Fifteenth International Conference on Grey Literature
Slovak Centre of Scientific and Technical Information, Bratislava, 2-3 December 2013

THE GREY AUDIT: A FIELD ASSESSMENT IN GREY LITERATURE

Program Book
ISSN 1385-2308

Host and Sponsors

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**Foreword**

**The Grey Audit**

**A Field Assessment in Grey Literature**

The Fifteenth International Conference in the GL-Series provides the grey literature community an inclusive platform from which to assess developments in their field of information. Over the past two decades, since the very launch of this conference series, information science has been significantly impacted by social and technological developments. This gives sufficient cause for an audit in the field of grey literature – drawing upon accomplishments, assessing limitations, and projecting a sustained course of action.

A field assessment of grey literature extends well beyond library and information science, for it includes the assessment of grey literature produced and published in other sciences as well as government, business and industry. Information professionals and practitioners also become a part of this assessment, for it is they who carry out research in specific fields and make results available to their respective communities and wider public audiences.

The Grey Audit seeks to ascertain the validity and reliability of information and data produced in the grey circuit. It further seeks to measure the cost effectiveness of investing in grey literature both in material as well as human resources. The Grey Audit sets out to examine accepted standards applied in processing and distributing grey literature in an effort to identify guidelines for good practice that will be of benefit well into our 21st Century. Such examples of good practice will no doubt impact policy, which in turn will ensure future programs where grey literature is deployed. Forty presentations from authors and researchers from 19 countries worldwide are harvested in this Program Book.

*Dr. Dominic J. Farace*  
Grey Literature Network Service  
Amsterdam,  
December 2013
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Nuclear Information Section
International Atomic Energy Agency

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Institute of Information Science and Technologies
National Research Council, CNR
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Federal Library Information Network
Library of Congress

NTK, Czech Republic
National Technical Library

NYAM, USA
New York Academy of Medicine

INIST-CNRS, France
Institut de l'Information Scientifique et Technique; Centre National de Recherche Scientifique

JST, Japan
Japan Science and Technology Agency
Conference Moderators and Chairman

Jens Vigen, Head Librarian CERN

For over a decade, Jens has been deeply involved in designing digital library services. In parallel to developing new services for members of the particle physics community, he has a particular interest for redesigning business models in the digital era for purchasing of library materials. Recently his activities have been strongly focused on establishing models for open access journal publishing. Before joining CERN, Jens held a position at the library of the Norwegian University of Science and Technology. In addition to his library qualifications he has a master degree in civil engineering; geodesy and photogrammetry. jens.vigen@cern.ch

Lubomír Bilský, Head Officer CVTISR

Lubomír started his professional career in 2001 at the Business and Innovation Centre Bratislava, where he was responsible for international projects implementation. He was an active member of the Innovation Relay Centres (IRC) Network dealing with the support of transnational research and technological cooperation development. In 2008, he became the head of Innovation section within the Enterprise Europe Network Slovakia consortium, an EC initiative supporting business, innovation and research cooperation of research organisations and SMEs. At Slovak Centre of Scientific and Technological Information (CVTI SR), he has been responsible for preparation and implementation of several national and international projects focused on support of scientific community in Slovakia, including active promotion of science and technology in society. He also co-ordinates activities related to building the national infrastructure for technology transfer support in Slovakia. lubomir.bilsky@cvtisr.sk

Dobrica Savić, Head NIS-IAEA

As head of the Nuclear Information Section, Dobrica is responsible for the International Nuclear Information System (INIS), the IAEA Library, and the IT support group. He holds a MPhil in Library and Information Science from Loughborough University, UK, an MA in International Relations from the University of Belgrade, Serbia, as well as a Graduate Diploma in Public Administration, Concordia University, Montreal, Canada. Dobrica has extensive experience in the management and operations of web, library, information and knowledge management, as well as records management and archives services across various United Nations Agencies, including UNV, UNESCO, World Bank, ICAO, and the IAEA. His main interests are long-term sustainability of information services, democratization of scientific and technical information, and the practical application of information technologies. d.savic@iaea.org
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**GL15 Program Committee**

Ján Turňa Chair  
Marta Dušková Co-Chair  
Ľudmila Hrčková Co-Chair  
Slovak Centre of Scientific and Technical Information, CVTI SR Slovak Republic

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New York Academy of Medicine, NYAM United States

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Korea Institute of Science and Technology Information, KISTI Korea

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University of Lille 3 France

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Library of Congress, LC United States

Christiane Stock  
Institut de l’Information Scientifique et Technique, INIST-CNRS France

Dominic Farace  
Grey Literature Network Service, GreyNet International Netherlands
# Program Outline

## DAY 1  Monday

**Location:** Lamačská cesta 8/A, 811 04 Bratislava

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<th>Time</th>
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<tr>
<td>8:15-9:00</td>
<td>Registration Desk Open</td>
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<td></td>
<td>Coffee and Tea Service</td>
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<tr>
<td>9:00-10:30</td>
<td>Opening Session</td>
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<td></td>
<td>Welcome Address, Opening Paper, and Keynote Address</td>
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<tr>
<td>10:30-11:00</td>
<td>Morning Break</td>
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<tr>
<td></td>
<td>Lunch</td>
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<tr>
<td>11:00-12:45</td>
<td>Session One (Technology Assessment)</td>
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<tr>
<td>13:45-15:30</td>
<td>Session Two (Sustaining Good Practices)</td>
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<tr>
<td>16:00-17:00</td>
<td>Introduction to Posters</td>
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<td></td>
<td>Briefings by Poster Presenters</td>
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<tr>
<td>17:00-18:30</td>
<td>Conference Reception</td>
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## DAY 2  Tuesday

**Location:** Lamačská cesta 8/A, 811 04 Bratislava

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<td>Coffee and Tea Service</td>
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<tr>
<td>9:00-11:00</td>
<td>Opening Session</td>
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<td></td>
<td>Poster Session and Sponsor Showcase</td>
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<td></td>
<td>Posters presented in an informal conference setting</td>
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<td>10:30-11:00</td>
<td>Morning Break</td>
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<td></td>
<td>Lunch</td>
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<tr>
<td>11:00-12:45</td>
<td>Session Three (Research and Data)</td>
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<td>13:45-15:30</td>
<td>Session Four (Towards Informed Policies)</td>
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<td>15:30-15:45</td>
<td>Pause</td>
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<tr>
<td>15:45-16:15</td>
<td>Closing Session</td>
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<td></td>
<td>Report by Conference Chair and Moderators, Conference Handoff, and Farewell</td>
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<td>16:15–17:30</td>
<td>Post-Conference Tour CVTI SR</td>
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# Conference Program & Timetable

## DAY ONE

**Moderator:** Jens Vigen, European Organization for Nuclear Research, CERN, Switzerland

### OPENING SESSION

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 9:00 – 10:30 | **OPENING SESSION**
| | **Conference Chair**, Ing. Lubomír Bilský, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia  
**Welcome Address** Prof. Dr. Ján Turňa, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia  
**Opening Paper** Activities of the Slovak Centre of Scientific and Technical Information in the field of GL  
Mgr. Marta Dušková, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia  
**Keynote Address** Open government data – the long and winding road  
Prof. Dr. Debbie L. Rabina, Pratt Institute, School of Information and Library Science, USA |

### SESSION ONE – TECHNOLOGY ASSESSMENT

<table>
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<th>Time</th>
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| 11:00 – 12:45 | **SESSION ONE – TECHNOLOGY ASSESSMENT**  
Beyond open source: a technology assessment of open standards and validation tools in the era of Cloud Computing and a SaaS case study  
Panagiotis Stathopoulos, Nikos Houssos, Promodos Tsivatos, and George Stavrou, National Documentation Centre; National Hellenic Research Foundation, Greece  
Digital Preservation at International Nuclear Information System (INIS)  
Dobrica Savić and Germain St-Pierre, Nuclear Information Section, International Atomic Energy Agency, Austria  
Effect of Open API, NDSL Open Service (NOS) on Sharing Technical Reports in Korea  
Seon-Hee Lee and Hyun-Mi Hwan, Korea Institute of Science and Technology Information, KISTI, Korea  
Grey literature and development of agricultural research in Cameroon  
Valère Djidere, Dschang University Library, Cameroon  
Collecting Grey Literature from Africa: a case study on the African Section Pamphlet Collection at the Library of Congress  
Mattye Laverne Page, Library of Congress, African and Middle Eastern Division, USA |

### LUNCH

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<tr>
<td>12:45-13:45</td>
<td>Lunch</td>
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### SESSION TWO: SUSTAINING GOOD PRACTICES

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<tr>
<th>Time</th>
<th>Event</th>
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| 13:45 – 15:30 | **SESSION TWO: SUSTAINING GOOD PRACTICES**  
Federal GL System Input Flow Analysis  
Aleksandr V. Starovoitov, Yuri M. Bogdanov, Aleksandr M. Bastrykin, Anton I. Borzykh and Leonid P. Pavlov, Centre of Information Technologies and Systems of Executive State Authorities, CITIS, Russia  
PATLIB Centre: why are we grey?  
Mária Harachová and Lubomír Kucka, Slovak Centre of Scientific and Technical Information CVTI SR, Slovakia  
Contribution to the improvement of dissemination of grey literature - JAEA Library’s efforts for collecting, organizing and disseminating information on nuclear accidents  
Kiyoshi Ikeda, Takeshi Ohshima, Shun Nagaya, Misa Hayakawa, Yukinobu Mineo, Minoru Yonezawa, and Keizo Itabashi, Japan Atomic Energy Agency, JAEA, Japan  
Guiding the Grey: The Implementation and Evaluation of a Journal Club amongst a Librarian and Clinical Practice Guideline Developers – A Cancer Care Case Study  
Marcus Vaska, Knowledge Resource Service (KRS), University of Calgary; Xanthoula Kostaras, Elysa Meek, Emily MacLeod, Inderjeet Sahota, Melissa Shea Budgell, Brae Surgeon, Guideline Utilization Resource Unit; Laurissa Watson, Research Evaluation Unit, Alberta Health Services, Cancer Care, Canada  
GreyGuide - Guide to Good Practice in Grey Literature: A Community Driven Open Resource Project  
Stefania Biagioni and Carlo Carlesi, ISTI-CNR, Italy; Joachim Schöpfel, University of Lille, France; Dominic Farace and Jerry Frantzen, GreyNet International, Netherlands |

### AFTERNOON BREAK

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<td><strong>INTRODUCTION TO CONFERENCE POSTERS</strong></td>
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### CONFERENCE RECEPTION

**International Conference Series on Grey Literature celebrating its Twentieth Anniversary, 1993-2013**
DAY TWO

Moderator: Dobrica Savić, Nuclear Information Section, International Atomic Energy Agency, NIS-IAEA, Austria

POSTER SESSION AND SPONSOR SHOWCASE

Conference posters are scheduled to be presented in an informal setting

SESSION THREE — RESEARCH AND DATA

Open academic community in Poland: New scholarly communication models during the transformation period
Maciej Ostaszewski, Information Processing Center, OPI, Poland

A Challenge of Research Outputs in GL Circuit: From Open Access to Open Use
Sergey Parinov, CEMI, Central Economics and Mathematics Institute, RAS Russian Academy of Sciences; Mikhail Kogalovsky, Market Economy Institute of Russian Academy of Sciences; Victor Lyapunov, Institute of Economics and Industrial Engineering Siberian Branch of Russian Academy of Sciences, Russia

Information support of research information interactions of doctoral students in Slovakia
Jela Steinerová and Andrea Hrčková, Comenius University Bratislava, Slovakia

The SK CRIS system as a source of unique information about scientific activities and their outcomes
Danica Zendulkova and Juraj Noge, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia

Auditing Grey in a CRIS Environment
Keith G. Jeffery, Consultant, United Kingdom and Anne Asserson, University of Bergen, Norway

SESSION FOUR – TOWARDS INFORMED POLICIES

Understanding the value of grey literature for public policy in Australia: Initial survey results
Julian Thomas and Amanda Lawrence, Swinburne University of Technology; John Houghton, Victoria University; Gerald White and Paul Weldon, Australian Council for Educational Research, Australia

Grey Literature in European Commission Projects
Sara Goggi and Gabriella Pardelli, Istituto di Linguistica Computazionale; Silvia Giannini and Stefania Biagioni, Istituto di Scienza e Tecnologie dell’Informazione, CNR, Italy

Back to Grey: Disclosure and Concealment of Electronic Theses and Dissertations
Joachim Schöpfel, Charles de Gaulle University Lille 3 / ANRT – GERiiCO and Hélène Prost, CNRS, France

For better or for worse?: Effects of the Legal Deposit Act no. 20/2002 and e-publishing on access to grey literature in Iceland
Stefanía Júlíusdóttir, University of Iceland, School of Social Sciences, Iceland

Scholarly publishing behaviour in Slovakia ... Are we ready for repositories?
Jaroslav Šušol, Miriam Ondrišová, Jana Ilavská, and Marcela Kopecká, Comenius University in Bratislava, Faculty of Philosophy, Slovakia

CLOSING SESSION – REPORT CHAIR AND MODERATORS, CONFERENCE HANDOFF, FAREWELL

Lubomír Bilský, CVTI SR; Jens Vigen, CERN; Dobrica Savić, NIS-IAEA;
Mattye Laverne Page, Library of Congress; Dominic Farace, GreyNet International

POST CONFERENCE TOUR OF CVTI SR

Guided by Lubomír Bilský, Slovak Centre of Scientific and Technical Information
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<td>Juraj Noge and Július Kravjar, Slovak Centre of Scientific and</td>
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<td>Scienza e Tecnologie dell'Informazione, ISTI-CNR, Italy</td>
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Opening Paper

Activities of the Slovak Centre of Scientific and Technical Information in the field of Grey Literature

Marta Dušková
Slovak Centre of Scientific and Technical Information (CVTI SR), Slovak Republic

The main objective of this paper is to inform the international grey literature community about the mission, objectives and activities of CVTI SR as an institution, which is the only one in Slovakia comprehensively dealing with grey literature.

In the introduction we would like to bring mission of CVTI SR in the field of grey literature in Slovakia. Our institution as a specialized public research library is under Library Act no. 183/2000 Coll., depository library and coordinator for processing documents normally issued in smaller amounts of research institutes, universities, international organizations, public bodies and other legal and individual entities, which aren’t issued by publishers in traditional distribution network.

It follows, that our institution is responsible for the collection, processing and storage of grey literature in the Slovak Republic. Mission in the field of grey literature fulfilled through multiple routes will be described together with the mission, objectives and activities of CVTI SR. In Slovakia, there is no other institution, which is focused on grey literature on national level.

The first way, how CVTI SR is involved in grey literature issues, is the collection, storage and disclosure of grey literature, which our institution acquires by Law no. 535/2003 Coll. for mandatory copies of periodicals, non-periodical publications and audio-visual works. The second way is to build a depository library of grey literature for Association of Slovak Scientific and Technological Societies in CVTI SR. A third way of making grey literature available for users in Slovakia is building so called SciDaP - Database of Slovak scientific electronic information resources for research and development with grey literature documents too. The fourth way is to make grey literature information available through information systems operated by CVTI SR: Central repository of theses, Central Registry of Publication Activity and SK CRIS.

Conclusion will be devoted to plans of Slovak Centre of Scientific and Technical Information in the field of grey literature on national level, as well as the problems associated with them.

Bionote

Marta Dušková studied library and information science at Comenius University in Bratislava (Slovakia). Since July 2010 she works in the Slovak Centre of Scientific and Technical Information in Bratislava (Slovakia) in Publication Evaluation Department. She deals with grey literature and The Central Registry of Publication Activity. She coordinates activities associated with obtaining and making grey literature available and cooperates with the processing and verification data publications included in The Central Registry of Publication Activity. From 2012 she is studying PhD study at Comenius University in Bratislava (Slovakia) with the theme: Communication of knowledge through of grey literature. Email: marta.duskova@cvtisr.sk
Opening Session Monday 9:00-10:30

Outline

• Presentation like „roadmap of CVTI SR“

Who we are?

What we do with grey literature?

What we do?

What you can see on GL 157?

...simply, clearly and quickly 😊

Scientific Library

• Specialised scientific public library

• Printed and electronic resources (books, journals, grey literature, patents, standards, ...) from technical, natural, economic and social sciences

• Library, information and search services

• Including deposit libraries of:
  – OECD
  – EBOR
  – WIPO
  – EDC

Who we are and what we do?

Scientific Library

Who we are and what we do?

Scientific Library

Who we are and what we do?
Support of Science

- Providing of national information systems (support for science evaluation for MinEdu):
  - Central Registry of Publication Activity
  - Central Registry of Artistic Activity
  - Slovak Current Research Information System (SK CRIS)
  - Central Registry of Theses and Dissertations + Antiplagiarism system

Popularisation of Science

- National Centre for the Popularisation of Science and Technology in Society
- Cycle events „Science in Centre“
- Cycle events „Science Café for Young People“
- Exhibitions
  - (for children, students, adults; interactive, educational, about various areas of science and technology)
- Week of Science & Technology in Slovakia
  - (every year in November, including exhibitions, workshops, presentations, conference, ....)

National projects

(co-funded by European Regional Development Fund):

- NISPEZ and NISPEZ II (National Information System for Supporting Research and Development in Slovakia – Access to Electronic Information Resources)
- DCVaV (Infrastructure for Research and Development – Data Centre for Research and Development)
- NITT SK (National Infrastructure for Supporting Technology Transfer in Slovakia)
- PoPVoT (Promotion of Science and Technology in Slovakia)
Opening Session

Monday 9:00-10:30

International projects:

– FORT (Fostering continuous Research and Technology)
– PATLIB (Patent Library)
– SEE Science (Southeast Europe Science)
– Schola Ludus online
– Smart-net (Interregional Network of Technology Centres)
– CentralCommunity (Emerging communities for collective innovation in Central Europe)

What we do with grey literature?

– Grey literature in library collection of CVTI SR
– Information systems with grey literature
  (Central Registry of Publication Activity and Central Registry of Theses and Dissertations)
– Digitalizing of grey literature
  for R&D institution in Digitizing workplace
– since 2010 GreyNet member

What can you see on GL 15 from CVTI SR?

• 2 Papers:
  – PATLIB Centre: why are we grey?
    (Mária Harachová, Lubomír Kucka)
  – The SK-CRIS system as a source of unique information about scientific activities and their outcomes
    (Danica Zanduková, Juraj Noge)

• 4 Posters:
  – Technology Transfer Support on National Level
    (Lubomír Bilský)
  – Central Repository of Theses and Dissertations – A Unique Umbrella Solution for a Significant Category of Grey Literature in the Slovak Republic
    (Juraj Noge, Jiří Kravajr)
  – PopVaT – Popularisation of Science and Technology in Slovakia
    (Patricia Stanová)
  – “Gold Value” Offer to Science and Research in Slovakia – is presented by the NISPEZ project and related activities
    (Mária Žitňanská, Michal Slásky, Marian Vaho, Ewa Králiková)
Keynote Address

Open government data – the long and winding road

Debbie Rabina, Pratt Institute,
School of Information and Library Science, United States

On May 9th 2013, President Obama signed an Open Data Executive Order and released an Open Data Policy memorandum. The new policies have been widely applauded as a means to promote transparency. The information community is focused on two elements of the new policy. The first, whereby all newly generated government information will be released by default in open and machine-readable format. And, the second that deals with the definition of information life cycle and open data from a data curation perspective.

While the new policy will have both immediate and long term effects on transparency, it is limited to information newly created by the United States government. Researchers in need of data sources that predate the memorandum, or that is created by other governments, non-governmental organizations, and international governmental organizations, still have to struggle to find ways to access and use such data.

Scholars are applying digital research methods to unearth new meaning and transparency from government information. Three disparate projects demonstrate current approaches to mining and using official data for research purposes. The first describes a web harvest of social media used by the U.S. federal government at the end on the 2012 presidential term; the second is a data extract project regarding funding of the United Nations Peacekeeping missions; and the third, is a data visualization of case law in relation to First Amendments rights.

Bionote

Debbie Rabina is associate professor at Pratt Institute, School of Information and Library Science. Her research and teaching are within the areas of information policy, official information and scholarly communication, and informed by the belief that societies that exercise a policy of open dissemination of and access to information are those that allow their citizenry to achieve personal and societal goals. Debbie is immediate past member of the Depository Library Council, an advisory board to the Public Printer of the United States, heads and World Information Societies and Environments concentration at Pratt and is a member of the Content working group of the Library of Congress, National Digital Stewardship Alliance. She publishes regularly in the LIS field, most recently in Journal of Documentation, JELIS, Advances in Librarianship and The Grey Journal. drabina@pratt.edu
Slovak Centre of Scientific and Technical Information

SCSTI

Achieve your goals with us

INFORMATION SUPPORT OF SLOVAK SCIENCE

SCIENTIFIC LIBRARY AND INFORMATION SERVICES
- technology and selected areas of natural and economic sciences
- electronic information sources and remote access
- depository library of OECD, EBRD and WIPO

SUPPORT IN MANAGEMENT AND EVALUATION OF SCIENCE
- Central Registry of Publication Activities
- Central Registry of Art Works and Performance
- Central Registry of Theses and Dissertations and Antiplagiarism system
- Central information portal for research, development and innovation - CIP RDI
- Slovak Current Research Information System

SUPPORT OF TECHNOLOGY TRANSFER
- Technology Transfer Centre at SCSTI
- PATLIB centre

POPULARISATION OF SCIENCE AND TECHNOLOGY
- National Centre for Popularisation of Science and Technology in Society

IMPLEMENTATION OF PROJECTS
- National Information System Promoting Research and Development in Slovakia - Access to electronic information resources - NISPEZ
- Infrastructure for Research and Development - the Data Centre for Research and Development - DC VaV
- National Infrastructure for Supporting Technology Transfer in Slovakia - NITT SK
- Fostering Continuous Research and Technology Application - FORT
- Boosting innovation through capacity building and networking of science centres in the SEE region - SEE Science

www.cvtsr.sk
Lamačska cesta 8/A, Bratislava
Beyond Open Source: a technology assessment of open standards and validation tools in the era of Cloud Computing and a SaaS case study

Panagiotis Stathopoulos, Nikos Houssos, Prodomos Tsiavos, and George Stavrou,
National Documentation Centre; National Hellenic Research Foundation, Greece

A significant factor for the development of grey literature (GL) delivery systems was open source software and open standards capabilities and availability. Open source software powers a significant number of GL systems implementations, including repositories, digital libraries, etc., while the definition and provisioning of open interoperability standards allows the delivery of value added services. Open source and open standards have achieved a high level of interoperability and technological platforms costs reduction. However, a paradigm shift is under way, in the way content and GL content in particular, can be organized, aggregated and delivered. Additionally to the open source systems increasing discussions are made for utilizing the Cloud capabilities, where under the uniform term Cloud, various technologies, business and service models are aggregated. In this paper a technology survey and assessment of the current state of the art for providing Cloud based services for Digital Repositories, Digital Preservations and repository interoperability, is made. Solutions that integrate Cloud based technologies and elements, or entirely Cloud based solutions are expected to increase in the forthcoming years. The various Cloud technology service models (Infrastructure as a Service, Platform as a Service, Software Service) and the capabilities they offer for the implementation of repositories, digital preservation and interoperability systems, are examined.

In the full paper the opportunities, challenges and requirements posed by this paradigm shift are examined, especially from the point of view of GL oriented Repositories and systems. The increased significance of open standards, in the light of migration among different Cloud providers, the neutrality of Cloud operators are especially targeted. Furthermore, as a specific case study, the efforts made by the National Documentation Center of Greece for providing a Repository with the Software as a Service Cloud model and an online Open Standards Validation system are presented. The Repository as a Service system builds upon previous e-infrastructures of the National Documentation center, and is provided for Greek public institutions as a SaaS based tool for organizing and delivering GL content, in a viable manner. In the area of interoperability the provisioning of a centrally managed Interoperability Validation tool, for validating conformance to a set of existing international open standards is presented. This validation tool is going to be used for validating interoperability features by a series of Greek digital culture projects, which can include GL material. This validation tool provides the necessary framework for ensuring, actively the interoperation of the various digital repositories projects, whether Cloud or standalone based, to aggregator services and for providing additional value added services.

Bionotes

Dr. Panagiotis Stathopoulos received his diploma in Electrical and Computer Engineering and his PhD in Broadband Networks at 1999 and 2004 respectively, from the National Technical University of Athens (NTUA). From 1999 until 2006 he has been with the Computer Networks Laboratory of NTUA participating and technically coordinating research projects in the areas of broadband communications and applications. From 2006, he is the head of the Systems and Networks Unit of EKT leading the team developing a highly sophisticated IT infrastructure, for providing advanced open access applications and services. He has taught at the University of the Aegean and the TEI of Piraeus, and he has over 30 publications in peer reviewed journals and conferences. Email: pstath@ekt.gr

Nikos Houssos works at the National Documentation Centre/NHRF in Athens, Greece as Head of the Software Development Unit. He is the software architect of the Greek “National Information System on Research and Technology” (EPSET) which comprises a variety of scholarly communications systems such as CRIS, repositories, e-publishing platforms and bibliographic systems. He has designed a number of GL systems including the Hellenic National Archive of Doctoral Dissertations. He participates in various FP7 projects like OpenAIRE/OpenAIREPlus, Arrow Plus, ENGAGE and PAERIP. He is a member of the euroCRIS Board and a contributor to the development of the CERIF data model. He has participated in EU FP5 and FP6 IST projects related to mobile networking and services (1999-2004), and lectured at the Technical University of Crete (2004-2007). Holds a Ph.D. in Computer Science from the University of Athens and has co-authored more than 30 peer-reviewed publications in international journals and conferences. Email: nhoussos@ekt.gr
Beyond open source: a technology assessment of open standards and validation tools in the era of Cloud computing and a SaaS case study

Panagiotis Stathopoulos, Nikos Houssos, Prodomos Tsiaios, George Stavrou

{pstath@ekt.gr}
National Documentation Centre / National Hellenic Research Foundation,
http://www.ekt.gr
Athens, Greece

Grey Literature and Open Source

- Open Source: a critical component of our community’s technological infrastructure
- Open Source empowered organisations to easily implement:
  - Digital Repositories and Digital Libraries
  - Infrastructures with reduced cost and increased local “know-how”
  - Reduced initial setup cost
  - Provided solutions & tools to the public, the grey literature professionals and organisations.
  - Open Source is only a part of a full infrastructure solution
- Is it possible for every organisation to maintain technological capabilities to support the whole application lifecycle efficiently?

Open Source Assessment

- Open source has been a disruptive force but:
  - Look beyond the initial purchase and installation cost
- Indicative IT systems lifecycle:
  1. Datacenter/computer room infrastructure,
  2. Hardware initial purchase cost, depreciation, maintenance and support
  3. Initial design, development, customisation
  4. Software maintenance and support, bug fixes, security fixes, new features requested
  5. System administrators, Monitor and Control Loop
- Thus Open Source is only a part of a full infrastructure solution
  - Is it possible for every organisation to maintain technological capabilities to support the whole application lifecycle efficiently?
Technology Trends: from Open Source to the Cloud

- Cloud technologies:
  - A variety of technology service offerings, with different definitions but with common core elements:
    - Self service
    - Networked
    - Common pool of resources
- Service Models:
  - Infrastructure as a Service
  - Platform as a Service
  - Software as a Service
- Central to EUs Digital Agenda 2020
- Significant economies of scale

The Software as a Service Model

- Software as a Service (SaaS)
  - Complete solution can fully outsource a system
  - Hardware / Middleware/ software development and maintenance
  - Monitor and Control, Operations, and Management
  - Can resemble hosted services but usually with an increased degree of customisation
  - SaaS applications examples:
    - docs.google.com, Microsoft Live, Adobe Connect, etc.
- A promise for cost reduction (?)
  - And focus to each organisations core competencies

Grey Literature and the Cloud

- IaaS and PaaS Service Models:
  - Provide new horizontal capabilities (especially PaaS, big data etc)
  - However largely transparent
- Software as a Service Model:
  - Usually Vertical. Systems that could be available as SaaS:
    1. Digital Repositories
    2. Current Research Information Systems
    3. Integrated Library Systems
    4. Digital Preservation
    5. Repository interoperability
    6. Aggregation Services (as centralised services)
  - Full blown solution
New Issues

• So are our troubles end with the Cloud?
  — Some of them
  — Others, more interesting ones, appear:
• Issues:
  — From s/w vendor lock-in to Cloud vendor lock-in?
  • Prepare migration strategy to different systems in order to avoid
    "cloud lock-in"
  — Are our data exportable and migration capable?
  • Ensure data are “exportable” and export formats are standards-based
  • Ensure interoperability APIs
  — Plus additional issues: is an open source based SaaS based also
    on proprietary elements and techniques? Security? Cloud
    Provider long term viability? SLAs monitoring/enforcement?

Grey Literature and Open Standards

• Open Standards provides the communication
tools for interfacing different systems, different
content using a common “language”
• Structure content:
  — Flat (DublinCore) or rich (CERIF, EDM, etc)
  — Initial cost of implementation but reduced long term
cost and increasing viability
• Independent from Software, Implementation
method and Service Model
  — Increasingly critical factor to a number of additional
applications/services

Open Standards

• We know the significance of open standards
for interoperability/aggregation/etc
• Additionally standards, and standard format
increasingly critical for:
  — Migrating our data among SaaS providers
  — Avoid SaaS provider lock-in
  • Create a “SaaS” market
  — Avoiding closed not interworking systems
A Repository as a Service case study

- EKT is Developing a “Repository as a Service” SaaS for eligible Greek organisations:
  - provide Digital Repositories as a Service, for scientific publications, grey literature, cultural institutions and archives
  - Build on EKT’s experience for developing and operating repositories for third parties
      - First pilots (semi automated) ready.
      - Next goal: further automation of tasks
    - Open standards and validation tools in order to increase third party organisations trust

The need for guidelines

- Metadata and functionality validation tools are critical for:
  - Repository as a Service development
  - Digital content interoperability
  - Aggregation mechanisms
- EKT has specified basic interoperability guidelines for digital repositories:
  - http://hdl.handle.net/10442/8887
    - English translation under way
  - Applicable both if development by EKT, provided as SaaS or developed externally
- Ensures a minimum level of interoperability independent of
  - Software
  - Implementation method
  - Delivery method (in house, outsourced, or Cloud)

Mandates

- Could combine guidelines, funder’s mandates and funding in order to guarantee high quality projects/outcomes
- Case study:
  - The Greek Digital Convergence Funding authority mandated that digital repositories must implement Digital Content Interoperability guidelines
    - Call mandated: http://www.digitalplan.gov.gr/portal/resource/Prosklhsh-31-Politimopo
    - >75 funded organisations, 65M€ of funding.
    - Focused on digital culture but includes Grey Literature related content
The need for validation tools

- Automatic validation of guidelines critical
  - Link automatic validation to value added services
  - E.g.: aggregator harvesting (OpenAIRE+, EUROPEANA) to funder mandate (Digital Convergence/EKT)
- Various validation tools for various standards:
  - Free, open, or project specific
  - (also CERIF validation tool under development)
- Multi-level Validation of repositories
  - Cultural, archival, etc
  - Generic and specific cases

Validation Benefits

- Ensure wide interoperability and aggregation
- Avoid "data" lock-in, ensure capability to transfer content and service among:
  - Different Digital Library/Repository software
  - Different SaaS cloud providers
    - Exploit advantages of Cloud without "lock-in" dangers
  - Ensure high quality of funded Digital Repositories and Libraries
  - Continuous implementation of the chosen guidelines

Conclusions

- Open Source was (and is) a key driving factor for Digital Libraries
- We must expand the interoperability and flexibility capabilities Open Source has provided
  - While exploiting where applicable Cloud and SaaS resources
- How?
  - Open Standards for content
  - Interoperability specifications and guidelines
  - Automatic validations tools
  - Aggregation Services
Digital Preservation at
International Nuclear Information System (INIS)

Dobrica Savić and Germain St-Pierre
Nuclear Information Section, International Atomic Energy Agency, Austria

Since its creation in 1970 until 1996, the International Nuclear Information System (INIS) collected and converted to microfiche over 312,000 non-conventional literature (NCL) reports received from IAEA member states and international organizations. The microfiche collection contains over 1 million items, with an estimated total of 25 million pages of full-texts. In 1997, the INIS Secretariat replaced the microfiche-based production system with an imaging system to process and to disseminate all NCL documents in electronic format. That marked the beginning of digital preservation efforts that still continue today. This paper provides an overview of the digital preservation practices and the technical infrastructure of the International Nuclear Information System (INIS). It describes the technical processes, the standards in place, the hardware and software used, as well as all practices related to scanning, quality control, OCR, preservation and storage.

Bionotes

Dobrica Savić is Head of the Nuclear Information Section (NIS) at the International Atomic Energy Agency (IAEA) in Vienna, Austria, which comprises of the International Nuclear Information System (INIS), the IAEA Library, and the IT support group. Mr. Savić holds a MPhil in Library and Information Science from Loughborough University, UK, an MA in International Relations from the University of Belgrade, Serbia, as well as a Graduate Diploma in Public Administration, Concordia University, Montreal, Canada. He has extensive experience in the management and operations of web, library, information and knowledge management, as well as records management and archives services across various United Nations Agencies, including UNV, UNESCO, World Bank, ICAO, and the IAEA. His main interests are long-term sustainability of information services, democratization of scientific and technical information, and the practical application of modern information technologies. Email: d.savic@iaea.org

Germain St-Pierre is a Digital Preservation Technician at the International Atomic Energy Agency (IAEA). Since 1997, he has been responsible for the collection, processing and dissemination in electronic format of the non-conventional literature (NCL) submitted to the International Nuclear Information System (INIS) by Member States. He is currently involved in two important projects, the digitization of the INIS NCL collection on microfiche and, in collaboration with the IAEA Library, the digitization of all books published by the Agency between 1957 and 1999. Email: g.st-pierre@iaea.org
Digital Preservation at
International Nuclear Information System (INIS)

Dobrica Savić & Germain St-Pierre
Nuclear Information Section, IAEA
Vienna Austria

Contents

• About INIS
• INIS Collection
• NCL Processing and Distribution
• INIS NCL Collection on Microfiche (1970-1996)
• First Steps in Digitization: Imaging Pilot Project (Summer 1995)
• Current Technical Infrastructure (2010 to present)
• Microfiche Digitization Project
• Other Digitization Activities
• Conclusions

International Nuclear Information System (INIS)

• One of the world's largest collections of published information on the peaceful uses of nuclear science and technology
• 43 years of international cooperation
• Operated by the IAEA in collaboration with 128 countries and 24 international organizations
International Nuclear Information System (INIS)

- Free online access to a unique collection of non-conventional (grey) literature
  www.iaea.org/inis
- Sophisticated Google-based search engine
- Unique multilingual nuclear thesaurus

INIS Collection

- Over 3,5 million bibliographic records
- More than one million NCL records
- Around 320,000 full-texts in PDF
- Reports, journal articles, books, legislative materials, multimedia, patents, software, standards, thesis/dissertations

INIS Collection

- 75% of all NCL (over 700,000 items) available in electronic or microfiche format
- Around 300,000 NCL items available from other sources
- Digitization of the microfiche collection is ongoing
- The INIS Collection counts over 480,000 full-texts in PDF (status 2013-10-24)
  - Around 320,000 full-texts are publicly available
  - 160,000 full-texts require clearance procedure
NCL Processing and Distribution

<table>
<thead>
<tr>
<th>Production System</th>
<th>NCL Processing</th>
<th>NCL Distribution</th>
</tr>
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<tbody>
<tr>
<td>1970-1986</td>
<td>Microfiche-based (B&amp;H, TDC Documate, Anacomp)</td>
<td>Conversion from paper to microfiche</td>
</tr>
<tr>
<td>1977-1983</td>
<td>INISIS (Institute of Scientific Information)</td>
<td>Conversion from paper to microfiche</td>
</tr>
<tr>
<td>1997-2003</td>
<td>INISIS2K (InputAccel)</td>
<td>Conversion from paper to PDF + OCR</td>
</tr>
<tr>
<td>2003-2009</td>
<td>INISI2K (InputAccel)</td>
<td>Conversion from paper to PDF + OCR</td>
</tr>
<tr>
<td>2010 to present</td>
<td>NCL Collection System (PixEdit + ABBYY FineReader)</td>
<td>Conversion from paper to PDF + OCR</td>
</tr>
</tbody>
</table>

- 312,000 NCL reports on microfiche
- 500,000 bibliographic records
- Over 1 million physical microfiches (~17 million pages)
- Diaz duplicates sent to INIS customers

First Steps in Digitization: Imaging Pilot Project (Summer 1995)
- There is always a beginning to a success story
- B/W scanning, document feeder, but no duplex scanner available
- Output: the first CD burned on the IAEA premises
Session One


- Image-based production system by Jouve Systems
- B/W scanning, image enhancement, link to bibliographic metadata using bar codes, validation and CD image creation
- Format supported: single-page TIFF Group 4
- 2 b/w Fujitsu production scanners, 5 workstations, 2 servers


- 32-bit modular Capture System (EMC InputAccel)
- B/W, Greyscale and Color Scanning, OCR, output to PDF
- Integration with Livelink-based INIS Data Processing System (IDPS)
- 2 B/W Fujitsu production scanners, 1 Kodak i260 color scanner, dedicated workstations for image enhancement and OCR

Current Technical Infrastructure (2010 to present)

- Robust NCL Collection System to support its continuous growth
- Flexible tools to support different projects:
  - PixEdit 7 (scanning, image enhancement)
  - ABBYY FineReader Corporate Edition 11 (multilingual OCR)
- 2 scanners (Fujitsu fi-5750c with VRS, Kodak i1440) that support color, greyscale and b/w scanning
- 2 Sunrise microfiche scanners
- 4 workstations with quad-core processors
Microfiche Digitization Project

- The microfiche digitization started in 2002 as support to document delivery service
- Scanning part had to be outsourced to 3 different companies
- Image enhancement, OCR and output to PDF done in-house
- 2 Sunrise microfiche scanners (300 true dpi)
- Special scanning utility (Scanflow)
- Image enhancement with PixEdit 7
- OCR with ABBYY FineReader 11

Other Digitization Activities

- Support digitization initiatives from Member States
  France, Mexico, Sweden, USA, Serbia, etc.
- Digitization of old IAEA publications
  Proceedings Series, Safety Series, IAEA Bulletin, IAEA Board of Governors,
  International Nuclear Data Committee (INDC), etc.

Conclusions

- Digitization projects require:
  - serious planning
  - substantial funds
  - qualified staff (internal or external)
  - awareness of standards
  - well defined purpose
- Maintenance of high quality digitization process is a must
- Document preparation, selection of proper scanning techniques, type of equipment, and adherence to current standards, determine digitization success or failure
- Digitization should not be a goal in itself - its ultimate use and usefulness must always be taken into account
- Meaningful and searchable metadata should accompany any digitized collection, making online search and retrieval efficient
- Long term preservation needs to be considered in order to ensure future sustainability and availability of the digitized collection
Korea Institute of Science and Technology Information (KISTI)


* Vision
World-class information research institute creating values for customers

* Main functions

<table>
<thead>
<tr>
<th>Collection and management of science &amp; technology (S&amp;T) information and the development of its service system</th>
<th>Research and analysis of international and local S&amp;T trend</th>
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<tr>
<td>Development and management of a high-performance research network</td>
<td>Development of a high-performance computing infrastructure and its application technology</td>
</tr>
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</table>

* Management and service of Korean R&D reports
KISTI exclusively manages, preserves, and serves Korean R&D reports for citizens and government officials. It provides Korean R&D reports and their information with National science & Technology Information Service (NTIS) and National Discovery for Science Leaders (NDSL).

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Effect of Open API, NDSL Open Service (NOS) on Sharing Technical Reports in Korea

Seon-Hee Lee and Hyun Mi Hwan
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This paper is a case study on sharing technical reports through Open Application Programming Interface (API) in Korea. Korea Institute of Science and Technology Information (KISTI) has been collecting the technical reports of national research and development projects through National Science & Technology Information System (NTIS). KISTI has shared the users with the technical reports through a portal system so called National Discovery for Science Leaders (NDSL). In 2009, KISTI implemented an Open API so called NDSL Open Service (NOS) to increase sharing the national R&D research results among users through major portals, institutes, and universities in Korea. The NOS participants can access the technical reports from their website directly instead of being on the NDSL platform. Usage of technical reports has increased dramatically since the implementation of NOS.

Goal
This study is to analyze the effect of NOS on the usage of national R&D technical reports by examining the changes of usage amount and the number of participating organizations in NOS.

Method/Process
The operating mechanism of NOS was mentioned in order to introduce its design and the populating system of technical report repository. The numbers of universities, institutes and portals using NOS and the usage statistics of technical reports through NOS were examined from 2009 to 2012. The statistics were obtained from the NOS usage monitoring system. The usage statistics of technical reports through NDSL and NOS were compared.

Results
The numbers of participating organizations in NOS has increased by 19 times from 5 in 2009 to 93 in 2012. The participants include universities, research institutes, and major portals such as Seoul National University, Korea Advanced Institute of Science and Technology, NAVER, etc. The usage amount of technical reports through the Open API, NOS has increased by about 100% since its implementation compared to the previous usages by NDSL portal alone. The usage of technical reports in search, detailed content views, and full-text views are increased through NOS.

Conclusion
National R&D technical reports funded by Korean government are being shared among users through various portals, universities, research institutes, and companies through NOS. The usage of the technical reports has increase dramatically since NOS implementation in 2009, which has contributed to populating grey literature repositories in Korea. Through NOS, the Korean R&D research results as national knowledge asset can be utilized by wide users for creating new studies and avoiding duplication of research.

Bionotes

Seon-Hee Lee is Senior Researcher at the Korea Institute of Science and Technology Information (KISTI). She has a master’s degree in Library and Information Studies (MLIS) from the University of California, Los Angeles (1996) and a Master of Art degree in Philosophy from Ewha Women’s University (1988). Her research interests include: collection development, grey literature, e-journals, information services, and collaborative digital reference services (CDRS). Email: wisdom@kisti.re.kr
Effect of Open API, NDSL Open Service (NOS) on Sharing Technical Reports in Korea

Dec. 2, 2013
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Korea Institute of Science and Technology Information (KISTI)

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Introduction
- KISTI has been collecting technical reports of national research and development projects through National Science & Technology Information System (NTIS) and servicing them through a portal system so called National Discovery for Science Leaders (NDSL).
- NDSL contains about 193,000 titles of Technical Reports (As of Mar. 2013).
- In 2009, KISTI implemented an Open API so called NDSL Open Service (NOS) to increase sharing the national R&D research results among users in major portals, institutes, and universities in Korea.
- NOS is an open platform. NOS participants can access, connect, and fuse the technical reports from their website directly using Open API instead of being on the NDSL platform. Usage of technical reports has increased dramatically since the implementation of NOS.
Goal

• This study is to analyze the effect of NOS on the usage of national R&D technical reports by examining the changes of usage amount and the number of participating organizations in NOS.

Method/Process

• Configuration of NOS was introduced for its design and the populating system as a technical report repository.
• Data exchange protocols and usages of NOS were compared among types of resources.
• The numbers of universities, institutes and portals participating in NOS and the usages of technical reports through NOS were examined from 2009 to 2012.
• The usage statistics were obtained from the NOS usage monitoring system.
• The usages of technical reports were compared between NDSL and NOS.

NOS Configuration

Value creation
Connecting Systems
App/ Mobile
Mash-Up
Business creation etc.

Value creation
Connecting Systems
App/ Mobile
Mash-Up
Business creation etc.
## NOS Protocols & Usages

**Table 1. Data Exchange Protocols**

<table>
<thead>
<tr>
<th>Type</th>
<th>oai2id</th>
<th>OpenAPI</th>
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<td>Protocol</td>
<td>OAI-PMH</td>
<td>REST</td>
</tr>
<tr>
<td>Contents</td>
<td>domestic article, R&amp;D report, S&amp;T trend</td>
<td>search, find, R&amp;D report, S&amp;T trend, standard</td>
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<td>Services</td>
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<td>link resolver, DDS, Document Delivery Service, link resolver</td>
</tr>
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<td>Data transmitting method</td>
<td>XML</td>
<td>XML, RSS, JSON</td>
</tr>
<tr>
<td>Authentication method</td>
<td>IP authentication</td>
<td>API key authentication</td>
</tr>
</tbody>
</table>

![Fig. Usage of e-fulltext through NOS](image)

## Results

### Participating institutes

- The numbers of participating organizations in NOS have increased by 22 times from 4 in 2009 to 89 in 2012.
- The participants include universities, research institutes, and major portals such as Seoul National University, Korea Advanced Institute of Science and Technology, NAVER, Samsung Electronics, etc.

![Figure. NOS organizations divided by protocols (2009-2012)](image)

## Usages of TR : NOS & NDSL

- The usages of technical reports (TR) through NOS in terms of search, detailed content views, and full-text download have been increased.
- The full-text download through NOS has increased by 89.3% since its implementation compared to the previous usage by NDSL portal alone.

![Usage of TR full-text download (2009-2012)](image)
**Conclusion**

- National R&D technical reports produced by Korean government funds are being shared among users through various portals, universities, research institutes, and companies through NOS.
- The usage of the technical reports has increased dramatically since NOS implementation in 2009 and more than 45% of total TR usages are made through NOS.
- NOS has contributed to populating grey literature repositories in Korea.
- Through NOS, the Korean R&D research results as national knowledge asset can be utilized by wide users for creating new studies and avoiding duplication of research.

**Effects of NOS are**

- improving R&D capabilities by provision of latest, qualified STI and value-added services
- promoting distribution of R&D results among organizations such as academia, research institutions, etc.
- saving budget for DB construction and system development to participating organizations
- providing contents that can be mash-up and commercialized by participating organizations
- building ST knowledge ecosystem through creative idea

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Grey literature and development of agricultural research in Cameroon

Valère Djidere
Dschang University Library, Cameroon

The Faculty of Agronomy and Agricultural Sciences of the University of Dschang in Cameroon is the most important institution in the Central Africa which is involved in rural development issue since 1960. It activities concerned particularly: training agricultural engineer, implementing agricultural research and supporting social development. For over fifty years, scientific research that has been done in this faculty generated an important number of grey literatures such as: dissertations, theses, scientific articles, abstracts... These documents represent a considerable mass of scientific and technical information that plays a very vital role in the scientific community to disseminate the results of research, serve as supports for other scientific work and bring solutions to the problems of society.

However, these studies are not sufficiently known by the public which they are intended worldwide. The objective of this work was to explore the barriers that make difficult the dissemination of this scientific production in the context of granting them a dimension that transcends the subjective part of graduation and grade change. To achieve this, we firstly used the qualitative method based on observation, survey of some officials involved in the process of research and documentation. On the other hand, we used the theory of "two step flow of communication" and the theory of "diffusion of innovation". These theories were important for our analysis and also provided a scientific base, which allowed us to have the following results: opinion leaders who should be the relays for imparting the message is not enough involved in the communication of the results of research ; there is also a resistance to the integration of new technologies as a prerequisite for better management of scientific production, and the absence of real scientific communication standards and policy that can bring the whole mass of this grey literature available to potential users.
Collecting Grey Literature from Africa:  
a case study on the African Section Pamphlet Collection at the 
Library of Congress

Mattye Laverne Page  
Library of Congress, African and Middle Eastern Division, United States

This case study describes the development of a sizeable collection of grey literature, the African Section Pamphlet Collection, at the Library of Congress. Over decades, the African Section has been the focal point for collecting materials at the Library of Congress which are from Africa and about Africa. Since it was established in 1960, the African Section has amassed thousands of pieces of grey literature. For early acquisitions, this can be attributed to the Library’s strict collecting policies. In 1966, the Library of Congress Field Office in Nairobi, Kenya was founded and an increasing amount of ephemera entered the Library from Eastern Africa. For years, these items were stored in cardboard boxes in work stations, before moving onto open shelving in plastic boxes and then eventually into more appropriate archival holders. The collection was highly visible. Patrons had full access. Managed by a technician and lacking any bibliographic control, patron and librarian alike were often surprised at the treasures to be found there.

Organizational and political changes in Africa contributed to a surge of activity with the African Section Pamphlet Collection in the 1980s. This case study describes the accomplishments over a 50 year period beginning with collection level cataloging in the mid-1980s for the LC Online Catalog which introduced the collections to patrons from afar. Prior to that, it was only known through research at LC and bibliographies that scholars and researchers had access to this material. The present collection is extensive, physically much less accessible and in need of more bibliographic access. The formats that comprise the African Section Pamphlet Collection are: posters, sample serials, African languages materials, university catalogs, a country collection housed in over 600 archival boxes, political ephemera and artifacts, a Portuguese colonial collection, and a tangible media collection. Only a small amount of this material has benefitted from preservation and conservation services, principally while preparing items for exhibit, or when re-housing curated items with custom fitted protective enclosures. Due to a recent Library inventory, a tangible media collection of approximately 150 items surfaced. Some small grey literature collections with permissions have been digitized and are available on line.

Copyright concerns have prevented microfilming and stalled digitizing the collection, although discussion continues. The current achievable goal for this collection is accessibility through the development of on-line finding aids. Since the collection is so massive, work is completed in increments by Africa region.
Collecting Grey Literature from Africa: a case study on the African Section Pamphlet Collection at the Library of Congress

Fifteenth International Conference on Grey Literature
December 2, 2013 - Bratislava, Slovakia

- Mattye Laverne Page
- Area Specialist, African & Middle Eastern Division
- Library of Congress
- United States

- Unusually rich and extensive research materials are available to the researcher at the Library of Congress.

- The African Section, one of three units of the African and Middle Eastern Division, is the focal point for the Library's Africana reference services and collections development.

- Africana materials are acquired via purchase, donations, exchanges, copyright deposits, and other methods.

Example of Use of Grey Literature

- Approximately 30,000 items are in the entire African Section collection of grey literature. During the summer of 2013, to commemorate the 95th birthday of Nelson Mandela, a brochure was designed, printed and distributed. The content – images of liberation movement documents, UN and other publications, a campaign pin & presidential coin, a digital comic strip and biographies as comic books - are just a few of the many items in the South African portion of the collection that concern Nelson Mandela. This brochure illustrates the variety of formats and subject content within the African Section Pamphlet Collection.
Additional Examples of Content and Formats

- Digital collection: Timbuktu online exhibit, oral interviews with African authors & poets, Macedo Portuguese Colonial Collection (next three slides)
- Pictorial & Print items: European trading cards, a Belgian royal scrapbook, an iconic South African photo, comics, children’s literature (three slides)
Session One Monday 11:00-12:45

Conversations with African Authors Digital Series

Classic photo, Comics Children’s Literature

Comments on Accomplishments Collection Visibility & Accessibility

- Microfilm
- Digital Exhibits
- Permissions
- Digital Preservation
- Bibliographic Projects
- Surveys & Partnerships
Reading Room Display
Obama 2008 Memorabilia from Africa

View the LC AMED site http://www.loc.gov/rr/amed/
for more news on recent projects and activities.

Thank You for Your Attention!
Mattye Laverne Page
mpag@loc.gov
Federal GL System Input Flow Analysis

Aleksandr V. Starovoitov, Yuri M. Bogdanov, Aleksandr M. Bastrykin, Anton I. Borzykh and Leonid P. Pavlov
Centre of Information Technologies and Systems of Executive State Authorities, CITIS, Russia

The procedures of collecting, processing and disseminating information on research and development (R&D) reports and theses in Russia are specified by the federal-level grey literature (GL) information system introduced into production use. The continuity of input document flow is secured by the federal law “On the obligatory copy of documents”. The system’s main information resource is the collection of two types of documents: 1) full-text R&D reports and theses (candidate and doctoral dissertations, according to Russian tradition); 2) information cards containing the bibliographic description and abstracts (metadata) of the full-text documents.

The essential characteristic feature of the system is that it functions in the waiting conditions when the volume of processed information, the system’s load, is entirely dependent on the external factor – the volume of the input document flow. The quantity of arriving documents is important from different points of view: it determines the distribution of workload over time and the completeness of the federal collection; it reflects the scientific activity of academic community and an executive discipline of scientists. Therefore a quantitative input flow analysis is both of theoretical and practical interest. In this paper we will consider neither content of arriving documents nor their quality standard – this would require a separate study. But in many aspects quantitative data are significant without respect to document quality; the computer power and human efforts needed to process a document do not depend on the document’s scientific level as well as the collection to be complete must include all the issued documents no matter what their scientific importance is and only in case of complete collection its quality monitoring would allow to reveal that the situation in this or that science subject or research institution is up to the standard or needs improvement.

The most evident system’s input flow peculiarity is that the flow is, so to say, regularly uneven. The cycles of flow peaks and low input are repeated every year in the same months during decades and are expected to remain so as long as the traditional starting and finishing dates for scientific works exist in Russia. Besides this cyclic recurrence the input flow may temporarily increase or decrease once in several years following some organizational events or budget changes in science. All these factors must be taken into account when planning the system’s workload and forecasting an expected input flow. In the paper the system’s input flow analysis is presented based on statistical records of many years. Numerical data in relative and absolute values are given.

Bionote

Leonid P. Pavlov graduated from Moscow Physical-Engineering Institute, Dipl. Eng. in computer systems. He is a Candidate of Sciences in informatics; and since 1976 is employed with the Scientific and Technical Information Centre of Russia (VNTIC) as Deputy Director. Main works in information systems, scientific and technical information, and grey literature. Email: leonpav@mail.ru
PATLIB Centre: why are we grey?

Mária Harachová and Lubomír Kucka
Slovak Centre of Scientific and Technical Information CVTI SR, Slovakia

Patent documentation historically belongs to the core of a library collection in the Slovak Centre of Scientific and Technical Information. It started to be built in the 1950th and has never been stopped. Till 1993 there were collections of Czechoslovak, German, American, Polish, Austrian, Swedish and USSR patents and a large stock of secondary patent literature. In 1993 most of collections was moved to the newly established Slovak Patent Office but we continued in building and preservation of national patent documents obtained from the Office. At present, in our institution there are except of printed national patents also CDs/DVDs with fulltexts of European patents (EPO), American patent documents (USPTO) and annotations of Japanese patent applications (JPO). Other patent documentation is accessible through online patent databases.

The abbreviation of PATLIB stands for „Patent Library“ and was used by the European Patent Organisation when it established a network of centres enabling an access to printed patent literature in its member states. The rapidly changing information technology and the availability of patent information via the Internet has changed the original role of PATLIB centres from providing copy and document delivery services to more sophisticated ones. By means of qualified search experts a vast number of information stored in patent literature is making available to professional and general public.

In October 2010 the PATLIB Centre of the SCSTI was involved in a co-operation program adopted by the European Patent Organisation. It was aimed at reorientating patent information centres to more professional ones. The program is implemented as a pilot project in seventeen centres from eleven participating member states. One of objectives of the project was to introduce intellectual property, embed its understanding and use in various business processes, research and commercialisation of inventions and in this way foster the meaningful use of the patent system. By means of making the information on intellectual property rights more available, scientists and other professional public are learnt about the possibilities how to protect their research results. This is a prerequisite for more extensive application of IP rights which might lead to a higher number of granted patents and wider scope of this kind of grey literature. Patent documentation as a kind of grey literature has enormous importance for scientists before starting their research to find out what in a relevant area was invented or protected. The presentation contains a summary and evaluation of achieved project results during three years of its implementation.

Bionote

Mária Harachová studied English and Slovak languages and literature at the Comenius University in Bratislava (Slovakia). During her career practice attended number of courses for information specialists in the field of industrial property, patent information sources and patent searches. Since 1986 she has been working at the Slovak Centre of Scientific and Technical Information in various positions: an editor in chief of technical newsletters, an information specialist in the EU information sources and patent information, head of the department aimed at technology transfer information support. At present she is also involved in implementation of national projects: National Information System Promoting Research and Development in Slovakia – Access to Electronic Information Resources and National Infrastructure for Technology Transfer in Slovakia. Email: maria.harachova@cvtisr.sk

Lubomír Kucka graduated from Library and Information Science at the Faculty of Philosophy of the Comenius University in Bratislava. In 1983 he obtained a Doctor of Philosophy degree. He started his career at the Slovak Technical Library in the Patent Literature Department. In the period of 1993 - 1996 he acted as a Director of Patent Information Department in the Industrial Property Office of the SR. From 1999 to 2007 he was at the position of the director of the Slovak Centre of Scientific and Technical Information in Bratislava. He attended trainings organised by the EPO and is an active lecturer in several courses in the field of industrial property information. At present he is a head of PATLIB centre. His professional interest is focused on industrial property information, search in databases and information services. Email: lubomir.kucka@cvtisr.sk
PATLIB Centre. Why are we grey?

Content

› Grey literature – patents
› Patents in the SCSTI
› PATLIB Centres
› PATLIB Centre in the SCSTI
› EPO programme
› Dissemination of patent information

Grey literature – patents

Slovak environment VS GreyNet International

Patents in the SCSTI

Collection:

› Since 1950th
› National patent documents: (printed) published by the Slovak Patent Office, EPO patents, USPTO patent documents, JPO patent applications (CDs/DVDs);
› Secondary patent literature
› Online patent databases (free: Espacenet, Patentscope, Depatisnet, EAPATIS, licenced: Derwent Innovations Index)
PATLIB Centre. Why are we grey?

- Access to patent information: on-site (a reading room), access via the Internet including remote access to the licenced database for registered users

- PATLIB Centres
  - PATLIB = Patent Library
  - Network of PATLIB Centres in the EPO member states
  - Tasks of PATLIB Centres: providing patents and intellectual property documentation and qualified information in this area

PATLIB Centre in the SCSTI

- Establishment: in 2003
- Services: emphasis on patent searches and interpretation of obtained results to clients – informative search reports

- EPO programme:
  - Reorientation of PATLIB centres → to provide advanced, sophisticated services 11/2010 – 11/2013
  - Pilot project - 17 PATLIB centres from 11 member states – PATLIB Centre from the SCSTI – a member of this group

Objectives of the project:

- to improve quality of patent search services
- enable PATLIB centres to provide supplementary services (commercialisation support, networking contacts)
- sustainability of PATLIBs (business development)

Benefits from the project:

- trainings and coaching of the PATLIB staff
- introducing new services
- enhancing the visibility of the centres in the public
PATLIB Centre. Why are we grey?

- Dissemination of patent information and IP awareness
  - User trainings aimed at increasing awareness of IP rights, searching capabilities
  - Promotion activities → PATLIB awareness
  - Networking with institutions aimed at IP, innovation, technology transfer
  - Importance → latest information, protection of own research results → a higher number of granted patents → reinforcement of the importance of grey literature

Thank you for your attention

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Contribution to the improvement of dissemination of grey literature -
JAEA Library’s efforts for collecting, organizing and
disseminating information on nuclear accidents

Kiyoshi Ikeda, Takeshi Ohshima, Mayuki Gonda, Shun Nagaya, Misa Hayakawa,
Yukinobu Mineo, Minoru Yonezawa, and Keizo Itabashi
Japan Atomic Energy Agency, JAEA, Japan

The Tokyo Electric Power Company (TEPCO) Fukushima Daiichi Nuclear Power Station accident (“the 3.11 accident”) occurred in March 2011. Since then, the Japanese government, research institutions, TEPCO, etc., have published various materials on the incident. This has included books, papers, technical reports, and conference proceedings as well as data obtained from monitoring activities and from various websites.

Such information has been distributed as grey literature in many cases. In such instances, it has necessitated the collecting, organizing, and archiving of grey literature on the website. However, information on the 3.11 accident is not sufficient for users, because it covers a wide variety of very different types of data on the website; moreover, websites are not permanent and changes in URLs are frequent.

In addition, it is difficult to get information from oral presentation of the latest research results at the local meetings called to discuss the 3.11 accident, especially those held in Japan. This is because oral presentation is not always published in print and electronic formats, and only participants of the meetings have access to the information.

The Japan Atomic Energy Agency (JAEA) Library has collected information on the 3.11 accident from various sources and websites and then disseminated it over the Internet. However, there are some unresolved issues in terms of permanent accessibility to information and the lack of bibliographical control.

We contribute to the improvement of the dissemination of grey literature by creating the metadata and organizing it with classification. We target various items such as photographs, video clips, press releases, and raw data from monitoring activities as well as literature regarding the 3.11 accident.

Our work is divided into two parts. The first organizes the 3.11 accident website information and its dissemination. We make up the metadata schema classification system by referring to the schema of the National Diet Library of Japan. Based on the consideration of metadata schema and classification system, we have already created more than 4,000 metadata of the website’s information concerning TEPCO’s “photo and video collection,” and more than 3,000 metadata of the Ministry of Economy, Trade and Industry (METI) of Japan’s “press release”

In the second part, we have analyzed 41 meetings, which include presentations related to the 3.11 accident held in Japan from April 2012 to March 2013. We have also created metadata of the meetings of the Atomic Energy Society of Japan (AESJ), held in September 2012 and March 2013.

**Bionote**

Kiyoshi Ikeda works as librarian at the Central Library of Japan Atomic Energy Agency (JAEA). He also currently works as the chief of International Nuclear Information System (INIS) and Nuclear Information Section of JAEA. Since 2011, he is in charge of selecting and classifying for INIS database input data. He joined JAERI (former JAEA) in 2004, and had been working for acquisition of library materials (domestic/foreign books, journals and technical reports). Between 2007 and 2010, he had been working for editing work at “JAEA Reports” and “JAEA R&D Review” which are grey literatures. He holds a degree in library and information science (M.A.) from the Graduate School of University of Library and Information Science (in Japan).

Email: ikeda.kiyoshi@jaea.go.jp
Contribution to the improvement of dissemination of grey literature

JAEA Library's efforts for collecting, organizing and disseminating information on the nuclear accident

Kiyoshi Ikeda, Takeshi Ohshima, Mayuki Gonda, Shun Nagaya, Misa Hayakawa, Yukinobu Mineo, Minoru Yonezawa, Keizo Itabashi

Japan Atomic Energy Agency (JAEA), Japan

Background

• Tokyo Electric Power Company (TEPCO) Fukushima Daiichi Nuclear Power Station accident ("3.11 accident") occurred in March 11th, 2011.
• Since then, the Japanese government, research institutions, TEPCO, etc. disseminate a variety of information, such as...
  • literature information : books, papers,
  • oral presentation, conference proceedings, technical reports
  • Not always published as literature in print and electronic formats
  • Only participants of the meetings could share information
  • various kind of information via the internet:
    • records/documents (report, press release), photos/movies, raw data (radiation monitoring, plant parameters) etc.
  → Grey Literature

About the JAEA Library

Feature at JAEA library

• One of the largest nuclear information centre in Japan
• To collect and provide information in the fields of nuclear science from all over the world
• To publish JAEA Reports originated from JAEA's R&D results and distribute them widely
• INIS (International Nuclear Information System) National Centre for Japan
  → Provide input data of literature about 3.11 accident
• To provide various kind of reference information about 3.11 accident on internet
Session Two Monday 13:45-15:30

Special website on 3.11 accident reference information

List of the R&D results related to 3.11 accident by JAEA staffs (JAEA Reports 18, journal articles 154, oral presentations 656)

Bibliographies related to the TMI-2, Chernobylsk-4 reactor accidents, environmental decontamination and others (18 theme, 15,969 articles)

Internet sources related to 3.11 accident (30 fields, 2,601 URLs)

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Issues on archiving grey literature

- Web information
  - Broken link, Deletion of homepage etc.
- Oral presentation information
  - Difficult to access
    - Permanent accessibility
    - Lack of bibliographical control
    - Some of them have been inaccessible! Disappearing!
- Metadata, classification and archive
  - Enable easy access to information

Need to archive 3.11 accident information!

---

Cooperation with National Diet Library

- Use of Archived Web information (WARP) to ensure permanent access to Web information
- WARP is the National Diet Library’s Web Archiving Project to archive Japanese official institutions’ websites: the government, the Diet, the courts, local governments, independent administrative organizations etc.

http://warp.da.ndl.go.jp/
Metadata for Web information

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</tr>
</tbody>
</table>

Classification system

- Use of the table contents of accident investigation reports, IAEA Nuclear Accidents Knowledge Taxonomy as reference

- Not always organized and reserved
  - Information on cutting-edge and valuable related 3.11 accident
  - Created about 2,000 metadata of oral presentation at the 5 meetings, e.g., annual meeting of the Atomic Energy Society of Japan
  - Use of metadata of web information (Dublin Core Metadata Element Set)
Session Two

Monday 13:45-15:30

3.11 accident Archives prototype system

- DSpace (open source repository software package)
- OAI-PMH (Open Archives Initiative Protocol for Metadata Harvesting) v2.0
- Dublin Core Metadata Element Set (DCMES/Simple DC) (ISO metadata standard)
- more than 36,000 metadata of the websites information concerning 3.11 accident of TEPCO and Ministry of Economy, Trade and Industry (METI) of Japan

![Image of a prototype system]

(METI&TEPCO)

Plant parameters,
Technological measures,
Radiation monitoring etc.

permanent accessibility

Conclusions

We contributed to the improvement of the dissemination of grey literature

- To cooperate with the National Diet Library’s WARP for reserved permanent access to Web information
- To develop metadata schema and classification system for 3.11 accident Web information and oral presentation information
- To developed prototype system using DSpace, compile about 36,000 items

Future

- To collect web information about 3.11 accident from all over the world
- Provide metadata for
  - Great East Japan Earthquake Archive “HINAGIKU”
    National Diet Library
  - INIS Database/INIS Collection Search
    International Atomic Energy Agency
    [http://inis.iaea.org/search/](http://inis.iaea.org/search/)
- To develop 3.11 accident archive successfully, it is essential to cooperate with the related organizations
Guiding the Grey:
The Implementation and Evaluation of a Journal Club amongst a Librarian and Clinical Practice Guideline Developers – A Cancer Care Case Study

Marcus Vaska, Knowledge Resource Service (KRS), University of Calgary;
Xanthoula Kostaras, Elysa Meek, Emily MacLeod, Inderjeet Sahota, Melissa Shea Budgell,
Brae Surgeoner, Guideline Utilization Resource Unit;
Laurissa Watson, Research Evaluation Unit, Alberta Health Services, Cancer Care, Canada

Introduction/Goal:
As a research-intensive facility located within a cancer care environment, library services provided at the Holy Cross Site closely adhere to an embedded librarian mandate, one where the librarian “actively engages in activities, possesses extensive knowledge of the researcher’s work, and offers assistance above and beyond common library service expectations” (Strain, 2011). The Guideline Utilization Resource Unit (GURU) is composed of knowledge management specialists (KMS) and nurse facilitators (NF) who support multidisciplinary teams in developing, implementing, and evaluating provincial clinical practice guidelines (CPGs) for the diagnosis, staging, treatment and follow-up of cancer. These CPGs are evidence-based documents with consensus recommendations; they are freely available on a public website for access by practitioners and patients, and are a form of grey literature. Team members at GURU consult regularly with the librarian to ensure that the most accurate and comprehensive search strategy is used to develop CPGs. The goal of this paper is to describe the process of organizing and evaluating a journal club involving a unique collaboration between guideline developers and a librarian.

Procedure:
The journal club is comprised of three KMSs, two NFs, the GURU Manager and an embedded librarian. The group has been meeting once per month since April 2012. Each member takes turns selecting two articles related to CPG development or implementation, and is responsible for leading an informal discussion. To evaluate the usefulness of the journal club and the impact of grey literature on CPG development in Alberta, all members of the journal club (n=7) will be interviewed in a focus group setting or a semi-structured interview. Transcripts of audio-recorded interviews will be qualitatively analyzed for repeated themes related to knowledge gained from, and perceived benefits of journal club meetings.

Results:
First, we hypothesize that monthly participation in the journal club will increase members’ knowledge of development, evaluation, and implementation of guidelines. Second, we believe that participants will have acquired a better understanding of the research process and how to critique current guideline research. Finally, we expect that members will report that the journal club provided the opportunity to facilitate discussions around topics that are less familiar to them. It is anticipated that this collaborative venture will further enhance the importance of grey literature and its usefulness for cancer care clinical practice guidelines.

References:
Bionotes

**Marcus Vaska** is a librarian with the Knowledge Resource Service (KRS), University of Calgary, Holy Cross Site, providing research and information support at an Alberta Cancer Care research facility. A firm supporter of embedded librarianship, Marcus engages himself in numerous activities, including instruction and research consultation, with research teams at Holy Cross and beyond. Marcus’ current interests focus on collaborative educational techniques aimed at creating greater awareness and bringing grey literature to the forefront in the medical community. Email: mmvaska@ucalgary.ca

**Xanthoula Kostaras** is the manager of the Guideline Utilization Resource Unit (GURU), a knowledge management program within CancerControl Alberta in Alberta, Canada. GURU supports provincial tumour teams in the development, implementation, and evaluation of clinical practice guidelines. She received an MSc in Community Health Sciences from the University of Calgary in 2008, with a specialization in epidemiology. Her research interests relate to strategies to improve guideline implementation and adherence, as well as the use of knowledge transfer strategies to support cancer patients to receive care that is based on best evidence and best practices. Email: xanthoula.kostaras@albertahealthservices.ca

**Emily MacLeod** is one of the Tumour Group Facilitators for the Guideline Utilization Resource Unit (GURU). Her background of health sciences support her role as a registered nurse focused on clinical practice guideline implementation. Emily collaborates with knowledge management specialists and members of provincial tumour teams to create communication strategies, support knowledge transfer and facilitate uptake of evidence-based oncology guidelines. Email: Emily.MacLeod@albertahealthservices.ca

**Elysa Meek** is one of the Tumour Group Facilitators for the Guideline Utilization Resource Unit (GURU). She is a bachelor-prepared registered nurse who works with the provincial tumour teams and focuses her efforts on strategies to support guideline implementation and evaluation. She is passionate about creating a solid implementation infrastructure regarding communication and team collaboration and concentrates her efforts on building the supports needed to facilitate the knowledge transfer of our evidence-informed guidelines into practice. Email: Elysa.Meek@albertahealthservices.ca

**Inderjeet Sahota** is a Knowledge Management Specialist for the Guideline Utilization Resource Unit (GURU) at Alberta Health Services – Cancer Control. He received his B.Sc. in Kinesiology (2008) and M.Sc. in Biomedical Physiology and Kinesiology (2011) at Simon Fraser University. As part of GURU he supports Provincial Tumour Teams in articulating their best practices related to the diagnosis, staging, treatment and follow-up of cancer. His current work is focused on the development of evidence-informed clinical practice guidelines for site-specific cancers. Email: Inderjeet.sahota@albertahealthservices.ca

**Melissa Shea-Budgell** is a specialist with the Guideline Utilization Resource Unit (GURU), a knowledge management program within CancerControl Alberta in Alberta, Canada. Melissa supports the Genitourinary, Endocrine, Cutaneous, and Gynecologic Provincial Tumour Teams in the development and evaluation of clinical practice guidelines. Melissa holds a Master of Science degree in Nutrition and Health Promotion and has been working in the area of health sciences research since 2002. Melissa is interested in research on the development and use of evidence-based quality indicators in cancer care and the delivery of cancer-related information to patients undergoing follow-up for a malignancy. Email: melissa.shea-budgell@albertahealthservices.ca

**Brae Surgeoner** is a Knowledge Management Specialist for the Guideline Utilization Resource Unit (GURU) at Alberta Health Services – Cancer Control. She received her MSc in Food Safety and Risk Communication from the University of Guelph in 2006. As part of GURU she supports Provincial Tumour Teams in articulating their best practices related to the diagnosis, staging, treatment and follow-up of cancer. Her current work is focused on the development of evidence-informed clinical practice guidelines for site-specific cancers. Email: brae.surgeoner@albertahealthservices.ca

**Laurissa Watson** is currently a Research Assistant in Evaluation in Population and Public Health at Alberta Health Services. She graduated from the University of Calgary with a Bachelor’s in Health Sciences (Honours) and recently completed an MPH from the University of Saskatchewan. Recent projects include research on HPV vaccine uptake in Alberta, an evaluation of a breast and cervical cancer screening social marketing campaign, and an evaluation of workplace health programs in Alberta. Email: Laurissa.Watson@albertahealthservices.ca
Guiding the Grey:
The Implementation and Evaluation of a Journal Club amongst a Librarian and Clinical Practice Guideline Developers: A Cancer Care Case Study

Marcus Vaska, Laurissa Watson, and the Guideline Utilization Resource Unit
GL15, Bratislava, December 2013

Embedded Librarian

- Applied research-centered locale
- Quality improvement
  - Enhanced knowledge
  - Greater efficiency
  - Changing practice regimen
- Project consultation
- Liaising role

Guideline Utilization Resource Unit (GURU)
http://www.albertahealthservices.ca/cancerguidelines.asp

- Alberta Health Services – CancerControl
- Support 12 tumour teams across Alberta
- Knowledge management specialists & nurse facilitators
- Guideline development and implementation
**Impact of Grey Literature on Clinical Practice Guideline Development**

- Balance between white & grey
- Key information shared as soon as guidelines are approved
- Evidence-based with consensus recommendations (development team)
- Creates greater awareness
- Freely available and accessible on public website for practitioners and patients

**Guidelines: Best Evidence, Best Practice**

- What makes a high quality guideline?
  - "systematically developed statements about specific clinical problems, intended to assist practitioners and patients in making decisions about appropriate health care"
- Well developed
- Well reported
- Well-written
- Based on the best evidence available

**Journal Clubs in Medical Disciplines**

- First formal journal club
- Core competencies valued by health professionals
  - Ability to interpret data
  - Ability to understand implications of research findings
  - Familiarity with recent knowledge in the field
- Content experts
- Clinical experts
- Researchers
GURU Journal Club Implementation

• Idea & Initiation
• Launch
• Steps to developing successful journal club
• Frequency & participation
• Facilitators & discussion leaders
• Archiving

Interviews

• Semi-structured interviews
  – N=7
  – Recorded and then transcribed for qualitative data analysis

• 25 questions focused on:
  – Journal Club processes (facilitation, selection and distribution of articles)
  – Impact of Journal Club on practice
  – Overall attitudes and perspectives

Results

• Relaxed structure
• Volunteer facilitation
• Interesting and diverse content

• Journal storage accessed sporadically

• Average rating = 7/10

• All members expressed desire to continue participating in Journal Club

Interesting Comprehensible Applicable to role

Number of participant responses

Journal Club Topics

Strongly Disagree Disagree Neutral Agree Strongly Agree
Impact

- Opportunity to network with group members
- Reciprocal sharing of knowledge/interests/opinions
- Opportunity to communicate and develop a relationship with embedded librarian
  - “...broadened my understanding and awareness of his role...”
  - “…gave him a better understanding of what we do [and] what would guide him to help find...research we need.”
- Opportunity for continuous learning

Recommendations

1. Minimal guidelines for facilitators.
2. Periodic survey of Journal Club members to ensure key interests are being addressed.
4. Expand goals of the embedded librarian to include team building and networking.
5. Address workload and scheduling barriers to enable all members to participate.

Future Considerations

- Provincial aspects & beyond
- Virtual journal club
- Seamless translation of grey literature in research & practice

“I think it has improved, in just my background knowledge...the discussion often sparks how we apply it to our roles and cancer care in general and I found it really rewarding and truly enhanced my knowledge...it definitely influences my practice.”
GreyGuide - Guide to Good Practice in Grey Literature:  
A Community Driven Open Resource Project

Stefania Biagioni and Carlo Carlesi, ISTI-CNR, Italy;  
Joachim Schöpfel, University of Lille, France;  
Dominic Farace and Jerry Frantzen, GreyNet International, Netherlands

The goal of this project is to develop an open source repository of good practices in the field of grey literature. That which originated in monographic form will now open and expand to include content from the global grey literature community. Such practices will range from the production and processing of grey literature through to its distribution, uses, and preservation. The repository will contain guidelines such as those in handling theses and dissertations, how to write research reports, metadata required for working papers as well as good practices in the subject areas of agriculture, health, education, energy, environment, et cetera. The purpose of an online repository of good practice in grey literature will provide the many stakeholders in government, academics, business and industry with the benefits of experience, sustained management, and proven results.

The procedure initially applied in this project deals with the design and development of a template that will capture data and information about published as well as proposed good practices within a standard format. While the metadata captured in the template are indeed standardized, their accompanying full-text documents need not be. Furthermore, the template seeks to identify intended users of a good practice, as well as metadata that will facilitate the search and retrieval of records in the repository.

Technical developments related to the design and construction of the repository, its eventual platform as well as its maintenance are other related issues addressed in the project. While there are no direct costs associated with the project, each partner is committed to allocate human and material resources needed to carry out their related tasks.

It is expected that the initial phase in acquiring records for the repository will rely on channels available through the Grey Literature Network Service. Populating the repository will be somewhat time-consuming and the first harvest will not produce an abundance of records. The project is long term; however it is all the more worthwhile. The GreyGuide will provide a unique resource in the field of grey literature that is long awaited and which responds to the information needs of a diverse, international grey literature community.

Bionotes

Stefania Biagioni graduated in Italian Language and Literature at the University of Pisa and specialized in data processing. She is currently a member of the research staff at the Istituto di Scienza e Tecnologie dell'Informazione "Alessandro Faedo" (ISTI), an institute of the Italian National Research Council (CNR) located in Pisa. She is head librarian and member of the ISTI Networked Multimedia Information Systems Laboratory (NMIS). She has been the responsible of ETRDL (ERCIM Technical Reference Digital Library) and currently of the PUMA (PUblication MANagement) & MetaPub, a service oriented and user focused infrastructure for institutional and thematic Open Access repositories looking at the DRIVER vision, http://puma.isti.cnr.it. She has coauthored a number of publications dealing with digital libraries. Her activities include integration of grey literature into library collections and web access to the library's digital resources, including electronic journals and databases. She is a member of GreyNet since 2005. Email: stefania.biagioni@isti.cnr.it

Dominic Farace and Jerry Frantzen see page 118

Joachim Schöpfel is senior lecturer at the Department of Information and Library Sciences at the Charles de Gaulle University of Lille 3 and Researcher at the GERiiCO laboratory. He is interested in scientific information, academic publishing, open access, GL and eScience. He is a member of GreyNet and euroCRIS. He is also the Director of the National Digitization Centre for PhD Theses (ANRT) in Lille, France. Email: joachim.schopfel@univ-lille3.fr
Definition of a Good Practice: “A good practice is simply a process or a methodology that represents the most effective way of achieving a specific objective...” SDC Knowledge Management Toolkit, 2004

Good ≠ Best

Repository and Open Forum

Published and Proposed

Good ≠ Best
**Session Two**

**Monday 13:45-15:30**

**Fifteenth International Conference on Grey Literature**
**CVTI SR Bratislava, 2-3 December 2013**

---

1. Search existing templates
2. Draft two templates - Proposed • Published
3. Divide into Sections, Tag record fields
4. Add Lead texts, Embedded lists, Screens

---

**System**
- OCTOPUS (PHP5 & Java & MySQL)

**Interface**
- Apache 2 HTTP Server

**Platform**
- Linux-Ubuntu 12.04.3 LTS

**Problems**
- Upload documents
- Character set management
- Browser compatibility issues

**Solutions**
- Mime Type & dimension
- UTF8 standard
- Unresolved for the previous version of Explorer 6

**Releases**
- OCTOPUS/GG version 1.0

---

**Promotion**
- Contest
- Social media
- Marketing

---
Fifteenth International Conference on Grey Literature
CVTI SR Bratislava, 2-3 December 2013

**Record Feed**
- submission
- automatic reply
- system check
- code: 2013-G05-001
- new featured item
- search & browse

**Way Forward**
- Uses and Applications
- Content Analysis
- Acquisition

**Launch**
- Thank You!
- Grey Guide • • •
  Guide to Good Practice in Grey Literature
  http://greyguide.isti.cnr.it
One of the recent tasks and responsibilities of the Slovak Centre of Scientific and Technical Information (CVTI SR) is to provide technology transfer support to public research organisations on national level.

For this purpose, SCSTI has been mandated by the Ministry of Education, Science, Research and Sport of the Slovak Republic to implement national project, co-financed from the EU structural funds within the Operational Programme Research and Development, named National infrastructure for technology transfer support in Slovakia – NITT SK. The project is focused on building and securing operation of the national system supporting technology transfer processes in Slovakia and is implemented in the period June 2010 – December 2014 with the total budget of € 8.2 million.

The transfer of knowledge from science to industry, for the benefit of society, will be supported through the complex mechanism, which is currently being developed. The key subject in the whole system will be the National Technology Transfer Centre, which will co-operate closely with local technology transfer centres established at universities and public research institutions. Important part of the system will be the National patent fund, from which financial support in the processes of protecting and commercialising intellectual property will be provided to public research institutions. The financial support shall include payments for patent filing and maintenance (PCT, USPTO, European and national applications), patent attorneys services, patent translations, partner search, marketing, negotiating and licensing. Even nowadays, patent filing fees are covered form the state budget money administrated by the CVTI SR, while external support services are provided within the NITT SK project. This is a great benefit for Slovak public and state universities and the Slovak Academy of Sciences, which had to permanently face the lack of financial means for these purposes.

Concerning the technology transfer activities that are being provided through the NITT SK project, these cover the whole process of transferring scientific knowledge into the praxis, starting from intellectual property protection and ending with its commercial utilisation. Services are provided by external high-level experts on relevant technology transfer issue from respective scientific field. All costs are covered from the NITT SK budget and are free for scientific community. Concrete services include assessment of intellectual property commercialisation potential, state of the art analyses, patent application preparation and filing, technology marketing, partner searches, negotiation support, preparation of licensing agreements, spin-offs creation, follow-up of royalties’ payment and so on. Since 2012, when this support started, several patent applications have already been supported within the NITT SK project.

Last year, the National portal for technology transfer has also been launched within the NITT SK project. It provides a comprehensive overview of technology transfer issues serving researchers, students, companies and local TT offices. Useful are sample contracts, internal regulations and other methodological materials related to technology transfer. It comprises also a list of competencies of Slovak R&D institutions and links to relevant Slovak, foreign and international organisations, groups and initiatives.

**Bionotes**

**Lubomir Bilsky** started his professional career in 2001 at the Business and Innovation Centre Bratislava, where he was responsible for international projects implementation. He was an active member of the Innovation Relay Centres (IRC) Network dealing with the support of transnational research and technological co-operation development. In 2008, he became the head of Innovation section within the Enterprise Europe Network Slovakia consortium, an EC initiative supporting business, innovation and research co-operation of research organisations and SMEs. At CVTI SR, he has been responsible for preparation and implementation of several national and international projects focused on support of scientific community in Slovakia, including active promotion of science and technology in society. He also co-ordinates activities related to building the national infrastructure for technology transfer support in Slovakia. Email: lubomir.bilsky@cvtisr.sk

**Miroslav Kubis** works in Slovak Centre of Scientific and Technical Information since 2012 as a Head of Department of Technology transfer and project manager of national project: The national infrastructure for technology transfer support in Slovakia – NITT SK. Email: miroslav.kubis@cvtisr.sk
A Study on the Improvement of Legal System for Collecting and Registering National R&D Reports

Kiseok Choi
Korea Institute of Science & Technology Information, KISTI, Korea

A R&D report, which is the result of national research and development project of each government ministry, has a characteristic as a public knowledge-based asset. So it is used with various systems for disclosing and expanding its outcome to the public. In fact, however, systematically collecting and utilizing its related information in KISTI, Korea Institute of Science & Technology Information (National R&D Reports Registration and Administration Agency), is insufficient. Formal regulation for submitting and registering national R&D reports to KISTI, which is wholly responsible for circulating national R&D information, has been arranged well so far. However, specific and concrete regulation system is not enough to make sure of their actual submission and registration. Therefore, this study examines and proposes a specific improvement plan for making good progress of collecting and registering national R&D reports at country levels. Also, it examines improvement methods for standardizing national R&D report style and applying for it, in order to increase work efficiency in submitting and registering the information of national R&D reports.
A Study on the Improvement of Legal System for Collecting and Registering National R&D Reports

Dec. 2, 2013
Kiseok Choi
Korea Institute of Science & Technology

I. Introduction

II. Content and scope of the study

III. Result of the Study

IV. Application Schemes

CONTENTS

1. Need

R&D reports submitted to KISTI: 10,000/year (2010–2012)
- About 45% of total amount-

 Requires a comprehensive study on the problem and improvement scheme with the current operating system

Lack of regulations for the management of copyright for national research report into DB and collection of private research reports
Introduction

1. Register and collection regulation of national R&D reports
2. Objectives
   - Maximize the efficient management and utilization of national R&D report

   Understanding of the relevant legal framework

   Problem Analysis
   - Analysis of legal system operational issues

   Proposed improvements
   - Review and suggest improvements (Written amendments to legislation)

   3. Content and scope

   Analysis of national R&D report collection, management, distribution and related major legal systems

   1) national research report related to the collection and registration legal system
   2) private national research report related to the disclosure of information and distribution of legal system
   3) map copyright issues related to the construction and operation of R&D report

   Improvements of the current legal framework and amend relevant laws and regulations

   1) review of progressive improvement of the current legal system in each area
   2) write revised version of related laws (draft): co-management regulations, etc.

   If you do not need legislation amendments, propose business improvement
Poster Session
Tuesday 09:00-11:00

Content and scope of the study

2. legal system related to private national R&D report information

- lack of classification criteria and procedures to private R&D reports
- high proportion of private R&D reports in some departments (can raise questions)
- unnecessary expansion of specifying private R&D reports can be done by request
- Low Enrollment in private R&D report
- problem of classification procedure and method
  - when submitting a research proposal by a research director, self-classification of security level - Project evaluation team confirm

Content and scope of the study

3. copyright issues related to national R&D report information distribution

- rules exist about National R&D report on information management and distribution, but the troubleshooting regulation for copyright is not - The possibility of copyright problem
- Right of Reproduction Problems
  - it is unclear whether the right to reproduce is granted to KISTI's DB service
  - public transmission rights problem
  - it is considered as transfer that the R&D report DB is open to public in the internet
  - uncertainty of service providers(KISTI) can transfer to public
- creation and equality maintenance of derivatives problem
  - Add a summary, translation by service provider can cause violation of copyright
  - data processing, providing for DB construction can be unable to maintain equality

Result of the Study

1. improvement plan for the rules of R&D report register and collection

- Regulations of National R&D Report Distribution
  - to ensure KISTI systematically collect the national R&D reports, apart from the existing registration rule, it is desirable maintain previous report distribution system
  - Although the abolition of 11/08/2010 amendment Act, it is desirable to maintain considering the United States NTIS cases
- Improvement of R&D report registration rule
  - change R&D report registration rule from optional to mandatory
  - establish rules of procedure of periodic reports to government the current enrollment status of R&D reports
- Standardization of registration form, information distribution of research reports
<table>
<thead>
<tr>
<th>Result of the Study</th>
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<tbody>
<tr>
<td>2. Improvement plan of open to public of private R&amp;D reports</td>
</tr>
<tr>
<td>- complement regulation of private procedures and duration</td>
</tr>
<tr>
<td>- prepare regulations of public open of R&amp;D reports after the closed period</td>
</tr>
<tr>
<td>- promote information circulation of R&amp;D reports by specifying the procedure and method of public open after the closed period</td>
</tr>
<tr>
<td>- establish monitoring procedures of the management status of secured &amp; private R&amp;D reports</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result of the Study</th>
</tr>
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<tbody>
<tr>
<td>3. Copyright issue improvement plan related to R&amp;D report info. circulation</td>
</tr>
<tr>
<td>- introduction of statutory license</td>
</tr>
<tr>
<td>- improve the way national research and development agreement</td>
</tr>
<tr>
<td>- prepare the regulations of comprehensive fair use</td>
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</tbody>
</table>

<table>
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<tr>
<th>Conclusion: Application Schemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Expected effect</td>
</tr>
<tr>
<td>- reflected in the government amended the relevant legislation</td>
</tr>
<tr>
<td>- used as basic data for systematic improvement of collection and management of R&amp;D reports</td>
</tr>
<tr>
<td>- available to other researchers, such as relevant research data</td>
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Industrial Philology:
problems and techniques of data and archives preservation for future generations

Alessandra Cinini, Sebastiana Cucurullo, Stefano Sbrulli, Manuela Sassi, Eva Sassolini
Istituto di Linguistica Computazionale, “Antonio Zampolli” CNR, Italy

Institute of Computational Linguistics in its fifty-year history has accumulated a wide variety of texts and corpora that have been stored in various formats and record layouts. Today, the memory of the procedures and codes of the past is still documented and the people who worked there are in service, we must thus plan a recovery strategy that maintains digital preservation and reuse. For example, one can cite texts in Latin and ancient Greek, which required a complicated system of encoding if we think that in the 60s-70s punch cards with a limited set of characters available were used. This part of the work has already been addressed and equivalence tables were created, so that a full performance can be obtained, even in a non-Latin alphabet, using Unicode encoding.

The problems related to text handling are mainly character encodings, based on different operating systems used over the years, the formats of the documents and the indexing system. Differences in the handling of text at different times, and content problems are among the most common. It often happens that textual materials produced in or recovered from a project of the past do not have a standard format, but are the expression both of technology and of the research needs at that time.

For this reason it was decided to study of a system for the realization of procedures for transcoding the characters (from EBCDIC, passing by ASCII, to arrive at Unicode) and for indexing and treatment of any type of texts.

Consequently, for a correct operation of materials recovery was made a standardization procedure of the format of the texts. This allows the disclosure and consultation with any system, open source or proprietary, while fully respecting the rights of the texts that are taken into consideration.

It remains to be seen what course to take to preserve the ancient procedures in programming languages for which printouts of processing still exist: can they be preserved or should they be dropped? Can they be considered a form of “industrial archeology”? The answer to these questions may result from a comparison of opinions that the people of Grey is perhaps the most qualified to do.

Bionotes

Manuela Sassi graduated in Foreign Languages and Literature at Pisa University, 110/110 cum laude. Since 1974 she has been working in Pisa at the Institute for Computational Linguistics of the National Research Council. Her interests and experiences range from linguistic to textual data processing and in providing linguistic resources on-line. She has been responsible for many national projects and has participated in numerous international projects. Email: manuela.sassi@ilc.cnr.it

Eva Sassolini graduated in Computer Science, at Pisa University, is CTER (Research Collaborator) at the Institute of Computational Linguistics (ILC) of the National Research Council - Pisa. She is involved currently in several national and international projects. Research Collaborator in “TextPower” (TP) project, (new technology and approach to treatment and exploitation of texts) and before in the project “Corpus Bilingue Italiano-arabo” for linguistic tools and resources for bilingual Italian/Arabic corpora realization. Junior researcher ILC in the project LINGUISTIC MINER: linguistic Knowledge system for the Italian language; working contribution in “INTERA” (Integrated European Language Data Repository Area) project, for multilanguage terms extraction. Junior researcher ILC in the project 8: “Diffusione della cultura e valorizzazione del patrimonio letterario della lingua italiana e della lingua araba attraverso una diffusione telematica di banche di dati letterarie”. Collaboration with IMSS (Istituto e Museo di Storia della Scienza) for the realisation of web applications for the query on galileian texts. Junior researcher in the project: "Corpus Bilingue italiano-arabo": in the framework of the comprehensive “Linguistica Computazionale: ricerche monolingui e multilingui”. Email: eva.sassolini@ilc.cnr.it
Istituto di Linguistica Computazionale (ILC) CNR of Pisa

Industrial Philology: problems and techniques of data and archives preservation for future generations

A. Cinini, S. Sbrulli, N. Cucurullo, M. Sassi and E. Sassolini

ILC fifty-year history of ICT applied to the NLP

wide variety of texts and corpora that have been stored in various formats and record layouts

Cultural Heritage domain

e.g.: texts in Latin and ancient Greek, which required a complicated system of encoding in the 60s-70s punch cards, with a limited set of characters available were used

equivalence tables were created, so that a full performance can be obtained using Unicode encoding.
Industrial Philology: problems and techniques of data and archives preservation for future generations

- Character encodings, based on different operating systems used over the years (from EBCDIC, passing by ASCII, to Unicode)
- Textual materials produced in or recovered from a project of the past do not have a standard format, but are the expression both of technology and of the research needs at that time.

Digital Text Repository schema

- Magnetic tape
- TCI format
- DBT format
- Other interchange format
- Intermediate format (1)
- Intermediate format (2)
- Intermediate format (n)
- XML TEI

Text acquisition strategy

<table>
<thead>
<tr>
<th>Source text</th>
<th>Transition phases (TP) required</th>
<th>Meta data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text in magnetic tape</td>
<td>Many type TP</td>
<td>Study and research in the archives TPC</td>
</tr>
<tr>
<td>Text divided into separate resources</td>
<td>TP+3</td>
<td>Recovered from paper-based data</td>
</tr>
<tr>
<td>Text in file obsolete</td>
<td>TP+2</td>
<td>Recovered from paper-based data</td>
</tr>
<tr>
<td>Text digital with obsolete character encoding</td>
<td>2&lt;TP&lt;3</td>
<td>Recovered from paper-based data, the digital format</td>
</tr>
<tr>
<td>Digital text</td>
<td>One TP</td>
<td>Recovered from the digital format</td>
</tr>
</tbody>
</table>
**Phase 1: texts material collection**

- Research of all existing text materials in ILC, looking to the historical projects to which ILC has worked;
- Identification of physical locations where these texts are;
- Recovery and analysis of text material;
- Quantification of the work required.

**Phase 2: text corpus standardization**

- For each type of textual data definition of:
  - a procedure for the text standardization;
  - Xml TEI model of text representation
  - costs of such work
Poster Session

Tuesday 09:00-11:00

Tools

- Tools of texts analysis:
  - DBT (Data Base Testuale);
- Modules and procedures for specific text recovery;
- Converter and parser XML TEI for text corpus testing

projects & applications

Scientific Cooperation Agreement between the ILC (Computational Linguistics Institute) and the "Accademia della Crusca" of Florence

- Selection of relevant text materials in ILC and then specific classification;
- Identification of the text encoding and, where present, of the linguistic annotations associated;
- Conversion of texts into a shared and standardized representation format;
- Development of a text management system for the advanced search functionalities.

Open questions

To preserve the ancient procedures in programming languages which printouts of processing still exist:
- Can they be preserved or should they be dropped?
- Can they be considered a form of "industrial Philology" and maintained?
Measuring interdisciplinarity within the bio-related scientific areas

Izabela Kijeńska-Dąbrowska
Information Processing Institute, OPI, Poland

The aim of the paper is to investigate conducted studies and evaluate best practices in research of measuring interdisciplinarity within the scientific environment of the bionanoscience. The number of research projects, studies and analyses conducted within the new, frontier fields is evolving. The core idea of the proposal is to map and evaluate interdisciplinarity measures and indicators used within the literature review and suggest the most suitable and excellent ones from the perspective of scientific usefulness and understanding.

The idea of the paper raised from the fact, that interdisciplinarity gives the positive synergy effect taken from the traditional scientific disciplines. Instant increase within interdisciplinarity in modern research is caused both, by growth in specialization in science itself, and by aggregation of knowledge sourcing from various scientific disciplines. Different sources of knowledge and independent by now scientific fields are combined together in order to solve problems of contemporary world and advancement in frontier science. Cross-disciplinarily of research is believed to be more creative and innovation prone. Boundaries between traditional fields are no longer stable. Use of knowledge created within one discipline is more often used in other scientific fields and results in formation of discoveries or innovations applied in real life. Thus, in modern times, solutions to major technology and society problems are taken from multidisciplinary research.

Due to evolving need of defining, measuring and enhancing interdisciplinarity of research, the number of studies on the subject, using different approaches and indicators, has been increasing since 1990s. The most often used and commonly agreed definition of interdisciplinarity was initially mentioned by OECD (1998). According to this description one can say about interdisciplinarity, multidisciplinarity or transdisciplinarity, while refers to increasing level of various interactions between traditional scientific disciplines.

While interdisciplinarity in science has been attracting growing interest. There has been conducted several studies aiming at creation of tentative typology of disciplines and research areas, that are perceived as most often applied in research and thus creating subcategories or clusters of scientific fields. These thematic areas are innovation and solution prone and as so described as effective or efficient. The analyses of thematic areas typology is mainly based on bibliometric studies, cluster analyses and in-depth econometric studies. Analysing results from these studies one can observe astonishing trend concerning the increasing interdisciplinarity within the new established thematic areas.

Bionote

Izabela Z. Kijeńska-Dąbrowska, PhD, assistant professor at the Information Processing Institute, Warsaw, Poland. Completed doctorate dissertation at Warsaw School of Economics (2010). Her recent research focuses on the aspects of interdisciplinarity within science and public research and development systems (R&D systems). Research interests concern aspects of regional and global innovation systems, development of new technologies, knowledge based economy; economic and technical problems of the knowledge and technology transfer from research institutions to industrial sectors. Email: izabela.kijenska@opi.org.pl
Central Repository of Theses and Dissertations –
A Unique Umbrella Solution for a Significant Category of
Grey Literature in the Slovak Republic

Juraj Noge and Július Kravjar
Slovak Centre of Scientific and Technical Information, CVTI SR, Slovak Republic

An ordinary person or even a professional may not realise that higher education institutions (HEI) in such a small country like Slovakia produce around 80 000 theses and dissertations each year. The fact that these theses and dissertations have been collected systematically since April 2010 from all HEI in Slovakia operating under the Slovak legislation, as well as archived, administered and made public, was presented at last year’s GL conference in Roma where we mentioned major benefits of establishing the Central Repository of Theses and Dissertations (CRTD), which now covers a complete GL category. It may be interesting to look at the solution from a slightly different perspective – as a unique technological solution that had to meet numerous requirements of its sponsor and to overcome unexpected technical and administrative obstacles.

In addition to the graphic presentation and technical description of key components, the poster also summarises major organisational activities that had to be overcome during the implementation of the system. The succession of performed steps and activities, as well as an outline of the technical solution may inspire its potential followers. Drawing attention to complications that arose during the implementation and operation, including the description of possible solutions, may be included in the best practices in this area.

The CRTD has always been intended as a basis for the comparative corpus for the Anti-plagiarism System (APS). APS is an extension of CRTD; both systems have been operating for three years and they are a major contribution to the implementation of the strategic objective of reducing the level of plagiarism at HEI in the Slovak Republic.

The poster contains a list of major benefits of the CRTD in the Slovak Republic, supplemented with statistical data. We also outline its development with an emphasis on the extension of the system’s functionalities and possibilities of its integration with other GL systems.

Bionotes

Juraj Noge After graduating in Computer Science from the Comenius University in Bratislava, Juraj Noge built his practical experience as an IT specialist over the course of 30 years and in various software houses. For the past four years, he has been in charge of IT development at the Slovak Centre of Scientific and Technical Information (SCSTI), where his duties include implementing, managing and developing systems such as the Central Register of Theses and Dissertations (CRTD), the Anti-plagiarism System (APS), the Slovak Current Research Information System (SK CRIS) as well as various library systems. At the same time, Juraj acts as the co-ordinator and expert guarantor of activities within projects financed through the state-funded National Information System for Supporting Research and Development in Slovakia – Access to Electronic Information Resources (NISPEZ), Infrastructure for Research and Development – Data Centre for Research and Development (DCVaV/DCR&D) and National Infrastructure for Supporting Technology Transfer in Slovakia (NITT SK). Email: juraj.noge@cvtsr.sk

Július Kravjar graduated in Mathematics at the Comenius University of Bratislava and later in Informatics. He is currently responsible for the „Central Repository of Theses and Dissertations“ and „Plagiarism Detection System for Slovak Academic and Research Institutions“ projects at the Slovak Centre of Scientific and Technical Information (SCSTI). Both nationwide systems are in the real operation from April 2010. He also participates as a team member at three other national projects: National Information System Promoting Research and Development in Slovakia - Access to Electronic Information Resources, Infrastructure for R&D - Data Centre for Research and Development, and National Infrastructure for Technology Transfer in Slovakia. Prior to joining the SCSTI, he held several positions in software development and software and ICT services marketing in the private sector. Email: julius.kravjar@cvtsr.sk
Life after Microfiches: The French National Centre for the Reproduction of PhD Theses (ANRT)

Joachim Schöpfel
Charles de Gaulle University Lille 3 ANRT – GERiiCO, France

Problem/goal
The ANRT has played a significant role in the back office of the French network for the dissemination and preservation of PhD theses for over forty years. Its online catalogue contains more than 200,000 PhD theses that academic or other research institutions can order in print format or on microfiche (MF). Complementary to this national mandate, the ANRT runs a print-on-demand service for more than 7,200 PhD theses called “Thèses à la carte”. Today, the development of electronic theses and dissertations (ETD) and open access is challenging the future of the ANRT. Is there a life after microfiche for the ANRT?

Research method/procedure
The poster describes the ANRT, its purpose and activity in the French national network for the dissemination and preservation of PhD theses. It then presents the results of a strategic analysis conducted as a part of an internal audit of its national mandate and its other current activities. Based on this analysis, some options or scenarios are suggested for the future development, including preservation, digitization, publishing, teaching and research.

Anticipated results
Preservation: scanning of older MF holdings for digital archives; interest of computer-output MF for inexpensively storing large numbers of theses in permanent format.
Digitization: scanning of older theses on MF or in print format for university repositories; scanning of other scientific heritage collections for academic servers.
Teaching: guided tours and internships for BA and Master students in library and information sciences.
Research: integration of ANRT in international research projects on ETDs (datasets, access restriction, open access infrastructure, scientometrics...).

This poster presents the ANRT for the first time to a larger international audience. The interest is twofold – help library professionals and scholars to identify the role and service offer of the ANRT and facilitate the access to French PhD theses; and help the ANRT to define its future orientation through discussion with experts and professionals of grey literature.

Bibliography

Bionote
Joachim Schöpfel is senior lecturer at the Department of Information and Library Sciences at the Charles de Gaulle University of Lille 3 and Researcher at the GERiiCO laboratory. He is interested in scientific information, academic publishing, open access, GL and eScience. He is a member of GreyNet and euroCRIS. He is also the Director of the National Digitization Centre for PhD Theses (ANRT) in Lille, France.
Email: joachim.schopfel@univ-lille3.fr
ANRT Lille

Public mission, know-how, services

Public mission

- Atelier National de Reproduction des Thèses
- Production, dissemination and archiving of microfiches of PhD theses

Created in 1971 by the French Ministry of Education, the ANRT reproduces French PhD theses in all scientific disciplines and guarantees their dissemination in France and other countries.

Public mission – state of the art

- Print theses
- Dissemination on microfiche
- Lille: SS&H, law, economics
- Grenoble: STM (transfer to Lille in 2011)
- Budget: gvt funding, revenues
- Financial and HR management by Lille 3
Public mission – some figures

- Reception: 2,068 SS&H and 3,735 STM
- MF production
  - SS&H: 2,114
  - STM: 9,201 (with Grenoble backlog)
- MF dissemination: 10,860
  - With 45 to 70 copies

(2012)

Public mission - challenges

- New STAR infrastructure for French ETD
  - New portal for French PhD theses
- Emerging infrastructure for scientific information called « BSN »
  - Retrodigitization of MF and print theses
  - Digital archiving of MF theses

Know-how

- Digitization
  - Print theses
  - Microfiches
  - Books
- Production of microfiches
- Conservation
- Microedition (print on demand)
- Dissemination and licensing
Know-how – resources

- **Human resources**
  - 18 staff: IT, administration, communication, digitization, printing, MF production

- **Technical resources**
  - Scanners: high-speed, MF, open book
  - Printer: B&W, color
  - Machines for master and duplicate MF negatives
  - Tools for bookbinding etc.

Services

- **Dissemination of theses (MF, print)**
  - Academic libraries and institutions
  - 200,000+ titles

- **Print on demand – Thèses à la carte**
  - Licensing with author
  - 7,000+ titles

- **Microedition**
  - On demand, for authors and institutions

- **Digitization of backfiles and heritage collections**
  - Journals, monographs, theses …

- **On campus: management of Lille 3 ETD files**

Services – some figures

- **Dissemination**
  - Thèses à la carte: 3,051
  - Microfiches: 532
  - Journals: 1,325
  - Copies for PhD students: 603
  - Microedition: 88

- **Project Lille 1**
  - 1,000 older books and 8,000 theses
  - (= 2.1m pages)

(2012)
Projects, perspectives, options

- **Digital Humanities**
  - Development of research (small datasets, embargoes, scientometrics)
  - Partnership with BA and Master programs
  - Conference on digital humanities
  - Coordination with university press and library

- Merger with campus reprography and printing service?

Contact

Atelier National de Reproduction des Thèses
Université Charles-de-Gaulle Lille 3
Domaine universitaire du Pont de Bois
BP 60149
F-59563 Villeneuve d’Ascq Cedex

- Phone 0033 (0)3 20 41 73 73
- Fax 0033 (0)3 20 41 73 24
- Email anrt@univ-lille3.fr

Want to know more?
Data Management & Curation Services: Exploring Stakeholders Opinions
Plato L. Smith
Florida State University, FSU, United States

Purpose - The purpose of the research study was to explore data management and curation services issues currently affecting all disciplines. A data management and curation services survey (HSC No. 2012.9198) was approved by FSU IRB on 11/2/2012, launched on 11/5/2012, and closed on 12/5/2012. The survey was started by 64 participants, completed by 53, and garnered an 83% completion rate. Data management planning, data curation, digital curation, and digital preservation are grouped under the heading data management and curation services while promoters (funders), stakeholders (institutions), and users (evaluators) are grouped under the heading of stakeholders within the scope of this research article.

Methodology - A purposive sampling of stakeholders were administered a 10 question Likert-scale and selection questions survey.

Findings – Survey results support researcher’s assumptions of concept terminology confusion, “a methodology in theory differs from a methodology in practice” (Watson & Wood-Harper, 1993), and importance of elements of data management greater & data seal of approval assessment guidelines. Results identified theoretical frameworks/perspectives and answered the following research questions:
1. What are some data and digital curation terminology issues?
2. Which elements of data management plan are important?
3. Which data seal of approval assessment guidelines are important?
4. What are some theoretical frameworks for research in data management and curation services education?

The following reviewer’s comment influenced this study:
“The author is correct to identify definitional confusion and competing models and frameworks as a major worldwide limitation on the development of a compelling theory of digital preservation. In the present environment of digital preservation/curation, practice based R&D is driving framework development, leaving, as the author points out, theory in an underdeveloped state.” – iConference 2012, Reviewer #3 comments (Paper #99)

Survey participants represented several disciplines.

Research limitations- The survey includes selection bias, inconsistent responses, small sample size, and lacks generalizability. Future research and increased sample size are needed for validity, reliability, and generalizability.

Practical implications- This study contributes to data management planning, data curation, digital curation, and digital preservation literature.

Social implications- The research article addresses important data management and curation services issues within information science discipline.

Originality/value-The research article introduces an Exploratory Description Conceptual Framework (EDCF) extended from conceptual framework for analyzing methodological suppositions (Burrell&Morgan, 1979; Morgan&Smircich, 1980; Morgan, 1983, Solem, 1993). The EDCF conceptualizes Metatriangulation (Lewis & Grimes, 1999) and Theoretical Triangulation (Denzin, 1978).

Bionote
Plato L. Smith II is currently Head of the Digital Library Center Department at Florida State University with rank of Associate University Librarian, my career in research libraries includes over 7 years total Association of Research Libraries experience with 5 years of increasing managerial responsibilities at Florida State University. As the Digital Library Center Department Head at Florida State University since June 2005, I manage major aspects of library’s digital collections development, institutional repository, digital assets management system, oversee scanning and digitization projects, and serve as FSU’s state-wide digital initiatives subcommittee (DISC) representative, Council of State University Libraries DISC Chair, and technical expert and Co-PI on the grant funded MetaArchive project (LOCKSS), a multi-institutional digital preservation partnership funded by the Library of Congress NDIIPP program. Working closely with special collections, technical services, faculty, librarians, and systems staff, some projects have included digitization of electronic theses and dissertations, special collections materials, and various intellectual output of the University community to provide value to the Libraries and the University. Email: psmithii@fsu.edu
Fifteenth International Conference on Grey Literature – The Grey Audit: A Field Assessment in Grey Literature

DATA MANAGEMENT & CURATION SERVICES (DMC): EXPLORING STAKEHOLDERS’ OPINIONS

Plato L. Smith II, Doctoral Candidate, plsc08@my.fsu.edu
Florida State University
College of Communication and Information, USA
GLij - Bratislava, Slovak Republic - December 3, 2013

Outline

1. Introduction
2. Data Management and Curation (DMC)
3. Statement of Problem
4. Research Questions
5. Methodology
6. DMC Survey – FSU IRB HSC# 2012.9198
7. Limitations and Significance of Study
8. References

Introduction

- Metadata
- Research based on data
- Standards
- Archive data
- Authentic
- Data creation
- Representation
- Publication
- Guidelines
- Policies
- Workflows
- Framework/Model
- Data Management Planning
- Data Curation
- Digital Preservation
- Digital Curation
- Metadata
- Research based on data
- Archival
- Digital
- Workflow

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Data Management and Curation (DMC)

Four Key Concepts of Data Management & Curation:
1. Data Management Planning (Entire data lifecycle)
2. Data Curation (Level 1 Curation - Traditional academic information flow)
3. Digital Curation (Level 2 Curation - Information flow with data archiving)
4. Digital Preservation (Level 3 Curation - Information flow with data curation) (Lord, 2003)

“A record if it is to be useful to science, must be continuously extended, it must be stored, and above all it must be consulted.” – Vannevar Bush, 1945

Data Management and Curation (DMC)

DMC practices include four major data lifecycle management processes that:
1. Fulfill departmental, institutional, organizational policies & data management requirements;
2. Provide data creation (primary, secondary, tertiary data), data publication, minimal data description;
3. Facilitate added value (metadata), management & storage of archived data over data lifecycle;
4. Integrate a series of technical & strategic actions and consultations to ensure continual data archiving, authenticity, integrity, and stewardship (Lord, 2003; Pennock, 2006; DCC, 2007).

Statement of Problem

- Definitional confusion of DM key concepts
- Competing models/frameworks fragmentation
- Undeveloped theory of digital preservation and theory of digital curation
- Under-utilization of relevant standards, best practices, and guidelines where appropriate
- A need to improve DMC within & across disciplines
- DMC activities and practices vary across disciplines
- Multiple disciplines face massive data storage issues
- It is “impossible to define all the terms of one theory in the vocabulary of the other” (Kuhn, 1982, p. 669).
Research Questions

1. How can definitional confusion of key DMC concepts be resolved within and across disciplines?
2. What are some of the theoretical frameworks used to address data management and curation issues?
3. Can multiple paradigm perspectives help develop DMC theory?

Methodology

- Design – Quantitative (online survey) research method
  - Qualtrics online survey – 10 questions
  - Primary survey questions focus on (1) DMC key concepts, (2) theoretical frameworks/perspectives, (3) elements of data management plan, and (4) data seal of approval assessment guidelines

- Participant Selection – Professionals/researchers affiliated with data management and curation (DMC)
  - Professionals from formal and informal networking contacts (i.e. professional list serves, conferences, & workshops)
  - n = 64 (64 starts & 53 completes: 83% completion rate)

- Sampling – Funders (promoters), stakeholders (institutions), & users from the US and foreign countries
  - Senior management, deans, faulty, funding program officers, researchers, scientists, practitioners, librarians, publishers, consultant, commercial

DMC Survey - FSU IRB HSC# 2012.9198
- Approved 11/2/2012
- Launched 11/5/2012
- Closed 12/5/2012
- 12 questions – online
- 83% completion rate
- Diverse stakeholders
- Multiple disciplines
- Various perspectives
- Cultural opinions
- Top 5 for Q7 – Q9

Q5. Key Concepts
- Data curation, digital curation, and digital preservation are independent yet interrelated concepts. 80% agree (45 out 56).

Q7. Theoretic Frameworks
1. Pragmatism (67%)
2. Ethnography (64%)
3. Grounded Theory (48%)
4. Autoethnography (36%)
5. Phenomenology (33%)

Q8. Elements of Data Management Plan
- IP Rights (98%)
- Format (94%)
- Metadata (94%)
- Storage and backup (94%)
- Archiving/preservation (94%)

Q9. Data Seal of Approval Assessment Guidelines
- Guideline #7 (94%)
- Guideline #1 (90%)
- Guideline #6 (88%)
- Guideline #3 (86%)
- Guideline #9 (84%)
**DMC Key Concepts and Theoretical Frameworks**

**Theoretical Frameworks**

- Autoethnography
- Constructivism
- Critical Theory
- Ethnography
- Ethnomethodology
- Feminism
- Grounded Theory
- Hermeneutics
- Narratology
- Phenomenology
- Phenomenography
- Pragmatism
- Symbolic Interactionism
- Triangulation/Metatriangulation

**DMC Key Concepts**

- DaC = Data curation
- DiC = Digital curation
- DP = Digital preservation

**Limitations and Significance of Study**

<table>
<thead>
<tr>
<th>Limitations of Study</th>
<th>Significance of Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population selection bias</td>
<td>The study articulates the differentiation of key DMC concepts for definition clarification, linking, and concept mapping.</td>
</tr>
<tr>
<td>Small sample size</td>
<td>The study applies theoretical and practical knowledge to underdeveloped research on theory of data management and curation (DMC).</td>
</tr>
<tr>
<td>Survey questions bias</td>
<td>The study may help in DMC theory development within &amp; across disciplines.</td>
</tr>
<tr>
<td>Assumption that participants are familiar with DMC key concepts</td>
<td></td>
</tr>
<tr>
<td>Partial, incomplete, &amp; drop out survey responses</td>
<td></td>
</tr>
<tr>
<td>The study may lack transferability &amp; generalizability.</td>
<td></td>
</tr>
</tbody>
</table>

**References**


Sokol, G. (1999). Integrating scientific disciplines: an evergreen challenge to...
National Repository in the Czech Republic of Grey Literature

Features

Website: www.nusl.cz
Provider: National Technical Library
Records: over 200 000 records
Partners: over 90 organizations
Source area: Academy of Science, Public Research Institutions, Universities, Libraries etc.
International Cooperation: OpenGrey, DRIVER, ROAR, OpenDOAR
Collection provenance: Czech Republic

Based on

Participants: the National Technical Library, the University of Economics Prague
Financial support: by the Ministry of Culture of the Czech Republic acknowledged

Goals

- Central access to grey literature and the results of research and development in the CR
- Support of science, research and education
- Systematic collection of metadata and digital documents
- Long-term archiving and preservation
- Cooperation with foreign repository

Support of expert discussion about Grey Literature

Annual Workshops:
http://nrgl.techlib.cz/index.php/Workshop
Informative Web pages: http://nrgl.techlib.cz
Publication: Grey Literature Repositories

www.nusl.cz
Survey of enhanced publications in the Czech Republic

Petra Pejšová and Hana Vyčíhalová
National Library of Technology, NTK, Czech Republic

The poster presents survey about the state of enhanced publications in the Czech Republic. The goal of this survey was to find out situation of enhanced publications at research institutions in the Czech Republic. What research data arise? How are they stored and archived? To whom they made available? Are there the real enhanced publications, i.e. research publications linked directly to research data? 113 Czech research institutions were contacted with online questionnaire during 11th September to 7th October 2013. The poster will show the results from 65 Czech research institutions which filled in the questionnaire.

Bionote

Petra Pejsova studied information science and librarianship at Charles University. She works as an information specialist in the State technical Library, Czech Republic. Actually she is leading a project Digital Library for Grey Literature – Functional model and pilot. Email: petra.pejsova@techlib.cz
Survey of Enhanced publications in the Czech Republic

Fifteenth International Conference on Grey Literature
CVTI SR, Bratislava, Slovak Republic, 2-3 December 2013
Petra Pejšová, Hana Vyčítalová
National Technical Library, Czech Republic

Situation in the Czech Republic

- New term
- Uncharted area
- Not regulated in legislation

Survey of Enhanced Publications

Aim: to find out situation of enhanced publications at research institutions in the Czech Republic
- What research data arise?
- How are they stored and archived?
- Are they made available?
- Do the real enhanced publications, i.e. research publications linked directly to research data exist?
- ...
NTK Research Methodology

- Target audience: research institutions (public research institutions, private, other…) – 113
- Representatives of institutions connected with institution research activities selected
- Form of questioning: structured questionnaire
- 19 questions, online application
- 11th September – 7th October 2013
- Contact: email with link to questionnaire to chosen representatives

Results

<table>
<thead>
<tr>
<th>Institution type</th>
<th>Institutes of Academy of Sciences</th>
<th>Public research institutions</th>
<th>Private research institutions</th>
<th>Other research institutions</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of addresses</td>
<td>54</td>
<td>21</td>
<td>34</td>
<td>4</td>
<td>113</td>
</tr>
<tr>
<td>Number of responses</td>
<td>33</td>
<td>14</td>
<td>16</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>Negative answer</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Do arise following data during your research work?

- Research data from measuring
- Accompanying material - visual documentation
- Research data from experiments
- Research data from testing
- Accompanying material - videos
- Research data from surveys
- Accompanying material - models
- Accompanying material - schemes
- Research data from statistical investigation
- Post-published data reviews
Are Data Linked to Research Publications?

- By joint storing of data with publication in digital form on website (15)
- By joint storing of data with publication in digital form in repository (15)
- Information on data availability in records (metadata) on publication (15)
- References from publication to place of data storing in digital form (14)

44% of questioned institutions plan to start linking of data with publications

<table>
<thead>
<tr>
<th>Yes</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>27</td>
</tr>
</tbody>
</table>

Are Data Available for Other Research Workers?

- Personal visit at workplace (full-time study, conversation, personal handover of data) (28)
- Data sending by e-mail, through FTP or in another manner (25)
  - On-line on website (15)
  - On-line in digital repository (9)

Yes 44
No 21

Reasons for Inaccessibility

- Risk of data misuse
- Commercial researches – customer’s property
- Fear of competition
- Part of intellectual property of research workers, know how of institution
- Subject of patent protection
**Creative Commons**

- Are they used?
  - No: 61
  - Yes: 4

- Will they plan to use CC?
  - Don’t know: 2
  - No: 18
  - Yes: 41

**Other Findings**

- Data volume is difficult to assess – in TB to GB
- Most common formats PDF, DOC and XLS, then many various formats
- 31% for project of common repository – 46% according to situation

**Thank you for your attention!**

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hana.vycitalova@techlib.cz
PopVaT – Popularisation of Science and Technology in Slovakia

Patrícia Stanová, Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia

The National Project for Popularisation of Science and Technology in Slovakia (PopVaT) started in April 2013 and it will continue until October 2015. It is co-financed from the EU structural funds. PopVaT is the fifth national project implemented by The Slovak Centre of Scientific and Technical Information (CVTI SR). The idea of the project follows the goals of National Centre for Popularisation of Science and Technology in Society (NCP VaT) – one of the departments of CVTI SR. It was created with the aim to fulfill the tasks related to implementation of the strategy of science and technology popularisation in society approved by the Ministry of Education, Science, Research and Sport of the Slovak Republic.

The main aim of the project is to increase the awareness of three target groups of population about science and technology importance.

The objective in target group general public is to inform about Science and Technology as an important part of people’s lives and as field of society in which it is necessary to invest for better economic results in the future.

Second target group of PopVaT concerns young people. It will use innovative and entertaining forms of popularisation to create a positive influence on young people who will be motivated to study in one of the areas of Science and Technology.

Target group scientific community will receive support in the field of individual communication and promotion of results of their research activities to the general public.

All main objectives will be achieved by the use of the most suitable activities and forms of promotion, regarding to each target group.

The major activities of PopVaT are:

- Scientific multimedia shows for young people
- Documentaries and audiovisual resources about Science and Technology
- Promotion of Science and technology on the internet
- Communication on social networks
- Science and Technology oriented conferences, seminars, workshops, film festival etc.
- Science promoting publications and periodicals
- Creation of Science Centre – kind of hands on museum for young people and wider public.

Building of Science Centre is one of the most important activities of the project and this idea is strongly supported by the Ministry of Education, Science, Research and Sport of the Slovak Republic and by several science and technical unions, NGOs and also by private companies. This activity is important mainly due to the fact that Slovak Republic is one of the last developed countries without a place like Science Centre.

Bionote

Patrícia Stanová studied library and information science at Comenius University in Bratislava (Slovakia). Since 2011 she works in National Centre for Popularisation of Science and Technology in Society established by the Slovak Centre of Scientific and Technical Information in Bratislava (Slovakia). She is actively involved in organizing events and activities focused on science and technology popularization in society. She also participates as a team member at national projects: National Infrastructure for Technology Transfer in Slovakia (NITT SK) and Promotion of Science and Technology in Slovakia (PopVaT). From 2012 she is studying PhD study at Comenius University in Bratislava (Slovakia) with the theme: Information behavior of “Google” generation. Email: patricia.stanova@cvtisr.sk
"Gold Value" Offer to Science and Research in Slovakia – is presented by the NISPEZ project and related activities

Mária Žitňanská, Michal Sliacky, Marián Vaňo, and Eva Králiková
Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia

"DATA IS THE NEW GOLD", Neelie Kroes, Vice-President of the European Commission responsible for the Digital Agenda

The national project activities are aimed at direct support to research and development (R&D) in Slovakia at national level and in long-term horizon. To provide access to a wide offer of world electronic information resources (EIR) is the most important activity. Access to EIR creates a part of a model of completely centralized providing of access to EIR as well as other activities serving to their effective usage. Creating a system for centralized access, search, use and administration of EIR for R & D is the second important project activity.

The third and the same important part of the offer to science and research in Slovakia is represented by building of SciDAP – a central bibliographic database and portal access to the Slovak EIR for research and development. The Slovak scientific and professional journals including open access journals and grey literature documents are concerned. The SciDAP represents a tool to process documents which would be kept for a long time in the institutional repository of SC STI digital documents.

These three activities create a part of the NISPEZ (National Information System to Promote Research and Development in Slovakia – Access to Electronic Information Resources and the Slovak Centre of Scientific and Technical Information is the NISPEZ project solver.

Keywords: NISPEZ, electronic information resources (EIR), for research and development (R&D), centralized access, Scientia.sk – search portal for science and research, SciDAP – Central database and portal access to the Slovak EIR for R&D, open access, grey literature

Bionotes

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Digital Libraries are nowadays called to support enhanced forms of scientific communication (we name these comprehensive research products) based on publication of “comprehensive scientific theories” – including the data and algorithms they are based on – as to make it possible for “others to identify errors, to support, reject or refine theories and to reuse data for further understanding and knowledge”\(^1\). In order to do that, they are requested to (i) manage in a seamless way a rich array of data ranging from traditional research outputs, mainly papers and experimental data, to living reports, executable research papers, and scientific workflows and (ii) promote collaboration among coworkers by realising innovative research paths and strategies. To make this more challenging, data to be managed often fall into the “big data” domain.

In this poster we present an innovative environment conceived to satisfy the above requirements via social networking research facilities offered by the D4Science Infrastructure. D4Science is an implementation of the Hybrid Data Infrastructure (HDI) concept, i.e. it is an IT infrastructure that caters for its users with a comprehensive set of data management facilities offered as-a-Service.

The D4Science social networking facilities manifest in a number of applications made available through a thin client (namely a web browser) and relying on the HDI. These facilities are conceptually close to the common facilities promoted by social networks – e.g. posting news, commenting on posted news – yet adapted to deal with the settings previously described, namely to promote large scale collaboration and cooperation on comprehensive scientific products, data sets, theories and tools. Overall, these facilities cater their users with:

a) a continuously updated list of events / news produced by users and applications (Home Social),
b) a folder-based file system allowing to manage complex information objects in a seamless way (Workspace),
c) an email-like facility for exchanging messages with selected co-workers (Messages),
d) a list of happenings organised by date, e.g. publication of a comprehensive research product, comments on a research product (Notifications),
e) a settings area where the user can configure diverse aspects characterising the system behaviour including his/her data and notification preferences (Personalisation).

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**Bionotes**

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Bionotes CONTINUED

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Supporting enhanced forms of scientific communication

Digital Libraries (DLs) are nowadays called to support enhanced forms of scientific communication:
• based on publication of comprehensive scientific theories;
• including the data and algorithms they are based on;
• to make it possible for others to identify errors, to support, reject or refine theories and to reuse data for further understanding and knowledge.


DLs are actually Virtual Research Environments* requested to:
• manage in a seamless way a large amount of data ranging from traditional research outputs, mainly papers and experimental data, to living reports, executable research papers, and scientific workflows;
• promote collaboration among coworkers by realizing innovative research paths and strategies. To make this more challenging, data to be managed often fall into the “big data” domain.

http://dx.doi.org/10.2481/dsj.GRD-013
We present an innovative environment conceived to satisfy the above requirements via social networking research facilities offered by the D4Science Infrastructure.

A set of applications made available through a thin client (namely a web browser) and relying on the D4Science Hybrid Data Infrastructure (HDI):

- An HDI is an IT infrastructure providing its users with a comprehensive set of data management & computing facilities offered as-a-Service.

These facilities are conceptually close to the common facilities promoted by social networks:

- yet adapted to promote large scale collaboration and cooperation on comprehensive scientific products, data sets, theories and tools.
A continuously updated list of events / news produced by users and applications

A Social Networking Research Environment for Scientific Data Sharing: The D4Science Offering

- User-shared News
- Application-shared News
- Share News

A folder-based file system allowing to manage complex information objects in a seamless way

Information objects can be:
- files, dataset, workflows, experiments, etc.
- organized into folders and shared
- disseminated via URIs
- accessed via WebDAV

A list of happenings organized by date, e.g. publication of a research product, comments on a research product, etc..

D4Science Workspace

D4Science Home Social

D4Science Notifications

D4Science Workspace

D4Science Home Social

D4Science Workspace

D4Science Home Social

D4Science Workspace

D4Science Home Social

D4Science Workspace

D4Science Home Social

D4Science Workspace
D4Science Personalization

A settings area where the user can configure diverse aspects characterizing the system behavior including his/her data and notification preferences.

Recap and Conclusion

The D4Science social networking facilities represent an innovative approach that nicely complement the DL offering and boost cooperation and collaboration. These facilities are:

- conceptually borrowed from social networks yet adapted to deal with the scientific data practices.
- exploit an Hybrid Data Infrastructure, providing users with the capability to effectively share "big data" or scientific products.
- suitable for heterogeneous contexts ranging from cultural heritage to biodiversity communities of practice.

Useful links

- D4Science Infrastructure
  - www.d4science.org
- gCube: the enabling technology
  - www.gcube-system.org
Find the Piece That Fits Your Puzzle

The Grey Literature Report

From

The New York Academy of Medicine

Focused on health services research and selected public health topics, the Report delivers content from over 750 non-commercial publishers on a bi-monthly basis.

Report resources are selected and indexed by information professionals, and are searchable through the Academy Library’s online catalog.

Let us help you put it all together; subscribe to the Grey Literature Report today!

For more information visit our website: www.greyliterature.org
or contact us at: greylihelp@nyam.org

The New York Academy of Medicine
At the heart of urban health since 1847
Applied Information Ethics in Grey Literature:
Introducing a new paradigm for enhancing professional practice
Sylvia Simmons and Jonathan Gordon-Till, InfoEthics UK, United Kingdom

The field of applied information ethics is concerned with the impact of information-based decision-making on the underlying moral compass of an organization and in turn on the business impact of ethical decision-making. Preliminary analyses of the professional landscapes in grey literature and applied information ethics in the early twenty-first century suggest that both fields share significant areas of concern with respect to professional practice. For example, whilst new technologies offer both opportunities and risks in managing grey literature, so too ethical questions are raised in the application of such new technologies in the digital preservation of archives. We posit that these shared areas of concern are exacerbated by the relatively poor understanding of our professional roles in the information age, and also that education and practitioner discourse in these two fields is deemed subordinate to – and is somewhat eclipsed by – perceived greater priorities in emerging technologies and the influence of globalization and new ways of working. If our conclusion is correct, we further suggest that our adjacent professional domains are at risk of complete marginalization, and by extension that our wider professional landscape (publishing, librarianship, records, information and knowledge management) is at risk of irreparable diminution. We invite interested practitioners and researchers to collaborate with us to validate our hypotheses. We also present an innovative and practical approach to ameliorating the risks associated with overlooking our areas of shared concern through the development an Information Audit Toolkit.
Combining ‘big science’ research data from different sources and standards: The case of Gravitational Waves and GRB search

Luisa De Biagi, CNR Central Library
Fabio Garufi, Naples University, Physics Dept., Italy

Gamma ray bursts (GRB) are the most energetic events in the known Universe. They were initially detected by military satellites monitoring USSR nuclear experiments, and nowadays are observed both by satellites and high quote ground detectors. Gravitational Waves (GW) are ripples in the space-time produced in stellar collapses, black holes and/or neutron stars coalescences. They have not been directly detected although a proof of their emission exists. A network of big detectors for GW detection exists around the World (2 in the USA, one in Italy one in Japan and one in Germany). GRB and GW could have common origin, so it is natural to search eventual correlation in the Satellites and GW detectors signals. This implies the management of data sets acquired using different standards and different sampling frequencies. Moreover, although satellites data are written in the same standard (FITS), each satellite has its detectors different from one another, while GW detector data are more uniform (Frames in GWIC standard). The goal of this poster is to trace an overview on the flowing and use of ‘Big science’ research data in astrophysics and, particularly, in gravitational physics, to examine the way in which Big Science data are managed and produced, including any recommendations which may be appropriate.

In fact the so called ‘Big Science’ data are qualitatively different from others: they come in large volumes, shared and exploited in ways which may differ from other disciplines, as well. This work will try to focus these differences using the case-study of Gravitational Waves data, discussing the benefits of a formal data-preservation strategy and the cases for open data and well-preserved data following from that. Then a brief sightseeing on the main National and International Projects/Consortia as LSC - LIGO Scientific collaboration community - which is already aware of the general need for data management, and the specific need for preservation - and repositories on astrophysics and gravitational waves data research.

In particular, the current volume of LIGO data is hundreds of terabytes, and the data rates are expected to grow, but LIGO is just one of several other existing or planned big physics projects, including the LHC, the Square Kilometre Array (SKA), and various European Space Agency (ESA)/NASA space missions. Consortia like that produce, together with the core data, a large volume of auxiliary data, representing background and calibration signals of various types. The raw data, are the lowest-level GW data consisting on signals from the core detectors, whose semantic content is specific to detectors and software, so that preserving it long-term would represent a significant challenge. Instead ‘data products’ and their supporting documentation, will be available for use and reuse by scientists who do not have an intimate connection with, and knowledge of the instrument. Then, though it doesn’t concern strictly data, will be also useful to give an overview treat big science communities’ literature repositories, since they seem to illustrate the way in which the communities have learned to act collectively (es. Arxiv.org, the preprint archive started in 1991 as an electronic version of the long-established practice of distributing preprints of accepted journal articles around the high-energy physics (HEP) community, by post, now including maths, astrophysics, astronomy etc.).
**Bionotes**

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Combining ‘big science’ research data from different sources and standards. The case of Gravitational Waves and GRB search

By Luisa De Biagi*, Fabio Garufi PhD**

* Consiglio Nazionale delle Ricerche (CNR) Informative and Documental Systems Office. CNR Central Library ‘G. Marconi’ National Referring Centre for Grey Literature
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Scientific communities and OA data-sets

Large OA data-sets do represent an added value, granting opportunities for scientific discovery but…..

Understanding the context in which data-sets are collected it’s crucial to:

- properly frame question and results;
- Elaborate right conclusions
- So — scientists need to work closely with scientific data ‘hunters’ if they intend to use huge composite data-sets

Multi-messenger astrophysics

- Besides traditional astronomy, based on the detection of light coming from cosmic objects, other forms of radiation can give valuable information on the astrophysical sources.
- Different scientific communities look at the different forms of radiation coming from outer space: Cosmic rays, gamma rays, cosmic neutrinos, gravitational waves…
- The data produced by the various detectors are very heterogeneous, due to the peculiarity of both the detectors and the sources, and their integration can be troublesome.
The Gamma Ray Bursts (GRB)

- Gamma Ray bursts (GRB) are the most energetic events in the known Universe. They were initially detected by military satellites monitoring USSR nuclear experiments, and nowadays are observed both by satellites and high quote ground detectors.
- The frequency of these events is of the order of one per day.
- GRB sources are still unknown but it is believed they are produced in Supernova shock waves and coalescence of binary stars and black holes.
- The data flow of some MB/hour is peaked on the event trigger and, depending on the detector – satellite or ground detector – point in different location in space or integrate a large portion of visible sky.
- GRB data are stored in FITS (Flexible Image Transport System). It is primarily designed to store scientific data sets consisting of multidimensional arrays (images) and 2-dimensional tables organized into rows and columns of information.

Gravitational Waves (GW)

- Gravitational Waves are produced, as a consequence of the General Theory of Relativity, by non spherically symmetric variation of mass.
- They are ripples in the space-time fabric that propagate at the speed of light and interact very weakly with matter, resulting in a very difficult detection. In fact they have not been detected directly, although indirect evidences exist.
- The sources of GW are rotating neutron stars, coalescing binary stars and merging black holes, that generate continuous waves, and supernova explosion that generate impulsive waves.
- Ground based GW detectors as VIRGO in Italy and the LIGO detectors in the USA, produce a continuous data flow of ~10 MB/s that are stored on the online data archive for a limited period and then on grid data centers.
- The GW data are organized with the LIGO/VIRGO Data Frame Format for interferometric gravitational wave detectors (IGWD). The predominant type of data stored in frames is time series data of arbitrary duration. It is possible, however, to encapsulate in frame structures other types of data, e.g., spectra, lists, vectors or arrays, etc.

Mixing GW and GRB data

- The joint analysis of GRB and GW data to search for possible correlation in the signals, due to a common origin implies the access and the management of both type of data.
- GRB satellite data are often publically available on e.g. the HEASARC data archive: [http://heasarc.gsfc.nasa.gov/docs/archive.html](http://heasarc.gsfc.nasa.gov/docs/archive.html).
- The NSF has asked LIGO Laboratory to prepare a Data Management Plan for the open release of LIGO data, including full strain data.
- This is envisioned to be similar to open data models like NASA’s HEASARC. In response, LIGO Lab convened the LIGO Open Science Center (LOSC).
Mixing GW and GRB data

The use of the full Virgo data remains limited to:

- The Virgo collaboration, Other GW partners projects like LIGO, Detailed MOU with joint data analysis and publications...
  → .......but work is in progress...

- GW and GRB data are usually sampled at very different rates. Meaningful GRB data integrate gamma flux on the detector with a time resolution of the order of the second (1 Hz) in different energy bands; present GW data are meaningful in the 5-1000 Hz range (0.2 – 0.001 s).

Worldwide Interferometer Network

Virgo and LIGO Scientific Collaboration (LSC) signed a MoU for data exchange data analysis and publication policy. They act as a single multi-detector observatory.
OA ArXiv.org repository: a fair-interactive tool for sharing astrophysical data

ArXiv.org: OA repository provided by Cornell University Library gathering e-prints in Physics, Mathematics, Computer Science, Quantitative Biology, Quantitative Finance and Statistics — an electronically and ‘interactive’ action started in 1991, born from the old practice of distributing preprints of accepted articles in High energy Physics within HEP community by post. Now — more than 875,000 e-papers/e-prints mainly in computer science statistics and maths — a well-known repository where where researchers and scientists can deposit or find articles and papers published in Green OA. http://arxiv.org/year/astro-ph/13

N.B. — Detailed categories within astrophysics, updated entries in real time (new, recent, current month)

astro-ph papers entries: 10461 + 1428 in 2013 (update October 2013)

Now improved with a mobile application for i-Phone granting access to the repository with a quick and easy search — extensive search engine (keywords or filters as title, author, abstract and ID.)

Other useful OA repositories


• IOP eprintweb.org, a free e-print service, provided by arXiv (for contents). Enhanced features in navigation, searching, personalization and presentation. Reference linking across the entire content and enhanced searching on all key fields, including institutional address.

• KEK Information Service System for Preprints (KISS): KEK publications and other preprints stored in KEK library, in the fields of accelerators, high energy and nuclear physics, synchrotron radiation, health physics, and computer science. http://www-lib.kek.jp/KISS/kiss_prepri.html

• The SPIRES-HEP database, run by the Stanford Linear Accelerator Center (SLAC): http://www.slac.stanford.edu/spires/hep: the 1st to be served over the web (since 1991), comprehensively covering literature in HEP (High Energy Phys.) and supplying also special databases for jobs (employment database), institutions, and recent HEP experiments.

Main geospatial Big Data initiatives

Launched to increase capabilities to processing geospatial data:

• the European Commission’s Big Data Public Private Forum http://big-project.eu/

• the US National Science Foundation’s Big Data Science & Engineering (http://www.nsf.gov/pubs/2012/nsf12499/nsf12499.htm)

• the US Office of Science and Technology Policy’s (OSTP) Big Earth Data Initiative (BEDI) http://www.whitehouse.gov/blog/2013/04/19/taking-pulse-our-planet-new-strategy-earth-observations

• recent ESA/ESRIN “Big Data from Space” event addressed challenges posed by policies for dissemination, data search, sharing, transfer, mining, analysis, fusion and visualization http://www.whitehouse.gov/blog/2013/04/19/taking-pulse-our-planet-new-strategy-earth-observations

• OPENGEO SPATIAL Consortium: http://www.opengeospatial.org/
January 2010 – all scientific and technical information available in just 3 CLICKS

Over 35 million records of articles, books, reports and conference proceedings from 1847 up to the present

DISCOVER ALL THE FEATURES AND FUNCTIONS AVAILABLE AT www.refdoc.fr
BDSP (Base de données en santé publique) – a unique initiative to archive and disseminate French grey literature on public health

François Petitjean, Marie-Laure Charron, Séverine Ferron, and Christiane Stock
La Banque de données en santé publique and INIST-CNRS, France

BDSP (database in public health) is a network of institutions initiated 20 years ago by the French ministry of health. Its aim is to collect and provide access to documents on public health topics, with specific attention to grey literature published in French.

40 organizations participate in this open and collaborative network, including the stakeholders of the French health system and from other French-speaking countries. It is managed by a team of 4 members of the EHESP School of Public Health.

The network produces a multiservice portal which includes a bibliographic database with more than 450,000 records and 60,000 full text documents online. It also offers a multilingual glossary and a thesaurus in public health. The website receives about 3000 visits per day.

BDSP is a unique product by its “construction”, its contents and its scope. Its flexible organization has allowed for many adaptations and extensions over the past 20 years, aiming to cover all fields on public health.

The bibliographic database offers access to an important number of grey documents published by the principal French organizations involved in public health, research units or government agencies, at both a national and regional level. The documents include expert’s reports, summary reports, policies, theses and dissertations.

Participation in the BDSP network allows its members to archive their grey publications and data, to increase their visibility, to share current awareness tasks and exchange bibliographic records or documents as well as best practices. Working in a network further helps to deal with obstacles in managing grey literature such as insufficient recognition of the documents compared to journal articles, difficulties to obtain authorizations for the dissemination (in particular for government agencies) and to keep up with the rapid evolution of knowledge.

At present the network explores ways to extend its cooperation with other French speaking countries and to share grey literature in French.

Bionote

Christiane Stock is the Head of the Monographs and Grey Literature service at INIST, in charge of the repositories LARA (reports), mémSIC (master’s theses in information sciences) and OpenGrey. Member of the Technical Committee for the SIGLE database from 1993 to 2005, she also set up the national agency for ISRN (International Standard Report Number). She is member of the AFNOR expert group who prepared the recommended metadata scheme for French electronic theses (TEF). Email: christiane.stock@inist.fr
BDSP : a unique initiative to archive and disseminate French grey literature on public health

F. Petitjean, M-L Charron, S. Ferron (EHESP School of Public Health), C. Stock (Inist-CNRS)

GL15 – Bratislava (SK), December 2, 2013

1. BDSP – a network, a portal and a database

- BDSP (Public Health Databank) is a network created by information professionals in 1993 at the request of the French ministry of health in order to provide access to the documentation on public health and especially to grey literature in French.

- The network is composed of 40 data producers, including stakeholders from the French health system and other French-speaking countries. The network is open and collaborative, guided by formal agreements.

- Reciprocal exchanges of services enables input to be added to the portal to keep it going, such as the creation of records on documents and events or monitoring hundreds of serials, and to benefit in return from document archiving facilities, access to all other input, sharing technical expertise, ...

- Two committees (librarians of the network and heads of the member institutions) manage BDSP.

- A team of 4 people from the EHESP School of Public Health manages and promotes the BDSP; it covers skills in information science, computer programming and public health

2. bdsp.ehesp.fr – the multiservice information portal

- The network produces a multiservice portal:
  - A bibliographic database with currently over 473,000 records, 63,000 full-text documents (13.3%) and a catalogue with 400 collections, serials and monographs.
  - It also offers a multilingual glossary and a thesaurus in public health.
  - The portal includes dedicated areas for job postings, for conference and meetings announcements, and an reviewed directory of websites on public health
  - The BDSP website is frequently used, with about 3000 visits per day.
  - BDSP users thus have free access to an important amount of information on public health in different forms
3. Grey literature in the bibliographic database

- Currently grey literature represents 11% (or 51,000 documents) of the bibliographic records.
- 26% of these citations provide a link to the full text (13,500 records). The rate is higher than for other document types (12%).
- The following document types are included:
  - Reports (policy, expert, inspectorate, official documents) – 46.5%  
  - Academic degree (theses, dissertations, doctoral theses) - 42%  
  - Conferences (proceedings, papers, oral presentations) – 11.5%
- The main producers of grey literature are universities (theses), agencies (expertise reports) and health observatories, all members of the network. All French doctoral theses on public health are referenced in the database.
- Grey documents are mostly written in French (89%), being produced in a large part by the members of the network.

4. Usage of the bibliographic database and the website

- The BDSP website is well frequented. In 2012 an average of 3000 visits per day (1 million /year) were made by 1500 visitors per day; the average visit took about 3 minutes and 17 seconds with 5 page views.
- The bibliographic database is the most frequented part of the portal. 1173 visits per day in 2012 by 860 visitors (39% of the total visits)
- Establishing a typology of users is difficult due to a lack of recent data. Network members think however that public health professionals, are the most frequent users, including during their studies or training
- BDSP users are located in France (87%) or in other French-speaking countries (9%)
- Specific data on the usage of grey literature is not available.

5. Difficulties with regards to grey literature

- Several obstacles appear with regards to archiving issues and the dissemination of grey literature:
  - Collecting grey documents requires the identification and mobilization of GL producers, as opposed to journals material. This applies in particular to « reports ». The librarians of the regional health agencies point out their difficulties in obtaining their in-house production.
  - This lines up with the poor recognition of grey literature or factual data by the health professionals.
  - Due to ignorance of intellectual property rights, many services won’t disseminate their production in public, but keep it in intranets. The same difficulties apply with authors for the agreements to disseminate the full-text.
  - The grey literature typology used in the database could be more detailed in order to avoid cataloguing errors and to improve consistency (e.g. expert’s reports with ISBN).
6. Leads for progress for grey literature

- Several opportunities for progress (strategies) emerge:
  - The development of sites dedicated to certain publics or professional groups providing added value to their productions and the possibility to share them
  - The reference to the national archives and to the obligation to deposit documents produced by the national services
  - The development of « best practices in public health » should be an important source for productions to be published
  - Working on the typology of grey documents may result in specific actions according to the documents and the users

7. Network organization and added value for its members

- BDSP is unique by its organization. The open and collaborative network allows for efficiency and flexibility.
- Pooling and sharing production of services which are useful for all have made it possible to extend and adapt the BDSP for the past 20 years. Today it covers all fields on public health (52 topics).
- Meetings and the participation in an electronic forum enable exchanges of professional practices, highly valued by the information professionals.
- The network adds value to in-house productions and events, and furthers the dissemination of information to its member structures
- The members of the network are the stakeholders for the smooth working of the BDSP

8. Contributions to the database – return on investment for its members

- The bibliographic database offers archiving facilities for the documents of its producers, providing added value services such as perennial links to the full text (citability).
  - This is even more true for grey literature: 38% of the full text documents for GL are deposited in the BDSP archive
  - Access to grey literature is thus made easier for the member organizations of the network
- International visibility is increased by providing indexing and keywords in both French and English.
- In exchange for providing input to the database the members could receive the same number of records produced by other members.
9. Perspectives: new collaborations

- The BDSP intends to open its network to all French speaking countries. Swiss and Moroccan institutions are already members. Several ways of achieving this are being explored:
  - Seek to associate the documentation centres in public health from African countries
  - Take into consideration the specific health problems of emerging or developing countries
  - Add areas dedicated to a specific country to the portal
  - Promote the BDSP to health professionals and researchers in other French-speaking countries (e.g. a cooperation project with the « Santécom » database of Quebec)

- Thus BDSP reinforces its role as federator and aggregator for scientific and professional information in the public health domain and as main access point for French language grey literature on this topic.

9. Perspectives – possible ways the BDSP portal can progress

- Network members discuss a new project to adapt the services offer in order to better answer the needs of health professionals, researchers and students. Working on the interface between data and users should enable information to be transferred into knowledge and skill development.

- Several ideas are being explored:
  - Create dedicated areas for geographic areas (French regions, French-speaking countries)
  - Elaborate and disseminate thematic syntheses
  - Inform on training courses, link to distant learning courses
  - Provide areas for best practice guides and contribute thus to continued training, linked to the concept of evidence-based public health
GreyNet International: Towards a new infrastructure  
*Inspired by its mission, innovative in serving the grey literature community*

Dominic Farace and Jerry Frantzen  
GreyNet International, Netherlands

GreyNet (Grey Literature Network Service) has been serving the international grey literature community since 1992 as an independent organization. GreyNet is dedicated to research, publication, open access, and education in the field of grey literature. Today, in order to provide an infrastructure commensurate to its mission and core activities, GreyNet seeks to expand its infrastructure and welcomes three new committees that will convene alongside the existing Program Committee in implementing its fourfold mission. These three committees will include an Editorial Committee, a Resource Management Committee, and a LIS (Library and Information Science) Committee. These new committees together with the Program Committee will stem from GreyNet’s Organizational Membership.

In the months leading-up to the Fifteenth International Conference on Grey Literature, GreyNet endeavors to move its bilateral relations with current and potential Associate Members to a more multilateral platform represented by four Committees and their Chairs.

**Bionotes**

**Dominic Farace** is Head of GreyNet International and Director of TextRelease, an independent information bureau specializing in grey literature and networked information. He is a native Louisianan and holds degrees in sociology from Creighton University (BA) and the University of New Orleans (MA). His doctoral dissertation in social sciences is from the University of Utrecht, The Netherlands, where he has lived and worked since 1976. After six years heading the Department of Documentary Information at the Royal Netherlands Academy of Arts and Sciences (SWIDOC/KNAW), Farace founded GreyNet, Grey Literature Network Service in 1992. He has since been responsible for the International Conference Series on Grey Literature (1993-2013). In this capacity, he also serves as Program and Conference Director as well as managing editor of the conference proceedings. Farace is editor of The Grey Journal (TGJ) and provides workshops and training in the field of grey literature.

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**Jerry Frantzen** graduated in 1999 from the Amsterdam University of Applied Sciences/Hogeschool van Amsterdam (AUAS/HvA) in Library and Information Science. Frantzen is the technical editor of The Grey Journal (TGJ). And, since 1996, he is affiliated with GreyNet, Grey Literature Network Service, as a freelance technical consultant. Email: info@greynet.org
GreyNet International: Towards a New Infrastructure

"Inspired by its mission, innovative in serving the grey literature community"

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In order to provide an infrastructure commensurate to its mission and core activities, GreyNet seeks to welcome three new committees that will convene alongside the existing Program Committee in implementing its fourfold mission dedicated research, publication, open access, and education in the field of grey literature.

GreyNet’s New Infrastructure 2014
Research, Publication, Open Access, Education

[Diagram showing different components and their connections]

GreyNet’s Income Sources

[Diagram showing different income sources]

GreyNet’s Open Sources

[Diagram showing different open sources]
Lara - Libre accès aux rapports scientifiques et techniques –
An open access digital library dedicated to
French scientific and public reports
Emmanuelle Rocklin
Institute for scientific and technical information, INIST-CNRS, France

As the national representative for the former SIGLE database, then as a national desk for French scientific and technical reports, Inist-CNRS has a longstanding experience in collecting grey literature and holds a unique collection of more than 60 000 paper reports, some of them belonging to dark grey literature as they were initially issued in only 2 or 3 copies. Besides its historical role of acquiring reports, Inist-CNRS has the mission to disseminate and promote scientific literature. That is why, facing the increase of native digital reports and following the involvement of CNRS in the open access movement (Berlin, 2003), Inist-CNRS decided in 2006 to create Lara, an interdisciplinary and institutional repository dedicated to scientific and technical reports.

Lara is based on DSpace, an OAI-PMH open source software developed by the Massachusetts Institute of Technology (MIT) and Hewlett Packard. It uses a qualified Dublin Core metadata set, which permits a full interoperability with other systems. Since Lara is a multi-institutional and multidisciplinary repository, it is organized according to both these two criteria. All items are first integrated in the collection of the institution which released them, then mapped in the disciplinary collection(s) corresponding to their scientific domain(s). The input can either be submitted via the web-user interface or imported via a routine in case of an important number of documents. This second way of items integration evidently means that we hold a version of the reports’ metadata to transform into qualified Dublin Core. Once the input made, each item is identified by a Handle, a unique persistent identifier remaining valid even if the contents moves to a new platform or technical environment. The reports can then be searched using the web-user search engine or browsing through date, author, title or subject. Each of these ways can be applied on a general level or more specifically in a collection (i.e. institution or scientific domain).

Lara is registered in different directories such as ROAR - Registry of Open Access Repositories - or Open DOAR - The Directory of Open Access Repositories - its metadata are also indexed by Google and Google Scholar. Thus, scientific and technical reports acquire a new visibility and more accessibility. Today, Lara proposes more than 2 000 reports in full-text. The database received 534 000 visits in 2012 and more than 73 000 PDF files were downloaded during the same year. The number of full text reports in Lara increases, on one hand with native electronic reports provided by institutions and on the other hand through agreements concluded on the digitization of some of the paper reports held in Inist-CNRS. Due to their age some documents can present problems for processing (digitization), such as manuscript texts or glued photographs or yellowed paper. Other challenges are fold-out graphs or plans or multi-volume appendix. All these reports are processed by Inist-CNRS Digital publishing and digitization department, including a transformation into searchable text using OCR (Optical Character Recognition programs) and resulting in digital reports in PDF files.

Bionote
Emmanuelle Rocklin is a scientific information specialist at the Institute of Scientific and Technical Information (INIST-CNRS). She is in charge of LARA, an open digital library dedicated to French scientific and public reports.
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Access to knowledge and information is necessary for the function of democracy, as well as for various kinds of research and recreation. The advent of electronic publishing was seen as a development that would make dissemination of various kinds of non-commercial publications (grey literature), which was difficult to get a hold of during the paper era, easier. This poster presents developments in publishing output in Iceland as documented in the Icelandic national bibliography during the first decade of the 21st century. Changes in the output of kinds of material are obvious. In all categories fewer units were issued in 2011 than in 2001, the decrease in total output is over 12%.

<table>
<thead>
<tr>
<th>Kinds of units in the Icelandic National bibliography</th>
<th>2001</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books, pamphlets</td>
<td>1539</td>
<td>1524</td>
<td>1465</td>
</tr>
<tr>
<td>Sound recordings music</td>
<td>228</td>
<td>233</td>
<td>196</td>
</tr>
<tr>
<td>New journals/newsletters</td>
<td>187</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>Maps</td>
<td>30</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>1982</td>
<td>1845</td>
<td>1738</td>
</tr>
</tbody>
</table>

On the 1st of January 2003, an amended Legal Deposit Act, no. 20/2002 took force, covering various kinds of media, amongst them e-publications, which then should be catalogued in the Icelandic national bibliography.

The difference is particularly striking in the numbers of new journals/newsletters (founded in this period), which decreased by almost 62%. This was during a time when foundation of new institutions, organizations and associations, which traditionally established newsletters to disseminate knowledge and information to members and to introduce their operations to non-members, was ongoing. The reason could only be that some other media and/or unit of communication than the journal or newsletter were being used for the above named purposes. In other words it looks like the units of publication have changed with the advent of e-publishing. This raises the question whether this development will affect public accessibility to the material being disseminated?

To give an indication of possible future developments the case of the Newsletter of IRMA (Icelandic Records Management Association) was investigated. IRMA was founded in December 1988, it started publishing the Newsletter of IRMA (Fréttabréf Félags um skjalastjórn) on paper in 1989. According to the Legal Deposit Act no. 43/1977 The Newsletter was delivered to the National Library (later the National and University Library of Iceland (NULI)), and catalogued there in accordance with the Act on the National Library of Iceland no. 38/1969 and later the Act on the National and University Library of Iceland no. 71/1994. At the beginning of the 21st century the publication of IRMA’s Newsletter changed to an e-publication accessible to members on IRMA’s homepage, which is closed to non-members. Thereby it was no longer deliverable to NULI, because the Legal Deposit Act no. 20/2002, only stipulates deliveries of internet publications, not those on closed nets. These developments led to a situation where information on and knowledge about the development of IRMA, which used to be white turned grey.

Subsequently the publication of IRMA’s Newsletter was discontinued and the items which used to be published there have since been published directly on IRMA’s homepage under headings such as News, Interviews, Events and others of that kind. Thereby, IRMA’s Newsletter no longer exists as a unit of publication, neither on paper nor electronically. The publication units are not the same as they were in the paper era.

Although homepages can be harnesses by NULI, according to the Legal Deposit Act no. 20/2002 links to other homepages, which for example describe an Event noted on IRMA’s homepage do not function. Therefore the accessible information will not be comparable to what it was when the event was described in IRMA’s Newsletter. These kinds of developments call for a new kind of thinking when amending legal deposit acts to ensure that access to the kind of knowledge and information deemed valuable at present and to posterity will be available.

**Bionote**

Stefanía Júlíusdóttir see page 167
Open academic community in Poland: New scholarly communication models during the transformation period

Maciej Ostaszewski
Information Processing Center, OPI, Poland

Digital revolution has contributed to fundamental changes in the way research is conducted and its results are propagated. The emergence of Open Science paradigms has reflected the very essence of those processes. It is only the last decade that the ideas of treating outcomes of research work as common goods have gained ever wider acceptance. The recent recommendation position statement of the European Commission sets a new landscape for future presentation of research results and their sharing. Member countries of EU have been requested there to define an agenda of the related implementation process.

There are several actions in Poland in the course of implementation, ranging from a set-up of the national IT platform for scientific and technical information, that will constitute a core of the national knowledge infrastructure, up to appropriate underlying legislation changes. Apart from ever more numerous activities contributing to the development of specific technical solutions, analyses are lacking in Poland that would show and provide diagnosis of the acceptance for those changes. The same lack is the case for the overall distribution of Open Science models in research work.

Those transformation processes assume wide adoption of Open Access models. The latter refers not only to research publications, but also encompass diverse documentation forms for the research outcomes, educational content, and looking into further future also research data.

It is our aim to present initial results of a study addressing the social context of that transformation. We are conducting a survey on the attitude of the Polish academic community towards introduction of the Open Science concepts, with focus groups representatively selected.

A study undertaken focused on:
- Diagnosis of the attitude and awareness level within the Polish academic and research communities against broadly viewed open models (open access, open data, open research, Science 2.0).
- Analysis of the range and level of the open science paradigms and tools implementation to research.

We use quantitative survey to collect data. The e-questionnaire based on LimeSurvey platform was sent to over 48K scientists holding at least PhD degree, registered in the “Polish Science” database operated by the OPI. The resulting conclusions are stratified according to disciplines, institutions and their categories, demographic criteria, in particular. Based on these filters, results will be attributed to several variables.

The analytic data resulting from the research should enable diagnosis of potential barriers, bottlenecks and sources of fear within the academic community.

Bionote

Maciej Ostaszewski is currently involved into sociological research on the knowledge and attitude of the academic community in Poland towards various aspects of Open Science. He has led some research projects in the sociology of science addressing problems of the institutional/geographic mobility of Polish scientists. His main research interests refer to new open models of scholarly communication, knowledge sharing and social aspects of Internet technology developments. Email: mostaszewski@opi.org.pl
OPEN ACADEMIC COMMUNITY IN POLAND: NEW SCHOLARLY COMMUNICATION MODELS DURING THE TRANSFORMATION PERIOD

Maciej Ostaszewski (mostaszewski@opi.org.pl)
Information Processing Institute
Bratislava 01.12. 2013

LEVELS OF IMPLEMENTATION IN POLAND (SOME REFERENCES)

- Ministry of Science and Higher Education
  - has announced the priority of introducing the open access to published research results based on public funding, the action will comply with the communication and recommendation released by the European Commission on July 17, 2012.

- Digital Libraries, Repositories, Platforms
  - appr. 101 Digital Libraries, Repository of Centre for Open Science
  - ARK: The Polish repository, A. Mickiewicz University, 2010
  - INFOna: national IT platform of information and knowledge resources

- Organizations and associations introducing OS ideas
  - ICM: CeOn Center of Open Science, Digital Center, The Modern Poland Foundation (free textbooks )
  - OA Journals
    - Dozen of scientific journals, Virtual Library of Science

SURVEY: OPEN SCIENCE

MOTIVATION

- Still insufficient level of public discussion about Open Science
- Lack of surveys dedicated to Open Science issues
- We could only infer that readiness to accept and support open models in science is still limited...

DESIGN

- Online survey
- Four thematic groups of questions: general issues, Open Access, Open Data, Science 2.0
- 36 questions (attitude, practice, knowledge)
- 9 demographic questions
- Questionnaire addressed to over 24K Polish scientists holding at least PhD degree
  - 849 completed
  - 456 drop out (after starting )
OPEN ACCESS: ADVANTAGES/DISADVANTAGES

- OA increases international visibility of Polish science: 52% yes, 44% no, 5% no opinion
- OA provides better knowledge about research: 51% yes, 44% no, 5% no opinion
- OA read and cited more: 52% yes, 44% no, 4% no opinion
- Poor quality research: 5% yes, 39% no, 56% no opinion
- OA undermines peer review: 31% yes, 69% no, 0% no opinion
- OA more difficulties with publishing in top journals: 3% yes, 97% no, 0% no opinion

OPEN DATA: ADVANTAGES/DISADVANTAGES

- Lacking access to RD is a significant cause of slowing down progress in science: 63% yes, 10% no, 27% don’t know
- Lacking access to RD leads to lower effectiveness of the research process: 71% yes, 9% no, 20% don’t know
- RD can be used for other purposes (possibly non-wishful): 51% yes, 12% no, 37% don’t know
- RD: admit mis-interpretation of other users (eg., due to their complexity): 53% yes, 18% no, 29% don’t know

SCIENCE 2.0: READINESS TO PARTICIPATE

Do you think you will join any social network platform dedicated to your research field? (N=849)

- 124 yes
- 124 no
- 124 don’t know
**METHODS OF TESTING HYPOTHESES**

- Four linear regression models were applied, using:
  - **Predictors**: Age, Sex, Discipline, Participation in international projects, Academic title/degree, Experience as research team leader, Type of institutions
  - **Dependent variables**: Knowledge, Behaviour, Opinions

- Factor analysis: aiming to reduce the number of variables and to detect an underlying structure of the relationships between variables:
  - Variables that cover cognitive, behavioral and affective aspects of the attitude toward Open Science
  - Three dominating factors: knowledge (about OS), behavior (publishing), opinions (positive opinions towards OA)
  - Dominant factors were used as new dependent variables

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**MODEL 1: OPINIONS**

**OPINIONS** (Positive opinions about OA)

**ARTS AND HUMANITIES**

**POLISH ACADEMY OF SCIENCES**

**FEMALE**

\[\beta = -0.061\]

\[R^2 = 4.8\%\]

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**MODEL 2: KNOWLEDGE**

**KNOWLEDGE** (about OS)

**PARTICIPATING IN INTERNATIONAL RESEARCH PROJECTS**

**RESEARCH INSTITUTES**

**FEMALE**

\[\beta = +0.116\]

\[R^2 = 3.2\%\]
CONCLUSIONS:

- Open Science adoption is still limited in Poland. Still, Polish scientists consider Open Models an important driving factor for the progress in whole science and individual disciplines.
- Strong Open Publishing promotion, the related systemic solutions and advantages for individuals contribute to the exposure of OA as the main aspect of Open Science. Other key aspects, including Open Data and Science 2.0, have still somewhat limited visibility.
- Polish research community is split in their attitude towards various dimensions of openness. Knowledge on Open Science as well as positive attitude towards Open Publishing are driven by factors whose majority is of international nature. Some local features referring to specific national research model can be observed, though.
- This report summarizes preliminary observations based on the conducted survey. More comprehensive analysis would still require some supplementary research, in particular of qualitative nature.
A Challenge of Research Outputs in GL Circuit: From Open Access to Open Use

Sergey Parinov, CEMI, Central Economics and Mathematics Institute, RAS Russian Academy of Sciences
Mikhail Kogalovsky, Market Economy Institute of Russian Academy of Sciences
Victor Lyapunov, Institute of Economics and Industrial Engineering, Siberian Branch of Russian Academy of Sciences, Russia

Open Access movement and currently formed GL circuit provide the scientific community with unique opportunity to modernize a fundamental part of research life-cycle: processes by which the scientists re-use research outputs when they produce new knowledge and then the community assesses their impact.

Cameron Neylon marked in his comments («Nature», 2012, №492, pp. 348–349) an important for GL domain challenge: “Open access must enable open use” that means the “innovators can manipulate the material” and from the technical side it requests a “standardizing the representations of data and knowledge in ways that make them easily transferable”.

When scientists mentally manipulate the research outputs, outcomes and other objects of scientific information space they discover relationships between the objects and thereby they re-use it to produce a new scientific knowledge. Some of these relationships become visible in scientists’ articles (e.g. by citations). Most of them are directly not observable and may exist in a mental form only.

CRIS technology, CERIF-based semantic linkage technique and available ontologies allow scientists to express explicitly their knowledge, opinions and hypotheses about scientific relationships between the objects as multilayer networks of semantic linkages over research information systems (RIS) content. Accumulated semantic linkages present a new data source for scientometric studies, which can partly compensate an absence of traditional peer-reviewing for GL instances.

Started in 1997 as an open repository for Russian-writing researchers in Social Sciences the Socionet CRIS (socionet.ru) is currently developed to allow scientists an explicit expression of their opinions and/or scientific hypotheses on inference/deduction, impact/usage, logical hierarchy/associations, etc. about relationships between research information objects.

The Socionet system uses the CERIF model of standardizing for the representations of data and knowledge and also the CERIF Semantics and SPAR ontologies converted to a form of semantic vocabularies. The CERIF based semantic linkage technique after some upgrades allows scientists to link different pairs of information objects from RIS content. The semantic meanings assigned by the scientists to the created linkages carry information about classes of relationships between research information objects. The scientific relationship classes are defined by taxonomy based on controlled semantic vocabularies produced from available ontologies.

By setting semantic linkages between information objects scientists provide some kind of professional tagging and folksonomy over research information space. This data is accumulated and processed by the Socionet Statistics unit. This public service gives the community an opportunity of direct assessment of research usage/impact that complements the traditional mechanism of research assessment for publications and scientific journals.

Bionotes

Sergey Parinov is a deputy director at the Central Economics and Mathematics Institute of the Russian Academy of Sciences (CEMI RAS), Moscow. He got his PhD (1983, CEMI RAS) in socio-economic modelling and a Doctor of Sciences degree (2001, Novosibirsk State University) in Computer Science. Last decade he was involved in open archives and institutional repositories development for Russian Academy of Sciences organizations. Currently he works on building virtual research environments for the Russian community of scientists by implementing CRIS-CERIF approaches and Open Science ideas. He has led the Socionet project (socionet.ru) over 13 years with a wide network of contacts in Russia. Now his Socionet team is designing a new public service for scientists to explicitly express their knowledge, opinions and hypotheses about scientific relationships that can exist between information objects of research data and information space. During the last years he has been one of leaders of the CRIS of Russian Academy of Sciences (RAS) project, in which more than 400 research institutes of RAS are involved. In this project he is responsible for a CRIS concept and a design of modern research management and assessment information system. From 2009 he serves on the Board of euroCRIS with responsibility for the DRIS/Best Practice Task Group. Email: sparinov@gmail.com
**Bionotes CONTINUED**

**Mikhail R. Kogalovsky** is leading researcher at Market Economy Institute of Russian Academy of Sciences in Moscow, member of editorial boards of a number of scientific journals, co-chair and PC member of scientific conferences, secretary of Moscow ACM SIGMOD Chapter. Mikhail graduated from the Saratov State University, Mathematics and Mechanics Department, and got his Ph.D. (CS) from the Central Economical and Mathematical Institute of Russian Academy of Sciences. He is author more 200 articles and books, translator and scientific editor of translations to Russian of wide-known books by Jeffry Ullman, Cris Date, Alan Simon, CODASYL and ANSI/X3/SPARC reports. His research concerns scientific digital libraries and scientometrics, data management, conceptual and ontological modeling, Web technologies and XML standards, information resources integration. Mikhail has been associate professor (half day) of Moscow State University during 25 years. Email: kogalov@gmail.com

**Victor Lyapunov** is a member of the Socionet work group about 15 years. He is the main software developer and server administrator of the Socionet system. Victor’s permanent employment is the Institute of Computational Mathematics and Mathematical Geophysics, Siberian Branch of RAS (Novosibirsk, Russia) and also he is a member of Socionet software team at the Institute of Economics and Industrial Engineering, Siberian Branch of RAS (Novosibirsk). Email: vic@ieie.nsc.ru
A Challenge of Research Outputs in GL Circuit: From Open Access to Open Use

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Mikhail Kogalovsky, Market Economy Institute of RAS (Moscow);
Victor Lyapunov, Institute of Economics and Industrial Engineering of Siberian Branch of RAS (Novosibirsk)

Open Science System

- Nomenclature
- Financing
- Self evaluation by scientists and organizations
- Research evaluation
- Internal organization’s motivation mechanisms for scientists
- Open Research Assessment: public scientometrics (data on motivations of re-use, etc.)
- Open Re-Use: research outputs circulation, scientists express scientific relationships between used research objects, notifications
- Open Access: scientists register in CRIS all research artifacts that can be re-used by other scientists

Traditional vs. open science

<table>
<thead>
<tr>
<th></th>
<th>what scientists do</th>
<th>create &amp; deposit</th>
<th>re-use research outputs</th>
<th>awareness about re-use</th>
<th>global cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Science</td>
<td>articles</td>
<td>by citing available articles, books, etc.</td>
<td>few data about citations and its motivations</td>
<td>weak</td>
<td></td>
</tr>
<tr>
<td>Open Science</td>
<td>reusable artifacts</td>
<td>making relationships and collecting data about tries and fails</td>
<td>immediate signals on by whom/how the artifacts were re-used</td>
<td>a strong form based on notifications about re-use and open scientometrics</td>
<td></td>
</tr>
</tbody>
</table>
Traditional Science

Scientists analyze artifacts and mentally make relationships between them.

Open Science IT innovations

| To register in a repository smaller pieces of research outputs (artifacts) and link them semantically with other artifacts | To express many types of research relationships between artifacts, including tries/fails data and motivations to use them | To get immediate notifications about using your artifacts with ability to react on it | To collect statistics, process it and update daily scientometric "portraits" of scientists, organizations |

Socionet.ru CRIS driven by scientific community

- Harvested from RePEc, CitEc and Socionet P-Zone
- Tracing all changes + notifications
- Collecting stats data, building scientometrics
- Harvested from RIS, CRIS and Socionet P-Zone

Research objects = 2m
Semantic linkages = 6m
Monitoring notification
Statistics, indicators

Information Objects at Socionet

Organization

Authors

Total number of linkages (ingoing, outgoing), statistics, other properties of related objects

Aggregated number of linkages (ingoing, outgoing)
Aggregated statistics (downloads, views)

Research outputs (RO)

citations / references
downloads / views
Open Access by Socionet

- Starting in 2000 Socionet provides for individual researchers and organizations many different tools:
  - To deposit single RO and materials of all traditional types: personal-organizational profiles, papers, articles, chapters, books, etc. and to create collections
  - To register new types of RO: citations, research artifacts (nano-publications)
  - To make semantic linkages between objects for expressing scientific relationships between them
  - To manage collections of materials, incl. in a form of institutional repositories (IR)
  - To provide all collected metadata for its harvesting by OAI-PMH protocol in CERIF format, and many other.

Open Re-Use: a Socionet approach

- Scientists use RO when they mentally manipulate with them to discover relationships and, if positive, thereby they re-use RO to produce a new scientific knowledge
- Some of these relationships become visible in scientists’ articles (e.g. by citations). Most of them are directly not observable and may exist in a mental form only
- The Socionet provides tools to express explicitly scientific relationships that allow a collecting of statistics about scientists’ “tries and failures” and about their motivations to re-use RO

Obvious use cases: {person, organization, RO, etc.}
Session Three

Use cases of a new research practice: (person, RO, etc.)

- Inference ("obtain background from", "updates", etc.)
- Impact/usage ("contains assertion from", "corrects", etc.)
- Hierarchical and associative ("broader", "narrower", etc.)
- Components of scientific composition ("duplicate", "revised", etc)
- Usage proposal ("can improve", "can illustrate", "can replace", etc)

Extended research assessment data

- Automatic daily gathering and updating of scientometric "portraits" of a scientist, a department and an organization
- Quantitative indicators
  - Numbers of created/used artifacts and relationships
- Qualitative indicators
  - Statistical distributions (how scientists, laboratory, organization used research artifacts and how the community used their RO)

Challenges: a new research communication

- To receive immediate signals about who and how used your RO
- To protest against or confirm usage characteristics of your RO, or provide other feedback
- To request on using or reviewing own RO by linking it with other RO or scientists’ profiles
- To upgrade own RO by using/citing suggested artifacts, or to ban requests from some authors, etc.

A communication among researchers becomes stronger with better and faster coordination of individual activities
Session Three
Tuesday 11:00-12:45

Information support of research information interactions of doctoral students in Slovakia

Jela Steinerová and Andrea Hrčková
Comenius University Bratislava, Slovakia

The support of research process on part of information behavior and information practices has long attracted attention of information science, especially in terms of digital scholarship and science 2.0 (Borgman 2007, Shneiderman 2008, Sonnenwald 2013). However, there is a need to manage large volumes of digital data in science and culture and new strategies and leadership for information environment of young researchers should be designed. The goal of this paper is to report on research of information needs of doctoral students in contexts of information support of the large volumes of digital research data and processes. Special attention is devoted to information interactions in the electronic environment. Based on the concept of information interactions (Fidel 2012) we concentrate on information problems and practices of doctoral students. The study was designed on the basis of previous research projects on relevance judgments of doctoral students and information ecology of the academic environment. The concept of the study conceptualized the following information interactions: research behavior, information use, information seeking, organization of information, information production, social media. We applied qualitative method of semi-structured interviews with doctoral students in different disciplines and visualization of information horizons. Results of data analyses confirm differences in information needs and information strategies in research behavior of doctoral students. Main information problems of doctoral students were identified, namely finding focus, expert support, networking and collaborative information behavior in real and virtual groups. As examples we mention several information horizons of doctoral students. In conclusion we propose special services and tools for the improvement of information interactions in digital environments. The final model of information interactions in different disciplines is described and recommendations for information portal design and information literacy improvement are proposed. Recommendations for modeling information practices in virtual environments with regard to large volumes of data and information behavior are also articulated.

Bionotes

Jela Steinerová is professor in Library and Information Science at Comenius University in Bratislava. She deals especially with human information behavior and information ecology. She teaches courses on Theory of Information Science, Information Behavior, Introduction to Information Science, Information Products, Methodology of research for doctoral students. Since 2002 she has been the head of a number of research projects, namely Interaction of man and information environment, Information use in information society and Information ecology, including an international European project of DELOS digital libraries. She was also engaged in international projects as UNESCO concept of information literacy for central Europe, The European curriculum of library and information science (EUCLID), the European Library, the collaboratory in LIS, etc. She is an author of several monographs and textbooks (information behavior, information strategies in the electronic environment), a member of editorial boards of international journals, lectures at international conferences. She participated in several study stays (Oxford, Brussels, Washington) and organized a series of international conferences (e.g. Information use in information society, 2006, Information ecology and libraries, 2011). Her main research reports and published works dealt with information behavior of students, relevance, information ecology, information literacy. She is a member of boards of the European conference on information literacy (ECL), the international AEW workshop, Polish international ISKO. Lately she lectured at such conferences as AEW (Turku), Inforum (Prague), LIDA (Zadar), ELAG (Helsinki), COLIS (London) etc. The report on information ecology of the academic information environment in Slovakia presents results of a qualitative study of information managers in universities, a survey of academic repositories, and experiments with concept mapping in digital repositories. At present she is engaged in the research of information behavior and information practices of PhD. students in cooperation with computer science project on cognitive traveling in the web. She is also engaged in international collaboration in information practices in workplaces (ENWI networking project) and interested in information ethics. She organizes methodological workshops for doctoral students in information studies and information systems. Email: steinerova@fphil.uniba.sk

Andrea Hrčková has been an internal PhD. student at the Department of Library and Information Science, Comenius University in Bratislava since 2010. She is writing dissertation thesis „Discussion Groups as an Information Resource“ and co-created two university textbooks. She also completed an internship as an Information and Knowledge Management Advisor in NATO (2011-2012). Andrea is currently a member in the research project Tradice, where she investigates the information behavior of different PhD. students. Email: hrckova.andrea@gmail.com
Information support of research information interactions of doctoral students in Slovakia

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15th International Conference on Grey Literature GL 15
Bratislava, CVTI SR, 2-3 December 2013

Outline
- Information science and digital scholarship
- Study of information behavior of PhD. students
- Results of data analyses
- Study of discussion groups
- Implications for digital scholarship
- Recommendations - information services
- Final model
- Conclusions

Digital scholarship
- Scholarly information work in digital environment
  - Large volumes of data (big data)
  - New methods, new procedures
- Information practices:
  - Open science, knowledge discovery
  - Information sharing
  - Scientific record, digital repositories
**Information interactions**

- Human information interactions:
  - relationships between people and information
    (interactions of scholars in sociotechnical systems)
- Current challenges of information science:
  - New models of digital scholarship
  - Background: interactive models in information science
    (e.g. Belkin, Ingwersen, Saracevic, Fidel, Spink)
  - Studies of PhD. students (Drachen et al., Vakkari)

**Study of doctoral students**

- Questions:
  - Which information needs and behaviors have doctoral students?
  - Which information interactions are typical for doctoral students in digital environments?
  - Can we develop a model of information interactions for digital scholarship?

**Study of doctoral students**

**Qualitative study**

- Semi-structured interviews – data acquisition
  - 18 PhD. students: representation of different disciplines
  - 28 questions, average age: 26,8, time: 1 hour
  - Information horizons

<table>
<thead>
<tr>
<th>Concept of the study</th>
<th>Research behavior</th>
<th>Information behavior</th>
<th>Organization Behavior</th>
<th>Social media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication process</td>
<td>Information seeking</td>
<td>Information organization</td>
<td>Information sharing</td>
<td>Networking</td>
</tr>
</tbody>
</table>
Session Three

Tuesday 11:00-12:45

Results: information strategies

- Browsing:
  - Internet, web
  - Keywords, citation chaining
  - Google, Google Scholar
- Libraries
  - Digital libraries
- Electronic databases of scientific documents

Results: social media

**Passive use**

- Reading
- Sharing
- Questionnaires
- Benefits:
  - Discussion fora
  - Blogs
  - Wiki
- Personal, Private communication

Results: information support

- Writing theses
- Citations
- Information literacy
- Use of electronic sources
- Collaboration with colleagues
- Learning
- Sharing of sources, strategies, tools, methods
- E-learning
- Repositories
- Integration of systems
Implications for digital scholarship

Make implicit knowledge explicit  
From lower levels of context to the highest levels  
Discovery of knowledge

Visualization  
Ecology: Adding value  
Interpretation  
Re-use

Study of discussion groups – grey information for PhD. research

Other points of view (Musicology)  
Solutions to technical problems (Comp science)  
Unpublished practical experience (LIS)  
News (systematic philosophy)  
Literature (Japonology)  
Feedback (LIS)

Implications for discussion group interfaces

Simple 3 fields registration  
Learnable contribution to the proper subject  
Easy browsing by topics, authors, date  
Findable signing in/out link  
Quick editing, deleting content  
Simple contribution form without redundant fields
Recommendations
- Information services
  - Value-added ecological information interactions for digital scholarship
  - Availability
  - Visibility
  - Convenience
  - Collaborations
  - Networking
  - Creativity

Final model: information support of research interactions

Conclusions
- Multiple scholarly interactions
  - Community models
  - Social networking, dialogue, reviewing
- Integration of information behavior with design
  - Conceptual infrastructures
  - From data cleaning to interpretations
  - Guidance in research work
Conclusions

• Implications for digital scholarship:
  • value-added information products, „grey” communities
  • Interactive spaces, collaboratories,
  • Statistical data, medical images, digital cultural objects, annotated human genome, etc.
  • Blogs, social media products, discussions, reviews, commentaries, annotations, profiles
  • Big research data, analyses, linked data – e.g. research stories, censuses, simulations, genealogy, prototypes
  • Knowledge bases, conceptual maps, knowledge maps

References

IAEA
Department of Nuclear Energy

Any news?
Yes, NE News!

Download our "NE News" iPad app and get one-stop-access to IAEA nuclear energy information and publications.

Available on the App Store

www.iaea.org/itis
The SK CRIS system as a source of unique information about scientific activities and their outcomes

Danica Zendulkova and Juraj Noge
Slovak Centre of Scientific and Technical Information, CVTI SR, Slovakia

Majority of R&D outcomes consist of data, information and documents integrated into a category of Grey Literature. From portfolio of these outcomes, especially publications, patents, products and innovations are interesting for scientific community and wide range of R&D stakeholders indoors and abroad.

Current Research Information Systems (CRIS) are one of key software tools for data collection and access, dissemination of information about scientific activities and their outcomes. The EU standards for these systems, primarily the CERIF data format, are covered by the international association euroCRIS.

The aim of providing the Information System about Science, Research and Innovation SK CRIS is to integrate all available research information at the national level. The system was designed on a data structure compatible with the CERIF data format and it became a member of the CRIS systems family.

The SK CRIS contains data about research projects funded by public resources, a registry of researchers, a registry of research organisations and research and development results. Data acquisition and refilling is possible by using integration interface importing data from external systems. It concerns mainly project data imported from systems of grant agencies. Direct data entry made by research subjects by online forms is the second way how to receive data.

The SK CRIS integrates also other available external data sources: registries of researchers from universities and Slovak Academy of Sciences and also publications from universities registered in the Central Registry of Publication Activity.

The SK CRIS makes contextual data about science and research accessible during their life cycle. It means that a user can see whether some document was created as a result of the project. The information about its authors and originators, persons and organisations is also available, as well as usage of a document and its citations. The SK CRIS is not limited to work only with metadata. It contains also the functionality allowing the integration of collected data with fulltext documents.

The benefit of the SK CRIS is mostly its ability to offer aggregated information from entered data and to present their relationship. Main characteristic of the SK CRIS is the CERIF based concept of objects (entities) with attributes, with a data model guaranteeing interoperability and full language variability. The relations and semantics allow to record the objects with relationship and to characterise properties and time attributes by roles and time details. However, the system will be used mainly by scientific community but also by research management, decision makers and public.

Enlargement of the SK CRIS functionality and integration of the other external data sources is our vision for near future. In the same time we consider the interconnection with other European CRIS systems. The SK CRIS information system was developed within the Activity No 4 of the NISPEZ national project implemented by the Slovak Centre of Scientific and Technical Information: *Enlargement of Central Information Portal for Research, Development and Innovation (CIP RDI) with new functionalities complying with EU standards.*

**Bionotes**

Danica Zendulková has worked in Slovak Centre of Scientific and Technical Information since 1996 in the ICT division. Until 2006 she provided the coordination of national distribution of library software developed by the UNESCO. Since 2002 she administrated the Information System of Research and Development Potential and the web site concerning science and technology. In 2005 she became Head of R&D Portal Unit. In 2007-2008 she worked as Implementation Manager of the project: Central Information Portal of Research, Development and Innovation. Since 2008 her responsibility is to administrate of Slovak state-operated CRIS system that is one part of the Portal. Danica is currently involved in EC funded projects. Primarily, following activity of national project NISPEZ is her job: Preparing a new CERIF-driven SK CRIS. During her career Danica Zendulkova has worked also as lecturer in specialised courses for librarians and has published several articles on wide issues concerning library automation and CRIS systems. Since 2011 she has been the EuroCRIS board member with responsibility for task group CRIS-IR which aims at furthering the science and technology of the linkage between CRIS and repositories. Email: danica.zendulkova@cvtisr.sk
Bionotes CONTINUED

Juraj Noge After graduating in Computer Science from the Comenius University in Bratislava, Juraj Noge built his practical experience as an IT specialist over the course of 30 years and in various software houses. For the past four years, he has been in charge of IT development at the Slovak Centre of Scientific and Technical Information (SCSTI), where his duties include implementing, managing and developing systems such as the Central Register of Theses and Dissertations (CRTD), the Anti-plagiarism System (APS), the Slovak Current Research Information System (SK CRIS) as well as various library systems. At the same time, Juraj acts as the co-ordinator and expert guarantor of activities within projects financed through the state-funded National Information System for Supporting Research and Development in Slovakia – Access to Electronic Information Resources (NISPEZ), Infrastructure for Research and Development – Data Centre for Research and Development (DCVaV/DCR&D) and National Infrastructure for Supporting Technology Transfer in Slovakia (NITT SK). Email: juraj.noge@cvtisr.sk
THE SK CRIS SYSTEM AS A SOURCE OF UNIQUE INFORMATION ABOUT SCIENTIFIC ACTIVITIES AND THEIR OUTCOMES

Danica Zendulkova and Juraj Noge CVTI SR

Fifteenth International Conference on Grey Literature, 2-3 December 2013, Slovak Centre of Scientific and Technical Information, CVTI SR Bratislava, Slovak Republic

THE SYSTEM SK CRIS

- Guarantee: Ministry of Education, Science, Research and Sport
- Supplier: InterWay s.r.o
- Provider: SCSTI
- Scope: National Information system
- Data format: CERIF

MAIN CHARACTERISTICS

SKCRIS:
- offers wide-range and detailed map of Slovak science, research and development (R&D)
- provides the information in mutual relations to all target groups
- contains the possibility of interoperability with similar systems across EU countries
- uses data format CERIF
SK CRIS CONTENT

- Researchers
- R&D Projects
- Organisations
- R&D Results

GREY SK CRIS

- Contextual data about science and research
- R&D Results: metadata and fulltext

CERIF

- Data format CERIF for obtain interoperability
- The SK CRIS system uses CERIF ver. 1.3
SK CRIS DATA MODEL

- Properties
  - Slovak & English language
  - Fulltext search and faceted navigation
  - Semantics
  - Relations:
    - Person Organisation
    - Publication Organisation
    - Project Organisation

INTEGRATION WITH OTHER SYSTEMS
SK CRIS BENEFITS

- User friendliness
- Rationalisation, eliminate duplicate collections
- Linking among collected objects
- Improvement data quality
- Integration of R&D data
- Interoperability with CRIS systems worldwide

CHALLENGE...

Responsibility of data correctness, completeness and timeliness is on the side of data creators. Our steps for reach adequate DATA QUALITY

- To complete and validate incoming data
- Avoid duplicity of data coming from different systems
- To use universal unique identifier for similar objects in integrated systems

THANK YOU VERY MUCH FOR YOUR ATTENTION

https://www.skcris.sk
Auditing Grey in a CRIS Environment

Keith G. Jeffery, Consultant, United Kingdom
Anne Asserson, University of Bergen, Norway

We define grey as information that is not peer reviewed scholarly publications. In the CRIS (Current Research Information System) domain Grey includes not only non-peer reviewed publications (typically technical papers) but also performance art, art artifacts, design documents, models (e.g. for engineering or architecture) and – increasingly importantly – research datasets. Recently national governments - inspired by the work of W3C on LOD (linked open data in the context of the semantic web) – have made government information available for citizen rights (the information should be available to those who paid for its collection) and business leverage – the information is used by businesses for strategic planning and a growing ICT business sector provides applications using LOD for business advantage.

Government portals to publicly-funded data collections have been implemented (usually as data.gov.nn sites where nn = country) using ‘flat’ metadata standards such as DC (Dublin Core) and CKAN (Comprehensive Knowledge Archive Network). These metadata standards provide limited information and – worse – it is very difficult to assure integrity of the associated dataset because there is no integrity checking mechanism. Much of the presented material is of a summary nature and based on more detailed research activities; rich metadata is available, both contextual (project, funding, persons, organisations, related white publications etc) and detailed (schema level for software to interact with the dataset). This rich metadata improves dataset integrity in discovery and utilisation.

The ENGAGE project (http://www.engage-project.eu. portal at www.engagedata.eu) aims to enhance the metadata associated with the usual data.gov portals with the rich metadata available around the supporting research datasets in order to improve discovery and to ensure appropriate use of the datasets in context. A 3-layer model has been proposed with discovery metadata (DC, CKAN and several others) generated from the contextual layer (CERIF: Common European Research Information Format – an EU recommendation to Member States) which in turn points to the detailed metadata associated with each domain or even individual dataset. The data mappings from CERIF to/from each metadata format are done once and manually, thereafter conversion is automatic. This architecture combines the easy browsing / discovery in the semantic web/LOD world with the formal rigour of underlying rich metadata stored in information system with full integrity constraints.

This architecture allows confidence that any audit of the quality of the semantic web/LOD environment will be favourable because it is generated from the underlying integrity-rich environment and not just generated by manual input and linkage.

Bionotes

Keith Jeffery is an information consultant. He is the former Director of International Relations at STFC (Science and Technology Facilities Council) based at Rutherford Appleton Laboratory. Keith previously had strategic and operational responsibility for ICT with 360,000 users, 1100 servers and 140 staff. Keith holds 3 honorary visiting professorships, is a Fellow of the Geological Society of London and the British Computer Society, is a Chartered Engineer and Chartered IT Professional and an Honorary Fellow of the Irish Computer Society. Keith is currently President of ERCIM and President of euroCRIS, and serves on international expert groups, conference boards and assessment panels. He had advised government on security and green computing. He chaired the EC Expert Groups on GRIDs and on cloud computing. Email: keith.jeffery@keithgjefferyconsultants.co.uk

Anne Asserson holds a master from the University of Bergen, UiB. She has been working with Research Documentation, and has participated in substantial parts of CRIS developmental work, locally and nationally since 1992. Anne Asserson has been part of the establishing and implementing of several CRIS both at the UiB and nationally. For several years she was the chairwoman of the Steering Group of the national CRIS system and project secretary of a National system for academic administration. Anne Asserson is presently representing UiB in the national project group of CRISin. She has also participated in The CORDIS funded European-wide project on “Best Practice” 1996 and was a member of the working group set up 1997 that produced the report CERIF2000 Guidelines (1999) www.cordis.lu/cerif, coordinated by the DGXIII-D4. euroCRIS is now the custodian of the CERIF model www.eurocris.org. Anne Asserson is a member of the euroCRIS board with the responsibility Member Strategy and External Relations. anne.asserson@fa.uib.no
Auditing Grey in a CRIS Environment

Introduction

- The vast majority of (research) information is grey
  - It is not peer reviewed scholarly publications
- We use information object to mean any digital grey object encoded in any format on any medium
  - Document, data file, video, software....
- Mechanisms are required to audit grey to assure quality
- We assert that audit of grey requires high quality metadata
Reliable Information

- **Quality**
  - Represents accurately world of interest
- **Context**
  - Environment within which collected – related entities
    - Persons, organisations, projects, funding, equipment, publications....
- **Availability**
  - Persistence (preservation / curation)
  - Conditions of use (open access)

We have to encode this as metadata for audit

Reliable Information: Quality

- Data integrity
  - Schema
  - Constraints
- Accuracy, precision
- Incomplete and inconsistent information
- Temporal validity
- Independent validation
  - Quality rating

(With acknowledgements to FINETIK)

Reliable Information: Context

- Related entities that give confidence that the information of interest is understood in context
- CERIF (Common European Research Information Format)
- EU Recommendation to member states
- Used in 42 countries
- National standard in 10
- Maintained, developed, promoted by euroCRIS (not for profit) www.eurocris.org
Reliable Information: Availability

- Persistence
  - Media migration
    - Who can read a 7 inch floppy disk? Or a 3420 IBM tape?
  - Declared syntax and semantics
    - Machine-readable AND machine understandable
  - Preservation of related software
    - Changing language, compilers / interpreters
    - Changing operating environment (sequential, parallel, distributed, data dependencies)
    - Specifications
- Access
  - Open
  - Toll-free (conditions, licences)

Open Data

- Semantic Web
- LOD: Linked Open Data
- RDF
  - Triples
  - Expressed as XML
- Metadata
  - DC
  - CKAN

Most portals clickable lists of datasets
- LOD: Linked Open Data
- RDF
- Most datasets pdf or xls
  - Essentially documents
- Very little metadata
- Metadata ‘flat’ and poor
- Not linked to underlying research datasets

Open data implies open access to any digital information object
Open Data

- Semantic Web
- LOD: Linked Open Data
- RDF
  - Triples
  - Expresed as XML
- Metadata
  - LKAN

Most portals click-on lists of datasets
Most data in pdf or xls
- Essentially documents
Very little metadata
Metadata ‘flat’ and poor
Not linked to underlying research datasets

Auditing Grey in a CRIS Environment 10
2-3 Dec 2012
Bratislava

The Vision: Metadata for Data Model

DISCOVERY
(“DC, eGMS…)

CONTEXT
(CERIF)

DETAIL
(SUBJECT OR TOPIC SPECIFIC)

Open Data and The worlds of information processing

Manual download
Manual connection to software
Manual integration

Example: summary data in semantic web/LDO environment (RDF) with associated processing

Relational (Links)
Integrity, performance

Example: research datasets in Relational DB environment with associated analysis, visualisation, data mining...

Automated download
Automatic connection to software
Automated integration
The Vision: The Models

- **Complete cohort of researchers, research managers, innovators, media**
- **User Model**
  - Interaction with data, processing, persons
  - Providing as set the user requires
- **Processing Model**
  - Representing research
- **Data Model**
  - Representing ICT
- **Resource Model**

Complete ICT environment for research

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**Conclusion**

- Architecture underpinning open data with quality research information
- CERIF provides formality and assurance
- Metadata interconverters: CERIF superset generating the less rich metadata formats: DC, CKAN...

The provision of quality metadata assures quality to be confirmed by audit
Understanding the value of grey literature for public policy in Australia: Initial survey results

Julian Thomas and Amanda Lawrence, Swinburne University of Technology; John Houghton, Victoria University; Gerald White and Paul Weldon, Australian Council for Educational Research, Australia

The changing role and increasing importance of grey literature for public policy development and implementation in Australia is little acknowledged or understood. With hundreds of organisations across academia, government, NGOs, think tanks, and private research companies now regularly producing policy research and information it is vital to understand the drivers behind grey literature production and the way it is used in policy development. The other part of the value chain is the immediate and ongoing capacity of users to find and access grey literature and the issues faced by collecting organisations in evaluating and collecting grey literature and making it available to the public. In order to address these issues researchers in Australia are conducting large scale online surveys, and semi structure interviews, with grey literature producers, users and collecting agencies in 2013, focussing on those organisations and individuals who are engaged with grey literature of relevance to public policy issues. This presentation will provide initial results from the data gathered, with a particular emphasis on the survey results of collecting organisations, from those at the National and state level to the many special libraries and online collections established to try to deal with the proliferation of policy related grey literature. It will also attempt to draw out the key findings and implications for improving grey literature production, access and collection across all three areas. This research is being undertaken as part of a three year Australian Research Council funded project, Grey literature strategies: enhancing the value of informally published research and information. Project partners are Swinburne University of Technology, Victoria University of Technology, the National Library of Australia, the National and State Libraries Australasia, the Australian Council for Educational Research and the Eidos Institute.

Bionotes

Julian Thomas has been the Director, Institute for Social Research (ISR), Swinburne University of Technology since 2005. In that role he has been responsible for a large number of publications about the influence of the Internet, government policies and social issues as well as part of the World Internet Project. Professor Thomas has initiated and led a number of online information and commentary services such as Australia Policy Online. Professor Thomas is one of the Chief Investigators of a major national Australian research project into Grey literature, policy innovation and access to knowledge about realising the value of informal publishing. Email: jthomas@swin.edu.au

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Gerald (Gerry) White is a Principal Research Fellow at the Australian Council for Educational Research (ACER). He specialises in the use of digital technologies and digital media in education and currently manages the Digital Education Research Network (DERN) (http://www.dern.org) which publishes weekly research reviews about ICT in education. Formerly head of Australia’s education technology national agency for education and training, Gerry’s interests and experience are in digital diffusion, online collaboration, grey literature, teaching and learning, leadership and online communities. Email: whiteg@acer.edu.au

Paul Weldon completed his PhD in sociolinguistics in 2007 and joined ACER in January 2010. For the three years prior to this he was Research Associate at Independent Schools Victoria. Dr Weldon has had a diverse career in Australia, the UK and in China, where he worked for two years as English Language Editor for the Journal of China University of Geosciences. He has worked on research projects in the fields of Social Capital, Education for Sustainability, School-Community Partnerships, Cybersafety, and on the development of school performance measures. He has published several reports and articles and he has also been a member of the Australian Cybersafety Consultative Group. Email: weldon@acer.edu.au
Grey Literature in European Commission Projects

Sara Goggi and Gabriella Pardelli, Istituto di Linguistica Computazionale; Silvia Giannini and Stefania Biagioni, Istituto di Scienza e Tecnologie dell’Informazione, CNR, Italy

The latest recommendations issued by the European Commission go towards the revision of their policy on dissemination and preservation of scientific information: the aim is to promote access to the results of the community-funded research by especially implementing the open access policy within ‘Horizon 2020’, the EU Framework Programme for Research and Innovation (2014-2020)\(^1\).

The growth of “fast” documentation - which is not long-term preserved or not available in stable URLs and repositories - pushed the European Commission to produce a set of guidelines for the management of documentation at-large and of specialised documentation produced within funded projects in particular. Those guidelines try to conciliate the visibility of the project activities in two directions: “a) better quality and user-friendliness of project websites, triggering higher popularity b) better visibility for the projects and the European Commission due to a more standardised format”\(^2\).

The EC guidelines proved to be a very useful tool for optimizing and handling information on the dedicated portals of the community-funded projects: the general recommendations, for example, focus the attention on the importance of using social media as well as webmaster tools and virtual meeting facilities (as web streaming) and of adopting an “eu” domain. Moreover, specific directives are given not only for the structure of the project homepage but often for the web site framework as well: homepage, project overview, consortium, management structure, scientific methodology and expected documentation.

Given this scenario, the web sites of these projects represent an essential vehicle for both the acquisition and the diffusion of grey literature and could also become an important resource within an European infrastructure able to overcome the disconnected and scattered nature of their content in order to optimise their rutilization.

Although the term “grey literature” (GL) has never been explicitly mentioned in the Commission guidelines, it is widely known that a good amount of documentation produced within the EC projects is made up of deliverables, e-newsletters, brochures, posters, flyers, videos, project factsheets, photographs. Starting from this condition, this paper analyses the GL production available on European Projects dedicated web sites, using a sample of projects selected from EU-CORDIS (based on the following query criteria: ict consiglio nazionale delle ricerche→scientific research→FP7→Italy.)

The aim of the survey is then to identify, measure, evaluate the usability and availability of grey literature provided by the European Commission projects web sites in order to verify whether this type of literature is compliant with EU recommendations. It is also important to assess to which extent grey literature is reusable for “nourishing” the European platform infrastructures devoted to the storage, dissemination and conservation of such research products.

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**Bionotes**

**Gabriella Pardelli** was born at Pisa, graduated in Arts in 1980 at the Pisa University, submitting a thesis on the History of Science. Since 1984, researcher at the National Research Council, Institute of Computational Linguistics "Antonio Zampolli" ILC, in Pisa. Head of the Library of the ILC Institute since 1990, responsible for the Archives of the ILC Institute since 2005. Her interests and activity range from studies in grey literature and terminology, with particular regard to the Computational Linguistics and its related disciplines, to the creation of documentary resources for digital libraries in the Humanities. She has participated in many national and international projects including the recent projects: - BIBLOS: Historical, Philosophical and Philological Digital Library of the Italian National Research Council, (funded by CNR ); - For digital edition of manuscripts of Ferdinand de Saussure (Research Programs of Relevant National Interest, PRIN - funded by the Ministry of Education, University and Research, MIUR). Email: gabriella.pardelli@ilc.cnr.it

**Silvia Giannini** graduated and specialized in library sciences. Since 1987 she has been working in Pisa at the Institute for the Science and Technologies of Information “A. Faedo” of the Italian National Council of Research (ISTI-CNR) as a librarian. She is a member of the ISTI Networked Multimedia Information Systems Laboratory (NMIS). She is responsible of the library automation software “Libero” in use at the CNR Research Area in Pisa and coordinates the bibliographic and managing activities of the ISTI library team. She cooperates in the design and development of the PUMA (PUblication MAnagement) & MetaPub, an infrastructure software for institutional and thematic Open Access repositories of published and grey literature produced by CNR. Email: silvia.giannini@isti.cnr.it

**Stefania Biagioni** graduated in Italian Language and Literature at the University of Pisa and specialized in data processing. She is currently a member of the research staff at the Istituto di Scienza e Tecnologie dell'Informazione “Alessandro Faedo” (ISTI), an institute of the Italian National Research Council (CNR) located in Pisa. She is head librarian and member of the ISTI Networked Multimedia Information Systems Laboratory (NMIS). She has been the responsible of ERCIM Technical Reference Digital Library (ETRDL) and currently of the PUMA (PUblication MAnagement) & MetaPub, a service oriented and user focused infrastructure for institutional and thematic Open Access repositories looking at the DRIVER vision, http://puma.isti.cnr.it. She has coauthored a number of publications dealing with digital libraries. Her activities include integration of grey literature into library collections and web access to the library's digital resources, including electronic journals and databases. She is a member of GreyNet since 2005. Email: stefania.biagioni@isti.cnr.it
Introduction

- The latest recommendations issued by the European Commission go towards the revision of their policy on dissemination and preservation of scientific information in order to promote the access to the results of the community-funded research by especially implementing the open access policy within ‘Horizon 2020’, the EU FP for Research and Innovation (2014-2020).

- The websites of European projects represent an essential vehicle for the diffusion of scientific information. BUT the EU considers the structure and the content of the websites as generally “suffering from a contextual and structural neglect”

- Starting from these conditions, this survey checks the current practices carried out by the partners of the European projects focuses on the analysis of the documentation/GL literature and its features.

Methods and Materials

- The survey has three levels:
  1. explorative level (does the project have a web site? which kind of documents does it produce? does it produce and present GL?)
  2. semantic level (categorization)
  3. projectual level (dataset definition)

- CORDIS as the starting point the query criteria
  ✓ Search for: Projects - Consiglio Nazionale delle Ricerche
  ✓ Refinements: Programme F7 Coordinator Country: Italy Participant Country: Italy

- Some categories are introduced to identify, measure and evaluate the usability and availability of the projects documentation production / GL production
Methods and Materials

- 226 projects matching the search criteria, that is: CNR appears as coordinator or participant
- Data collection between June 1 – August 5 2013
- Information sources: CORDIS and OpenAIRE directories, projects websites
- Google for verifying the existence of projects websites
- Information gathered from:
  ✓ CORDIS directory contents
  ✓ Project site structure and contents
  ✓ Projects production
- Projects documentation analysis:
  a) type of products, b) format, c) availability/access

Explorative phase by CORDIS websites

- The 8.5% of projects with a website has not developed a real site but just makes available some information and/or documentation

  ✓ the presence of the site is not closely related to the project in execution

  ✓ the presence of the website seems related to the increasing financing

Documents in CORDIS

- Research articles in Journals
  ✓ about 20% available in pdf

- Reports

- Periodic report summary
  ✓ OA in html

- Periodic report – OA in pdf

24 projects present their documentation only in CORDIS

Projects thematic areas
### Results: projects websites analysis

**Documents categorization criteria**
- a) Guidelines area
- b) Logic association

<table>
<thead>
<tr>
<th>Categories</th>
<th>n. Projects</th>
<th>%</th>
<th>total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit cards</td>
<td>12</td>
<td>6.0</td>
<td>11.7</td>
</tr>
<tr>
<td>Universities &amp; reports</td>
<td>14</td>
<td>7.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Press releases</td>
<td>21</td>
<td>11.0</td>
<td>9.1</td>
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<tr>
<td>Images</td>
<td>40</td>
<td>20.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Media materials</td>
<td>188</td>
<td>94.0</td>
<td>45.0</td>
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<tr>
<td>Event images</td>
<td>17</td>
<td>8.5</td>
<td>12.0</td>
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<tr>
<td>Project newsletters</td>
<td>53</td>
<td>27.0</td>
<td>24.2</td>
</tr>
<tr>
<td>Informative documents</td>
<td>2</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Press releases</td>
<td>17</td>
<td>8.5</td>
<td>6.0</td>
</tr>
<tr>
<td>Research/scientific articles</td>
<td>172</td>
<td>86.0</td>
<td>44.0</td>
</tr>
<tr>
<td>Technical documents</td>
<td>10</td>
<td>5.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Newsletters</td>
<td>20</td>
<td>10.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Others</td>
<td>4</td>
<td>2.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### Split and/or merging of some categories in order to give more emphasis to the informative content
- e-Newsletters, Image material, Media press, Normative documents (Case studies in Technical documents and Events in Informative material)

#### Projects websites
- Projects websites present a restricted area in 62% of cases
- 23 projects provide the graphical representation (request from EU guidelines) of their Research plan
- 4 projects present the case-studies maps
- 17 projects provide partners location maps

#### Categories / Types in EU guidelines
- Projects websites present a restricted area in 62% of cases
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- 4 projects present the case-studies maps
- 17 projects provide partners location maps

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<th>Categories</th>
<th>n. Projects</th>
<th>%</th>
<th>total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social networks</td>
<td>24</td>
<td>12.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Forums/Blogs</td>
<td>20</td>
<td>10.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Wikis</td>
<td>5</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>Related information</td>
<td>44</td>
<td>22.0</td>
<td>21.0</td>
</tr>
</tbody>
</table>

#### Categories / Types in EU guidelines
- 24 projects are included in the circuit of social networks
- 20 projects have a Forum and/or a Blog
- 5 projects present a WIKI
- 44 projects give related information and the 68% are links to related projects

<table>
<thead>
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<th>Categories</th>
<th>n. Projects</th>
<th>%</th>
<th>total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research/technical information</td>
<td>24</td>
<td>12.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Social networks</td>
<td>24</td>
<td>12.0</td>
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</tr>
</tbody>
</table>
Session Four

Tuesday 13:45-15:30

The analysis of projects websites highlighted:

• The information extent varies from project to project
• Greater compliance to EU guidelines for Projects overview and Consortium areas
• Greater compliance to EU guidelines for documentation contents than for formats and models
• Publications and reports showed by CORDIS often do not match those showed by the projects
• Prevalence of html for descriptive documents; downfall of format: pdf vs html for deliverables/reports, research articles, brochures, announcements, factsheets...
• Almost all categories are available in OA except some, in particular: deliverables and publications; the OA for monographs (abstracts, e-booklets) and conference papers (presentations) is greater than for journals

Concluding Remarks

The analysis of projects websites detects:

• a wide heterogeneity on the choice of terms which label the documentation: documentation, publications, library, results, dissemination are some of the terms used by the projects to collect and make available their documents
• Grey Literature is the majority of documentation produced by projects but is still lacking a infrastructure which merges, describes and makes it available more easily
• projects websites do not usually bring in the keywords identifying the topics dealt with. Moreover, they do not always show targeted links to related projects
• CORDIS is the only source for establishing links between projects belonging to the same thematic areas but these links are very general

In order to promote relationships between projects, even belonging to past frameworks, and thus facilitate the acquisition and utilization of the grey literature, what would it be desirable?

o a greater attention to the recommendations of the EU
o the adoption of taxonomic criteria in order to avoid redundancy in terminology
o the use of keywords identifying the projects specific topics
Back to Grey:
Disclosure and Concealment of Electronic Theses and Dissertations

Joachim Schöpfel, Charles de Gaulle University Lille 3 / ANRT – GERiiCO
Hélène Prost, CNRS, France

Problem/goal
The open access (OA) principle requires that scientific information be made widely and readily available to society. Defined in 2003 as a “comprehensive source of human knowledge and cultural heritage that has been approved by the scientific community”, open access implies that content be openly accessible and this needs the active commitment of each and every individual producer of scientific knowledge.

Today, the success of the open access initiative cannot be denied. Yet, in spite of the growing success of the open access initiative, a significant part of scientific and technical information remains unavailable on the web or circulates with restrictions. Even in institutional repositories (IR) created to provide access to the scientific output of an academic institution and central vector of the so-called green road to open access, more or less important sectors of the scientific production are missing. This is because of lack of awareness, embargo, deposit of metadata without full text, confidential content etc.

This problem concerns in particular electronic theses and dissertations (ETDs) that are disseminated with different status – some are freely available, others are under embargo, confidential, restricted to campus access (encrypted or not) or not available at all. While other papers may be available through alternative channels (journals, monographs etc.), ETDs most often are not.

Our paper describes a new and unexpected effect of the development of digital libraries and open access, as a paradoxical practice of hiding information from the scientific community and society, partly while sharing it with a restricted population (campus).

Research method/procedure
The study builds on a review of recent papers on ETDs in institutional repositories and evaluates the availability of ETDs in a small panel of European and American academic IR, networks and institutions. Thus it provides empirical evidence on this reality of restricted access. Yet, its main objective is to propose a model of independent variables affecting decisions on embargo and on-campus access, together with a table of different degrees of (non) open access to ETDs in institutional repositories.

Anticipated results
We discussed for years if the Web would facilitate access to grey literature or not, and if so, if grey literature would become white and disappear. Three years ago, we suggested that the definition of grey literature can survive the Web and open access (Prague Definition). This year, we show how the Web, contrary to all expectations and hopes, can increase barriers to scientific information and hamper dissemination of electronic theses. Back to grey...

We try to explain this return to grey literature in terms of different degrees of secrecy related to intellectual property, legitimate interests, expected exploitation and trade secrets, adapting the SPARC approach to openness of scientific journals to electronic theses.

Bionotes
Joachim Schöpfel is senior lecturer at the Department of Information and Library Sciences at the Charles de Gaulle University of Lille 3 and Researcher at the GERiiCO laboratory. He is interested in scientific information, academic publishing, open access, GL and eScience. He is a member of GreyNet and euroCRIS. He is also the Director of the National Digitization Centre for PhD Theses (ANRT) in Lille, France. Email: joachim.schopfel@univ-lille3.fr

Hélène Prost is responsible for studies at the Institute of Scientific and Technical Information (INIST-CNRS). The different studies concern the evaluation of collections, document delivery, usage analysis, grey literature and open access to information. Expertise in statistical tools and knowledge in library information science allowed her to participate in various research projects and writing of several publications. Email: helene.prost@inist.fr
Back to Grey Disclosure and Concealment of Electronic Theses and Dissertations
Joachim Schöpfel
Hélène Prost

The context
Development of open access and institutional repositories
An increasing problem with access restrictions

Typologies of restricted access
Limited availability
- Access via login and password
- On-campus (intranet) or off-campus (internet)

Embargo
- Delayed access
- From 6 months to 5 years (or more)

No access
- Confidentiality (copyright protection)
- Metadata without full text
Session Four

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Example

University of Amherst

SCHOLARWORKS @ UMassAmherst

Evidence

The decision making

People & institutions
Posting Workflow

- No embargo option available in workflow, embargo needs special procedure
- Opt-out if claim for embargo
- Opt-in for free dissemination

Machine Readability

- Full text, metadata, citations & data, incl. supplementary data, provided in community machine-readable standard formats through a community standard API or protocol
- Full text, metadata & citations may be crawled without special permission or registration
- Full text & metadata not available in machine-readable format

Back to grey?

Internet is not synonymous with openness

Institutional repositories and ETD workflows do not make all items more accessible and available

Sometimes, a new infrastructure even appears to increase barriers to PhD theses

Back to grey?

Open access

Institutional

Restricted access & secrecy
Options

- Raising awareness
- Legal status
- Metadata
- Discovery tools
- Standardisation

Thank you

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helene.prost@inst.fr

Bibliography: http://www.citeulike.org/user/Schopfel/tag/gl15etd
For better or for worse?:
Effects of the Legal Deposit Act no. 20/2002 and e-publishing on access to grey literature in Iceland

Stefanía Júlíusdóttir, University of Iceland; School of Social Sciences, Iceland

This paper presents the findings of studies carried out by the author on the effects of the enforcement of the Legal Deposit Act no. 20/2002 on the 1st of January 2003, and the effects of e-publishing, on bibliographic access and access to the items themselves. In 2002 she investigated the % of dissemination of knowledge created in Iceland in the period 1944-2001 (sampling years: 1944, 1969, 1979, 1989, and 2001) in the following categories: commercial literature published in Iceland, commercial literature published abroad (as found in the Web of Science), and grey literature (GL) published in Iceland, patent applications, and standards. The findings indicated that the % of grey literature, patents and commercial publications issued abroad, increased steadily during this period, while the percentage of commercial publication issued in Iceland decreased as a % of the whole of the knowledge output. By 2001 the % of GL had not grown as much as expected and it was suspected that in-house publishing carried out in organizations and businesses that had not been delivered to the National and University Library of Iceland (NULI) according to the Legal Deposit Act no. 43/1977 might be the reason for this anomaly. Therefore the author investigated whether publications listed on the homepages of two institutions of economic importance to the country, the Marine Research Institute and the Institute of Economic Studies at the University of Iceland had been delivered, catalogued and made accessible in NULI, as they should have been according to the Legal Deposit Act no. 20/2002 and the Acts on the National and University Library no. 71/1994, and no. 142/2011. The findings indicated that with the move of the production process to the institutions themselves and the advent of e-publishing, GL was no longer delivered to NULI as it had been during the period of paper publications; when the printing presses were responsible for the deliveries to NULI. The aim of the 2002 Legal Deposit Act was to increase deliveries of publications to NULI by stipulating delivery of publications regardless of publishing media; and thereby increase access of authorities and the public to all Icelandic publications. The reverse seems to be happening. The scope of the 2002 Legal Deposit Act is narrower than that of previous such acts in Iceland, because it does not stipulate delivery of intranet publications, although the delivery of publications, such as guidelines, detailed research handbooks important when assessing the outcome of research, interim reports, etc., was and still is stipulated when they are issued on paper. The outcome is that entire research projects may be carried out in Iceland without access to any publication on it being available to authorities and the public; they are either issued in-house while the research is ongoing or abroad when the final findings have been reached. Another effect of e-dissemination seems to be that some kinds of publications for example newsletters are no longer issued as such, because the news is now publicized on the intranets or the Internet. The overall effects are that contrary to expectations there is less access now in the e-age than in the paper age when all publications were delivered to NULI and catalogued in the Icelandic national bibliography. This development calls for an amendment to the 2002 act on legal deposit.

Bionote
Stefanía Júlíusdóttir is an Assistant Professor in the Department of Library and Information Sciences, Faculty of Human and Social Sciences at the University of Iceland. Her main fields of teaching and research are systematization of knowledge and information (i.e. cataloguing, classification and indexing), retrieval of knowledge and information, and the development of the subject field of collections of recorded knowledge and information (i.e. in libraries, records centres and archives). Moreover, her research field includes the effects of e-publishing on public access to publications (particularly grey literature), as stipulated in Icelandic legal deposit acts. The topic of her PhD thesis on which she is presently working, focuses on the effects of developments in the research areas named above on career opportunities and working conditions of staff in libraries, records centres and archives in Iceland. Her professional experiences include Director of the Library of the Icelandic Building Research Institute, Librarian in the National Department of the National Library of Iceland working on the National bibliography, Library Director (of public and school libraries) at the Ministry of Culture and Education, Library Director at the Directorate for Health in Iceland. Education 1974 BA-in Librarianship and Biology at the University of Iceland, MS-degree in Librarianship from Columbia University in the City of New York, PhD studies at Åbo Akademi in Finland and at the University of Iceland. Email: stj12@hi.is
For better or for worse?

Stefanía Júlíusdóttir
School of Social Sciences, University of Iceland

15th International Conference on Grey Literature,
Bratislava, 2-3 December 2013

Facts on Iceland

• Iceland is an island in the North Atlantic Ocean
  – Presently the population is slightly over 320,000
  – It was settled around 670-874, by Nordic and Celtic people
  – There was oral administration, in worldly and religious matters
  – Christianity became state religion in 1000, it brought the Latin alphabet and recording of administrative material and literature
  – It came under the power of the Norwegian king in 1262
  – Joined Norway into a monarchy with Denmark and into the Kalmar Union in 1397-1523, got home rule in 1904, became sovereign in 1918 and gained full independence in 1944
  – Administrative and legal matters were formed by the traditions of the nations in power until independence

Publications in Iceland were white or black

• Traditionally there was access to printed matter in Iceland
  – Grey literature as well as market publications
  – Legal deposit stipulations have been in force since 1886
  – Bibliographic access was available in the Icelandic National Bibliography
    • Published 1887-2001 on paper by the National Library and since 1999 as a web publication (http://utgafuskra.is/statistics.jsp) also at the National and University Library of Iceland (NULI)
    • Physical access to the publications was available at the National Library of Iceland and in the Quarter Libraries
  – Therefore GL, apart from publications not delivered to the National Library due to ignorance of producers, did not exist in Iceland during the era of paper-publishing
Ratio of GL versus market publications

• In 2002 I researched changes in knowledge output in Iceland, investigating the ratio of GL versus market publishing 1944-2001
  – Data from the Icelandic National Bibliography in e-format was received from NULI for 1944, 1969, 1979, 1989, and 2001
  – The author (having worked on cataloguing for the Icelandic National Bibliography) analysed the cataloguing records for the publications as being issued either by a market or GL publisher
  – Information on data on market publishing abroad of knowledge created in Iceland was sought in the Web of Science
  – Data on patent applications was received from the Patents Office and
  – Data on Icelandic standards from Icelandic Standards (IST)

Knowledge output in Iceland 1944-2001

Findings 1

• Findings showed that the increase in knowledge output was greater than the increase in the population, and GL increased much more than market publications. This indicated that
  – Access to written knowledge was becoming ever more important for sustenance work of the nation, and moreover that
  – Knowledge creation was becoming an important way of sustenance in Iceland
• Producers are responsible for legal deposit deliveries to NULI
  – The findings also indicated that when GL publishers became technically able to produce their own publications in-house on paper (and electronically) the result was that
    • GL was not delivered properly to NULI because GL publishers did not know about the Legal Deposit Act
Findings II

- Prior to the 1st of January 2003 when the 2002 Act on Legal Deposit Act took force, there was no legal stipulation requiring the delivery of online publications to NULI
- This, along with the fact that the % of GL did not increase from 1979 to 2001, although there were increases in numbers in all categories gave rise to the suspicions
  - That a considerable amount of online GL had not been delivered to NULI, and
  - That the amount of GL was greater, possibly much greater than the findings indicated
- This was to be corrected with a stipulation in the 2002 Legal Deposit Act that covers publications on various media, amongst them online publications

Effects of the Legal Deposit Act 2002

- To find if the situation had improved following the enforcement of the 2002 Legal Deposit Act on the 1st of January 2003, a new research project was undertaken
- The hypothesis was that after the 1st of January 2003, there were no longer problems with access to online GL; it had become easy and quick for all to locate GL on the Internet
- Two Icelandic institutes were chosen for the investigation: the Institute of Economic Studies at the University of Iceland and the Marine Research Institute, both of which have assumed advisory roles for the Icelandic government
- Therefore it must be important both for members of the administration and the public to have complete access, both bibliographic and to the publications of these institutes

Method

- Access, both bibliographic and to the actual publications of the two chosen institutes was investigated by
- Searching for items on publication lists found on the homepages of the institutes in Gegnir.is (the national union catalogue of Icelandic libraries) to establish the bibliographic access as well as access to the publications themselves
- Neither of the institutes used Gegnir as their library system, thus they did not catalogue their publications in Gegnir themselves
- Both had published under the Legal Deposit Acts no. 43/1977 and no. 20/2002 (and one of them also under the 1949 act)
- Moreover, items were searched for directly on the Internet using Google to establish if claims on the importance of bibliographic access for precise retrieval were true
Results

• The findings do not support the hypothesis. Access to GL issued by the two institutes investigated did not improve after the 1st of January 2003. Among the reasons was that their staff was not aware of their legal duty to deliver their publications to NULI.

• Google search proved imprecise and even useless in some cases, for example when the search terms did not appear in the titles of the items searched for.

• Bibliographic cataloguing is therefore necessary to ensure precision in retrieval, and in some cases to receive the sought for items at all.
Scholarly publishing behaviour in Slovakia …

Are we ready for repositories?

Jaroslav Šušol, Miriam Ondrišová, Jana Ilavská, and Marcela Kopecká

Comenius University in Bratislava, Faculty of Philosophy, Slovak Republic

Institutional repositories are regarded as one of major conceptual and technological revolutions in the field of scholarly publishing, enabling quick and widespread dissemination of research results. In order for the repositories to become this revolutionary tool, it is necessary that they get full political and financial support from the academic institutions’ managements as well as a wide acceptance from the academics, university teachers and researchers. At the Comenius University in Bratislava, the oldest and the largest university in Slovakia, we are preparing a project of new institutional repository. In order to find out about the prospects of such an endeavour, we plan to make an enquiry on its feasibility from both the above-mentioned points of view – 1. state of the art of repositories implementation in Slovakia, 2. the acceptance of electronic publishing channels within the complex of manifestations of publishing behaviour and 3. willingness/readiness of researchers to share data and sources. Publishing behaviour represents an important part of information behaviour of information users. While information behaviour in the broadest sense is usually defined as a complex of various ways of interaction between a human as an actor of information processes and the information, the publishing behaviour is a specific component of this phenomenon, that occurs on the production side of information/communication spectrum. It is possible to explore the publishing behaviour using various approaches, quantitative and qualitative methods, analyzing the subjective interpretation of reality among authors themselves (sociological or ethnological methods based on questionnaires, surveys or interviews) or measuring hard data in the form of publishing outputs/production. One of the principal approaches towards research in publishing behaviour is the application of quantitative methods of scientometrics or bibliometrics that are usually put into a broader context. Scientometrics and bibliometrics are not new disciplines, but very current at the moment in Slovakia, vividly discussed in the academic circles due to the fact that some of their methods and indicators are being recently used as an important part of university management and of allocation of financial resources from the level of ministry of education. We will apply both sociological and bibliometrics methods on publishing data from Comenius university in our research. It should lead to defining the patterns of publishing behaviour of authors in the academic environment.

Bionotes

Jana Ilavská holds a master degree (Mgr.) from Comenius University in Bratislava, where she is undertaking a PhD. on Librarianship and Information Science. Her research interests are oriented on bibliometrics, scientometrics, infometrics and related topics including repositories. Since 2001 she has been working in Academic Library of Comenius University as system administrator and librarian. She is experienced in database systems, metadata and knowledge organization. She participates on several university or national projects, including building of Central Registry of Publication Activities of Slovak universities. Email: ilavska@rec.uniba.sk

Marcela Kopecká studied Library and Information Science at Comenius University in Bratislava, Slovakia and she works as an information specialist in the Academic Library at the same university. She is a student of PhD degree at Comenius University in Bratislava. In her research she concentrates on e-publishing and the usage of institutional repositories in academic communication. She participates in research projects on information behaviour of PhD students. Other areas of interest include Open Access, repository development, metadata of open archives and open repositories, data interoperability and digital libraries. Email: kopecka@rec.uniba.sk

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Jaroslav Šušol works as a professor in library and information studies, and the dean of the Faculty of Philosophy, Comenius University in Bratislava. He received his master degree in library and information science and English at Comenius University in 1986, license spéciale in information science and documentology at Université Libre de Bruxelles in 1992, and PhD in LIS with the thesis on the topic of retrospective conversion of library catalogues in 1993. He took part in several European research projects connected with network communication environment and its various aspects, like DELOS, CECUP, and CELIP. At present he is involved in research in the area of scholarly electronic communication, digital libraries, information and publishing behaviour and information ecology. Email: susol@fphil.uniba.sk
Scholarly publishing behavior in Slovakia … are we ready for repositories?

Jaroslav Šušol, Miriam Ondrišová, Jana Ilavská, Marcela Kopecká

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Digital institutional repository (IR) & publishing behavior

Institutional repositories in Slovakia (1)

- DLIS research
  - VEGA 1/0429/10 Information ecology of the academic inf. environment
  - APVV-0280-10 Cognitive traveling in digital space

- Questionnaire survey
  - 39 universities & colleges (20 public, 3 state, 12 private, 4 international)
  - Slovak Academy of Sciences
  - 27 evaluable questionnaires (among them all significant institutions)
  - Current state:
    - 14 institutions have IR (2 standalone IRs, 13 IR via local storage), 12 institutions have plans to build IR
    - In 16 cases IR building had been initiated by library
    - CU - local storage available via OPAC:
      - > 52,400 theses in e-form, > 400 digitized university proceedings, > 50 text books
Institutional Repositories in Slovakia

Questionnaire survey

problems & barriers:
- copyright and other related legislation
- financial issues
- lack of cooperation among relevant departments within institution (management, library, IT, archives, etc.)
- reluctance to share results of scientific research out of official publication channels (i.e. prestigious publishers, renowned journals)
- individual traits (technical skills, age, etc.)

Registration of publication outputs – evaluation of research performance


- 83 publication categories, 8 citation categories
  - number of publication outputs and allocation of funds = direct linkage
  - scanned documentation
  - plan = full texts in IR

CU publication outputs 2011-2013

- document types

Total number of publications = 25,281 (about 9,000 publ. per year)
CU publication outputs 2011-2013 (5)

CU faculties with highest rate of online publications - most frequent publishing channels

- **FMPH**
  - arxiv.org, cern.ch
  - preprints, articles in journals with high impact factor, conference proceedings
  - tradition

- **FMED, JFMED**
  - sciencedirect.com, bmj.sk, medical portals
  - articles in Slovak (domestic) and foreign journals, abstracts

- **FPHIL**
  - Slovak domain websites (.sk)
  - articles in Slovak journals, collections of papers
  - Slovak language, local topics

CU online publications distributed local storages

16.78% of all online publications are accessible from the domain of Comenius University (uniba.sk)
- distributed on 48 various location

- difficult discoverability preservation
CU online publications

**citation impact**

- online publications
  - better visibility, discoverability

**increasing average citation number**

- in some publication categories, especially:
  - scientific proceedings & collections of papers
  - articles in professional domestic journals
  - textbooks for higher education institutions
  - articles in CCC
  - articles in foreign scientific journals

CU institutional repository

... what’s next?

- CU information strategy
- institutional showcase for research - CU scientific park
- encourage collaboration between researchers/authors, departments, faculties, libraries...
- deal with legislation problems

Questions?
FEDLINK
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Pre-Conference Announcement

Sixteenth International Conference on Grey Literature

Grey Literature Lobby: Engines and Requesters for Change

- Think Tanks
- Advocacy Groups
- Research Teams
- NGOs
- IGOs
- Foundations
- Coalitions
- Lobbyists
- Special Interest Groups
- Task forces
- Watch Dog Groups
- Associations
- Etc.

Federal Library Information Network | FEDGrey Working Group
List of Participating Organisations

Last Update: November 10, 2013

Alberta Health Services, Cancer Care
Australian Council for Educational Research, ACER
Banque de données en santé publique
Biblioteca Centrale "G. Marconi", CNR
Central Economics and Mathematics Institute, CEMI
Centre National de Recherche Scientifique, CNRS
Centre of Information Technologies and Systems, CITIS
Comenius University
Dschang University Library
EBSCO Publishing
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European Organization for Nuclear Research, CERN
Federal Library Information Network, FEDLINK
Florida State University, FSU
Grey Literature Network Service, GreyNet International
Health Information Network Calgary, HINC
InfoEthics UK
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Institute of Computational Linguistics, ILC
Institute of Economics and Industrial Engineering, IEIE
Institute of Information Science and Technologies, ISTI
Institute of Research on Population and Social Policies, IRPPS
International Atomic Energy Agency, IAEA
Japan Atomic Energy Agency, JAEA
Japan Science and Technology Agency, JST
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Market Economy Institute
Naples University, Physics Department
National Documentation Center, EKT
National Hellenic Research Foundation
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