

# Practices and Patterns: the Convergence of Repository and CRIS Functions

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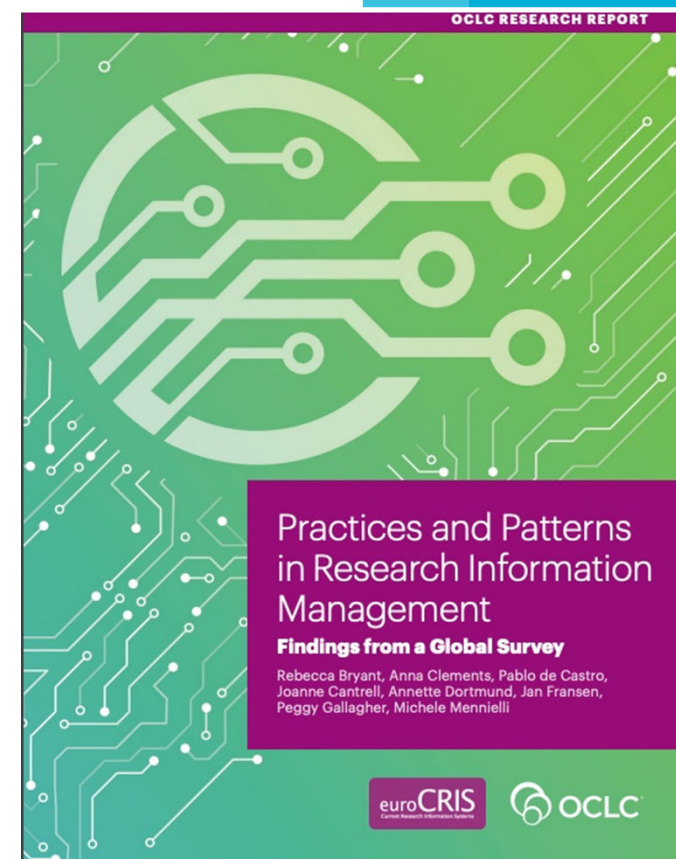
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## Today's presentation

- Introduction to OCLC Research, euroCRIS, and our collaborative research
- The background: evolution of repository-CRIS convergence
- Survey findings





- Devoted to challenges facing **libraries and archives since 1978**
- Community resource for **shared Research and Development (R&D)**
- Engagement with OCLC members and the community around **shared concerns**
- **Learn more**
  - [oclc.org/research](https://oclc.org/research)
  - [Hangingtogether.org](https://hangingtogether.org) blog

## Research Information Management: Defining RIM and the Library's Role

**Rebecca Bryant**  
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University of St. Andrews (UK)

**Carol Feltes**  
Rockefeller University (US)

**David Groenewegen**  
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**Simon Huggard**  
La Trobe University (Australia)

**Holly Mercer**  
University of Tennessee-Knoxville (US)

**Roxanne Missingham**  
Australian National University (Australia)

**Mallaca Oxnam**  
University of Arizona (US)

**Anne Rauh**  
Syracuse University (US)

**John Wright**  
University of Calgary (Canada)

## Convenience and Compliance: Case Studies on Persistent Identifiers in European Research Information Management

Rebecca Bryant, Annette Dortmund,  
and Constance Malpas



An international not-for-profit association founded in 2002 to bring together experts on research information in general and research information systems (CRIS) in particular

The infographic features a central globe with the euroCRIS logo overlaid. Three white circles are connected to the globe by lines, containing the following text: '45 Countries' (top left), '15 Strategic Partners' (bottom left), and '>200 Members' (right). Below the globe, a row of logos for partner organizations is displayed.

45 Countries

15 Strategic Partners

>200 Members

euroCRIS  
Current Research Information Systems

Partner logos: ALLEA (ALL European Academies), VIVO (connect • share • discover), EARMA (European Association of Research Managers and Administrators), ERCDATA, ERCIM (European Research Consortium for Informatics and Mathematics), APA RSEN (Research Information Systems Network), EUROPEAN UNIVERSITY INFORMATION SYSTEMS, ibict, ORCID, Jisc, CASRAI (Connecting Research), EUROPEAN SCIENCE FOUNDATION, DÜRASPACÉ, and OCLC.

# Building on previous research



<http://www.eunis.org/blog/2016/03/01/crisir-survey-report/>

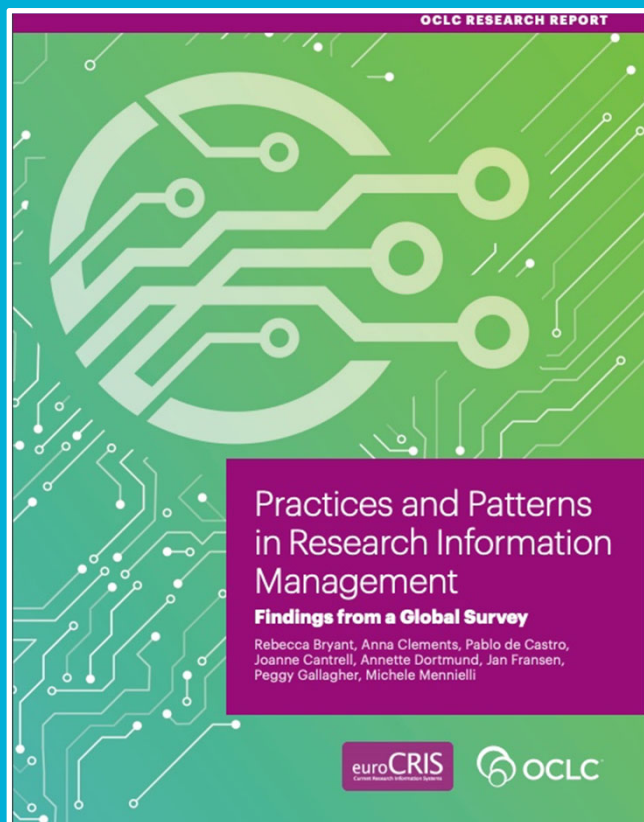
<http://www.eunis.org/wp-content/uploads/2016/03/cris-report-ED.pdf>

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CINECA & EUNIS & euroCRIS

# Practices and Patterns in Research Information Management: Findings from a Global Survey



**Rebecca Bryant**, PI, OCLC Research

**Pablo de Castro**, Strathclyde University and euroCRIS

**Anna Clements**, University of St. Andrews and euroCRIS

**Annette Dortmund**, OCLC EMEA

**Jan Fransen**, University of Minnesota, Twin Cities

**Michele Mennielli**, DuraSpace and euroCRIS

Plus a number of valuable collaborators at OCLC



[oc.lc/rimsurvey](https://oc.lc/rimsurvey)



# Repository/CRIS interoperability: background



## Repositories and CRIS: working smartly together. Conference and Software Exhibition

[Programme](#) | [Contact](#)

19th July 2011

*Nottingham University Park Campus*

Building on the successful event 'Learning how to play nicely: Repositories and CRIS' which was organised by the Welsh Repository Network in 2010, this event will look at the interaction of Repositories and CRIS (Current Research Information Systems). This event will also disseminate the findings of the RePOSIT project.

RSP has also invited leading suppliers of Repository and CRIS software who will be taking part in an exhibition which will be held throughout the day in the refreshments area.

- Designed as a mechanism to get repositories populated
- Original workflow CRIS metadata records → repositories

<http://www.rsp.ac.uk/events/repositories-and-cris-systems-working-smartly-together/>





Slide by Mark Cox (KCL &  
euroCRIS Board, July 2011)

## CRISes and OARs

- CRISes and OARs developed substantially separately
- OARs primarily developed as **discovery** tools
  - Public facing
  - Generally populated via individual deposit
  - Development usually led by library staff
- CRISes mainly used as (data) **management** tools
  - Used within institutions, with little or no public interface
  - Often built to integrate with other systems to allow import of data
  - Most implementations led by institution's research offices
- Considerable overlap in the data that is collected by each

[http://www.rsp.ac.uk/documents/get-uploaded-file/?file=rspnottingham190711\\_embed.ppt](http://www.rsp.ac.uk/documents/get-uploaded-file/?file=rspnottingham190711_embed.ppt)



*Slide by Mark Cox (KCL &  
euroCRIS Board, July 2011)*

## Integration of CRISes and OARs

- Increasing realisation in institutions that there is benefit from streamlining OAR and CRIS development
- Several potential ways of doing this
- Can use a CRIS for gathering all research related information, including research output, and feed/link to repository
- Can expand repository to be able to cover a wider range of research related information
- Can use portal functionality of sophisticated CRIS systems to mimic repository functionality

# “Several potential ways of doing this”: IR-as-a-CRIS

<https://eprints.soton.ac.uk/271048/>

University of Southampton Institutional Repository

[Search](#) [Advanced Search](#) [Policies & Help](#) [Latest](#) [Download Statistics](#) [Browse by Year](#) [Browse by Divisions](#)


## EPrints: a hybrid CRIS/repository


Carr, Leslie (2010) EPrints: a hybrid CRIS/repository. *Workshop on CRIS, CERIF and Institutional Repositories, Italy. 10 - 11 May 2010. 2 pp.*


Record type: **Conference or Workshop Item (Other)**

### Abstract

It is a truth universally acknowledged that a repository collects and manages research papers, data, reports, patents and software (curating many kinds of research outputs for immediate access and long-term preservation) but that it is just one of the systems that a CRIS has to interact with. Specialised research databases are used not only for research outputs, but for human resources, project management, finance, grant funding and research expertise. Repositories can therefore benefit from the extended data schema of CRIS systems, while CRIS systems can benefit from the user engagement model of repositories.

 PDF  
hybridCRISIR.pdf - Other  
[Download](#) (9MB)

 Other  
hybridCRISIR.docx - Version of Record  
[Download](#) (317kB)

 Image (PNG)  
word/media/image2.png - Other  
[Download](#) (106kB)

# Design of linear and star-shaped macromolecular organic semiconductors for photonic applications

Kanibolotsky, A. L., Laurand, N., Dawson, M. D., Turnbull, G. A., Samuel, I. D.W. and Skabara, P. J. (2019) Design of linear and star-shaped macromolecular organic semiconductors for photonic applications. *Accounts of Chemical Research*, (Accepted for Publication)



Text  
186403.pdf - Accepted Version  
Restricted to Repository staff only  
1MB

## Abstract

No abstract available.

Item Type:	Articles
Status:	Accepted for Publication
Refereed:	Yes
Glasgow Author(s) Enlighten ID:	Skabara, Professor Peter and Kanibolotsky, Mr Oleksandr
Authors:	Kanibolotsky, A. L., Laurand, N., Dawson, M. D., Turnbull, G. A., Samuel, I. D.W., and Skabara, P. J.
College/School:	College of Science and Engineering > School of Chemistry
Journal Name:	Accounts of Chemical Research
Publisher:	American Chemical Society
ISSN:	0001-4842
ISSN (Online):	1520-4898

University Staff: [Request a correction](#) | Enlighten Editors: [Update this record](#)

## Funder and Project Information

Project Code	Award No	Project Name	Principal Investigator	Funder's Name	Funder Ref	Lead Dept
301327	o	Hetero-print: A holistic approach to transfer-printing for heterogeneous integration in manufacturing	Peter Skabara	Engineering and Physical Sciences Research Council (EPSRC)	EP/R03480X/1	ENG - Electronics & Nanoscale Engineering
303776	o	Light-controlled manufacturing of semiconductor structures: a platform for next generation processing of photonic devices	Peter Skabara	Engineering and Physical Sciences Research Council (EPSRC)	EP/P02744X/2	Chemistry
303955	o	Single-molecule studies of light-emitting polymers: observing and manipulating	Peter Skabara	Engineering and Physical Sciences Research Council (EPSRC)	EP/N009908/2	Chemistry

- **Eprints-based IR-as-a-CRIS model** operating at eg the University of Glasgow Enlighten repository, <http://eprints.gla.ac.uk/>
- Collection of additional info on funding sources requires connection to (*interoperability with*) project database

<http://eprints.gla.ac.uk/186403/>

# An early attempt at describing the CRIS/IR landscape (2014)

## The Gradual Merging of Repository and CRIS Solutions to Meet Institutional Research Information Management Requirements ☆

Pablo de Castro <sup>a</sup>  , Kathleen Shearer <sup>b</sup>, Friedrich Summann <sup>c</sup>

<sup>a</sup> GrandIR Ltd, Edinburgh EH3 5ET, Scotland, UK

<sup>b</sup> Confederation of Open Access Repositories (COAR), 37073 Göttingen, Germany

<sup>c</sup> Bielefeld University Library, Bielefeld, Germany

Available online 1 July 2014.



 [Show less](#)

<https://doi.org/10.1016/j.procs.2014.06.007>

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### Abstract

Much has been said in recent times about the alleged dichotomy between Institutional Repositories (IRs) and Current Research Information Systems (CRISs).

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Title: The gradual merging of repository and CRIS solutions to meet institutional research information management requirements

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Authors: [De Castro, Pablo](#)   
[Shearer, Kathleen](#)   
[Summann, Friedrich](#) 

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Source: "Managing Data-Intensive Science: the Role of Research Information Systems in Realising the Digital Agenda": Proceedings of the 12th International Conference on Current Research Information Systems (2014) *Procedia Computer Science* 33: 39-46 (2014)

### *Interoperability*

- CRIS and IR

### *Integration*

- CRIS-as-IR
- IR-as-CRIS



# Elusive landscape to pin down due to swiftly evolving character, esp w/ widespread arrival of commercial CRISs to the UK in the wake of REF2014

## CERIF CRIS use in UK HE

- Lots of CERIF CRIS procurement in last year - some are in early stages of implementation
- Pure (Atira) - 17
  - St Andrews, Aberdeen, York, Royal Holloway, Strathclyde, Hertfordshire, Lancaster, Aston, Institute of Education, London, Dundee, Heriot-Watt, Glasgow Caledonian, King's College London, Edinburgh, University of the Highlands and Islands, Bath, Queen's University Belfast
- CONVERIS (AVEDAS) - 5
  - Cranfield, Hull, Stirling, MRC Oxfordshire Regional Centre, Brighton
- Symplectic Elements (Symplectic)
  - eg Brunel, Imperial, Queen Mary, Leeds...

Research assessment exercises identified in the OCLC/euroCRIS survey as *one of the main drivers for CRIS implementation* worldwide



[www.ukoln.ac.uk](http://www.ukoln.ac.uk)

A centre of expertise in digital information management



EuroCRIS / EuroCRIS Research Output / Conference

Please use this identifier to cite or link to this item: <http://hdl.handle.net/11366/75>

Title: CERIF CRIS UK landscape study: work in progress report

Authors: Russell, Rosemary

Description: 13 slides.-- Update to original report "Adoption of CERIF in Higher Education Institutions in the UK: A Landscape Study" published by R. Russell and UKOLN on Mar2012, <http://www.ukoln.ac.uk/isc/reports/cerif-landscape-study-2012/CERIF-UK-landscape-report-v1.1.pdf>

# Commercial CRISs start trying to operate as repositories – which they were not originally designed to do

v2.sherpa.ac.uk/id/repository/2607

Jisc Digital Resources > Open Access

## OpenDOAR

Browse Search Statistics Policy Tool Our APIs Suggest Admin

### QUB Research Portal

Repository Information

Repository Name	Queen's University Research Portal (QUB Research Portal) [English]
Repository Type	Institutional
Description	This is the Institutional Repository of Queen's University Belfast which provides access to the research output of the institution. The interface is available in English.
Repository URL	<a href="http://pure.qub.ac.uk/portal/">http://pure.qub.ac.uk/portal/</a>
OAI-PMH URL	<a href="http://pure.qub.ac.uk/ws/oai">http://pure.qub.ac.uk/ws/oai</a>
Software Name	PURE
Languages	English
Content Types	Journal Articles Bibliographic References Conference and Workshop Papers Unpublished Reports and Working Papers Books, Chapters and Sections

Sense of technologies, workflows and institutional units at odds with each other (while warnings were issued on the 'false dichotomy' between IRs and CRISs, <http://www.ukcorr.org/2012/09/26/three-perennial-questions/>)

**IT'S IMPORTANT TO KEEP COLLECTING UP-TO-DATE SNAPSHOTS OF THIS SWIFTLY EVOLVING LANDSCAPE**

# OCCLC/euroCRIS Survey: Methodology and promotion

Online survey data collection: Oct 2017 – Jan 2018

- English and Spanish versions

Convenience sample

- Report is explanatory and descriptive in nature

Survey promotion through:

- OCLC and euroCRIS communications channels and events worldwide
- Communications by CRIS vendors and user communities
- Listservs, social media, and announcements to research & library organizations

# The Surveys



20 Countries 84 Institutions

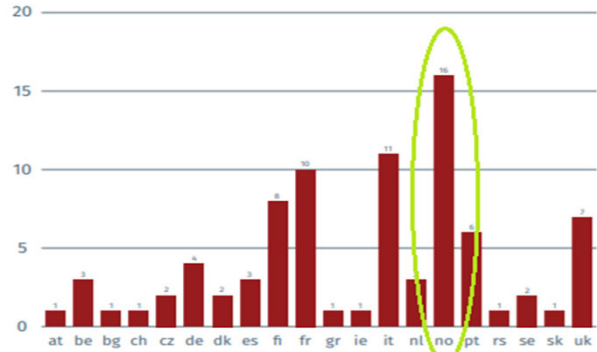
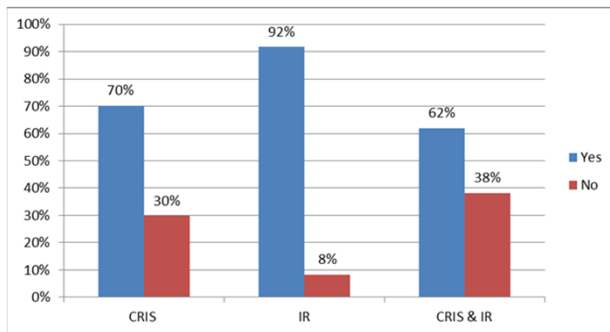


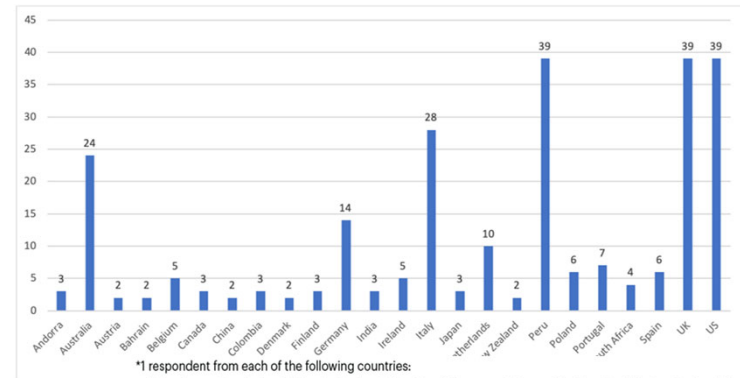
TABLE1: GEOGRAPHIC DISTRIBUTION OF RESPONDENTS



70% with a CRIS

58% with a CRIS

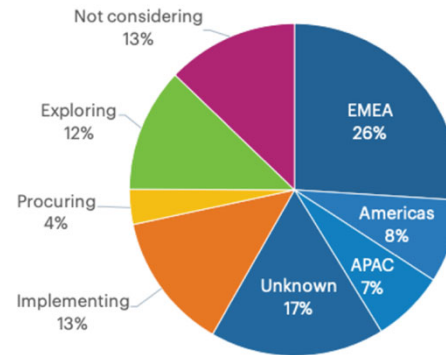
44 countries 381 institutions



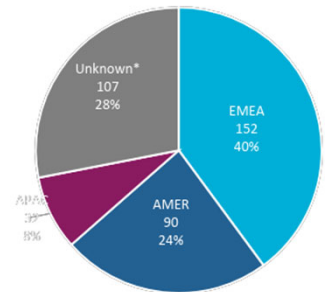
\*1 respondent from each of the following countries: Afghanistan, Albania, Azerbaijan, Barbados, Belize, Brazil, Hungary, Lebanon, Mexico, Namibia, Russia, Saudi Arabia, Slovakia, Sri Lanka, Sweden, Trinidad and Tobago, Turkey, Uganda, United Arab Emirates and Uruguay  
 \*\*107 respondents did not provide a country

Respondents by RIM Status (n=381)

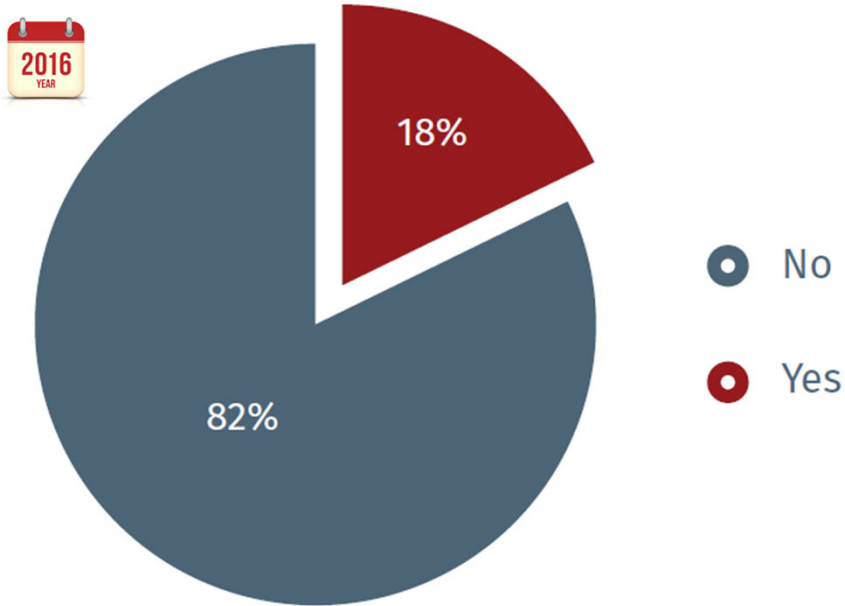
Note: 29 respondents did not provide their RIM system



Respondents by Region (n=381)

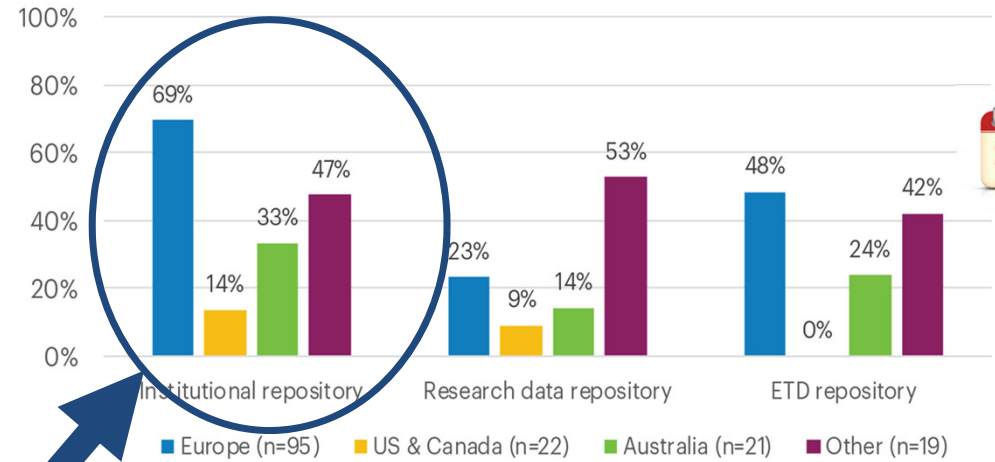


# How many systems?

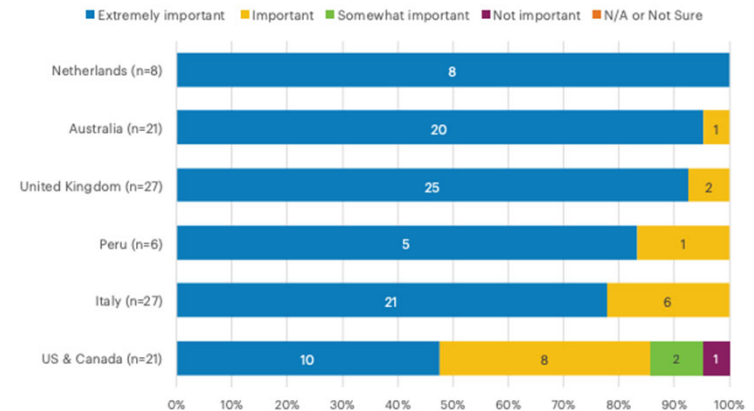


In the 18% of the cases where both CRIS and IR systems are available a single software platform is used for both

## Does Your RIM System Serve as Your Default...



## Importance of RIM System as Registry of Institutional Research Outputs

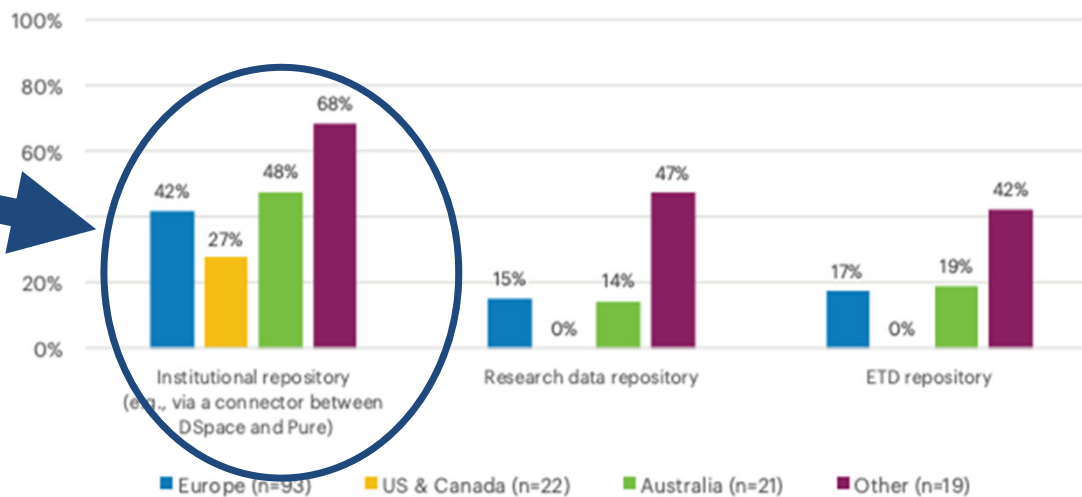
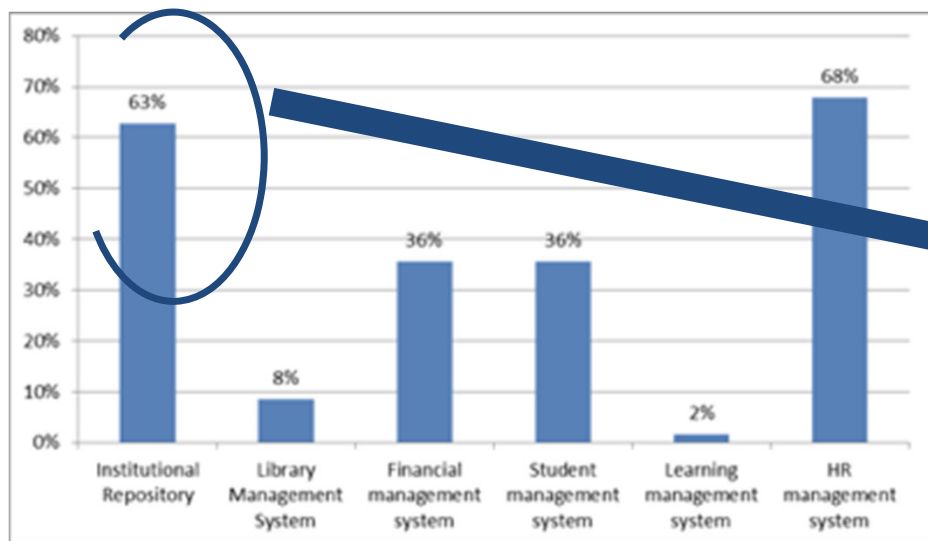




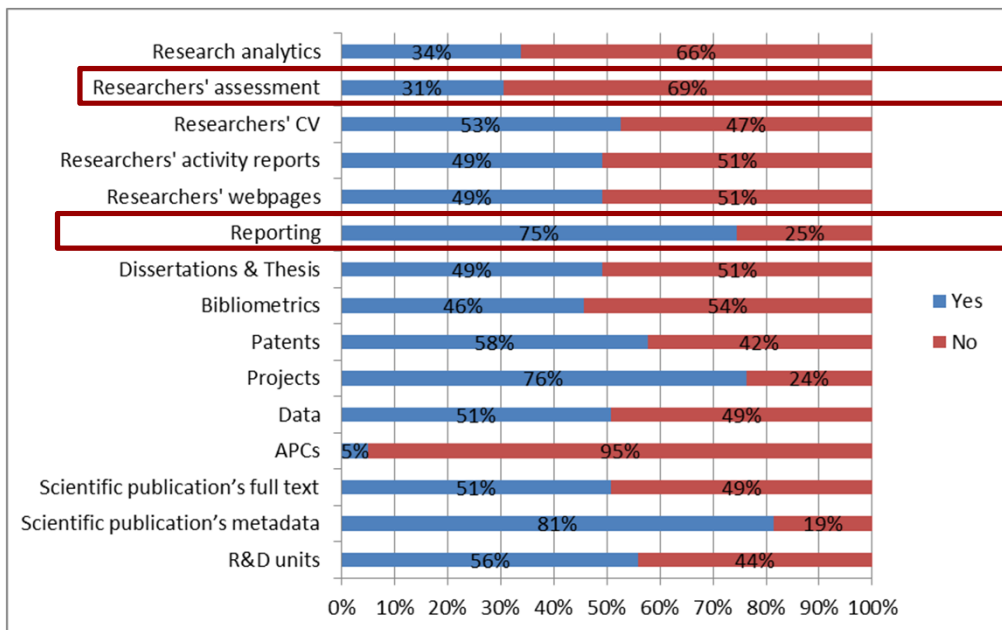
# CRIS-IR Interoperability



Which of the following internal systems interoperate with your RIM System(s)?

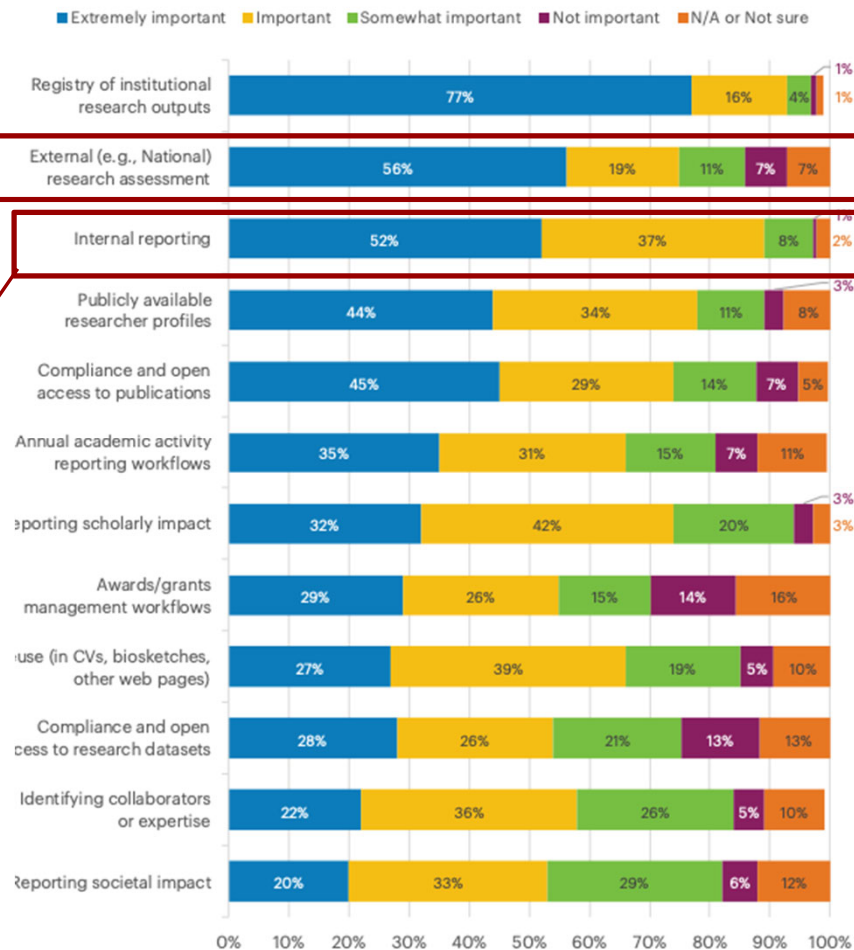


# Content and Functions

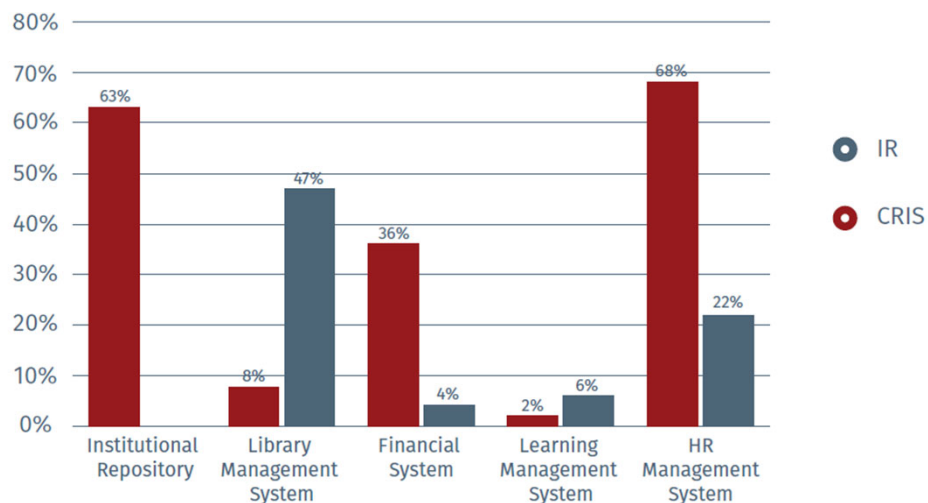


## Important Functions of RIM (n=203)

Base: Institutions with a live RIM system

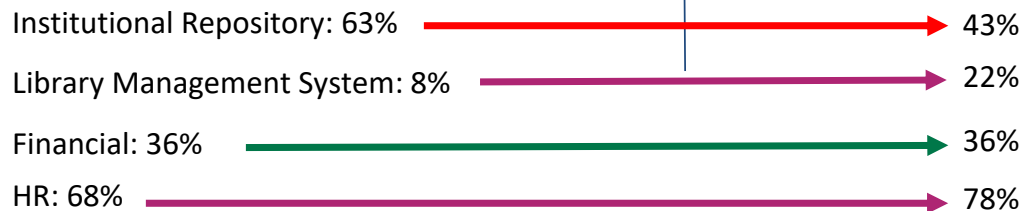
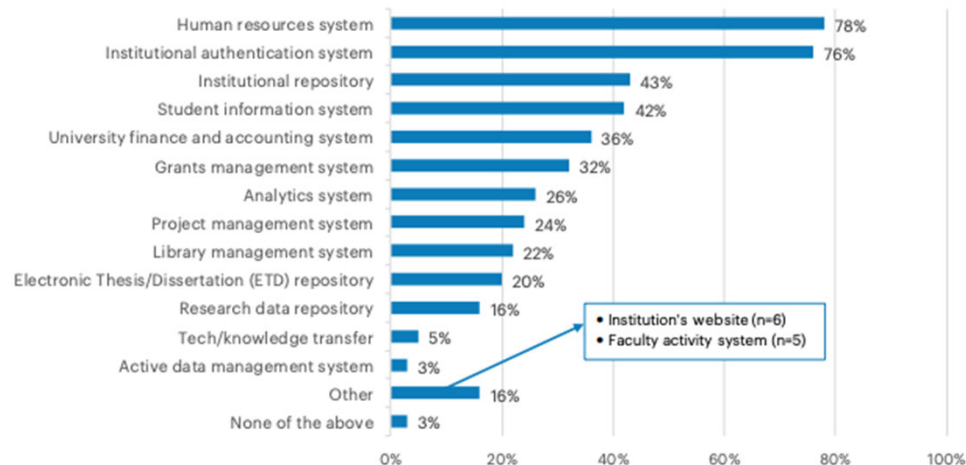


# Internal Systems Interoperability

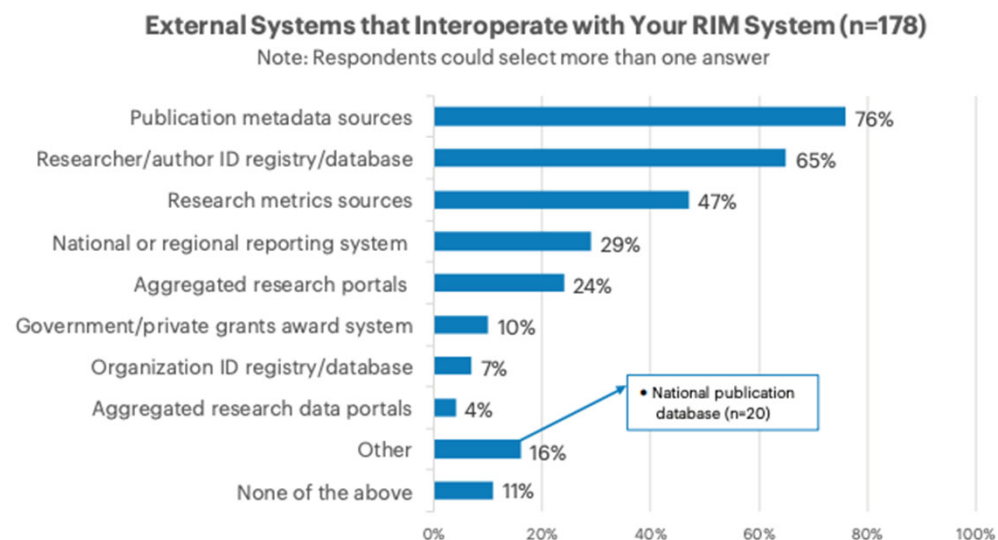
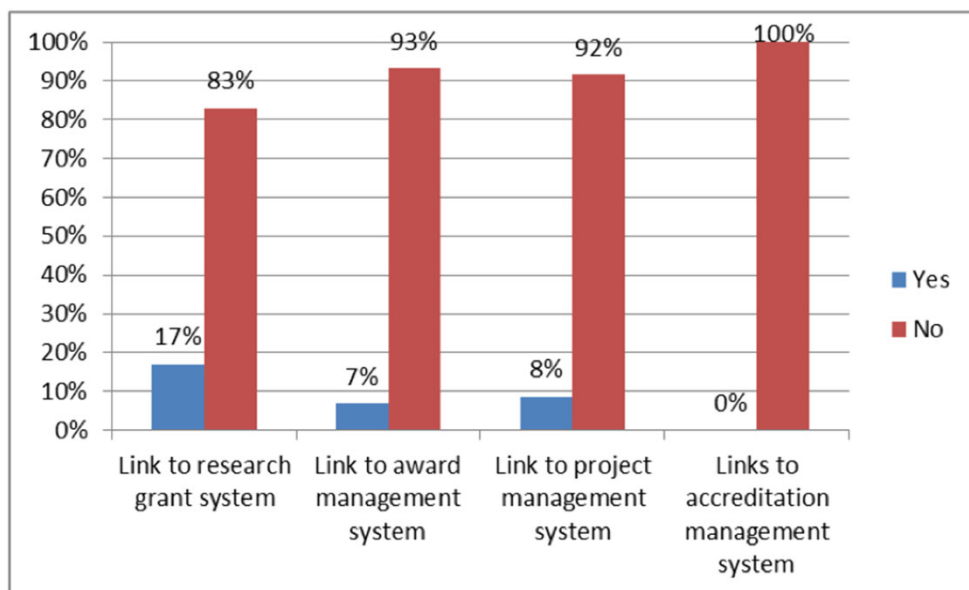


Internal Systems that Interoperate with Your RIM System (n=184)

Note: Respondents could select more than one answer



# External Systems Interoperability

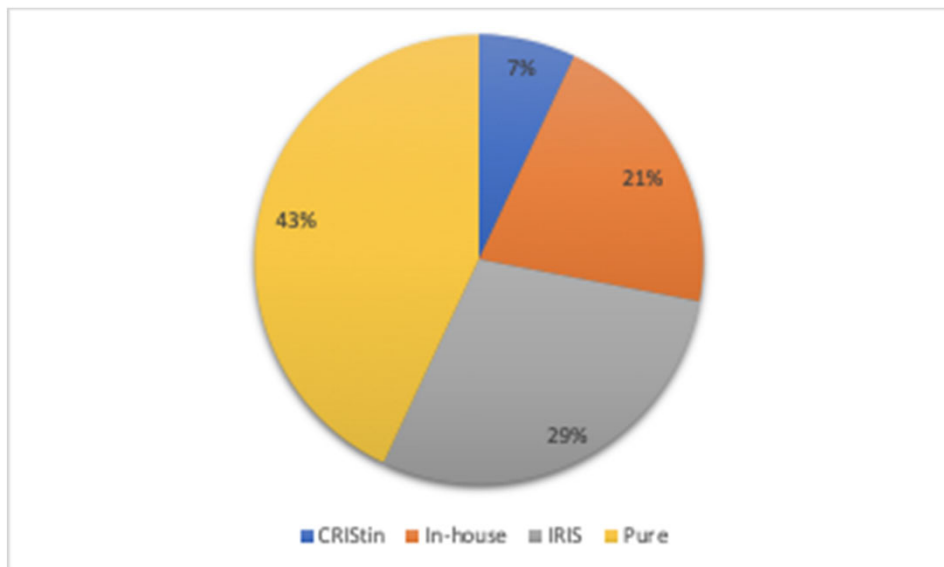


The two surveys tracked different external systems interoperability

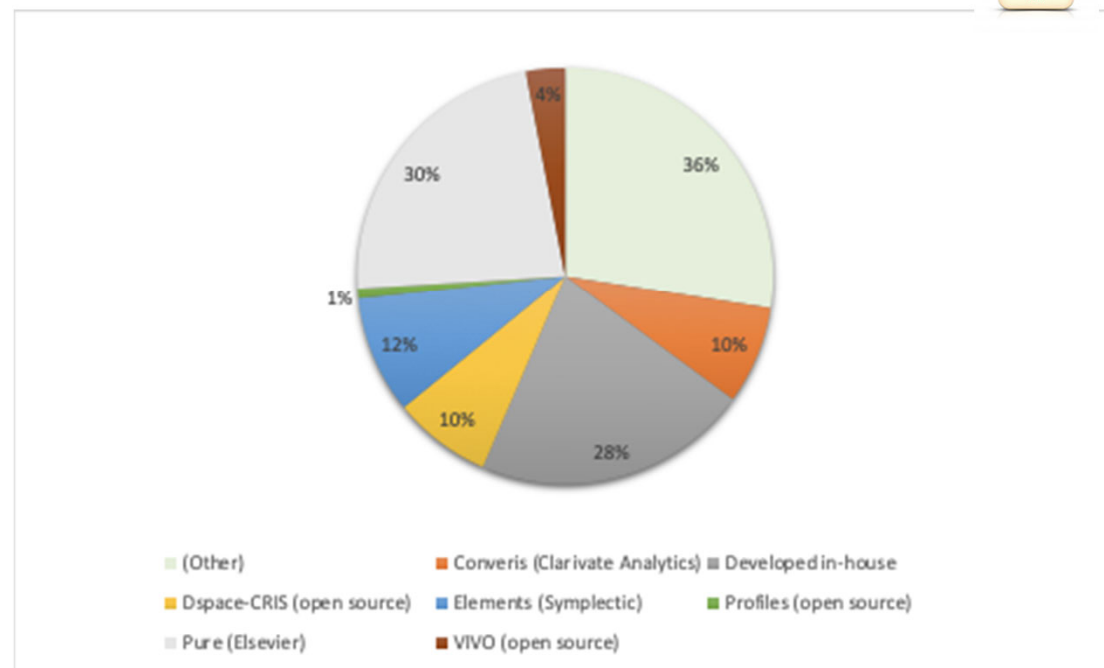


# Technologies

2016  
YEAR



2018  
YEAR





# Fast forward to June 10<sup>th</sup> OR19 WS on repo/CRIS interoperability/integration

## Attempt to capture an up-to-date snapshot for the evolved repository/CRIS co-existence & merging

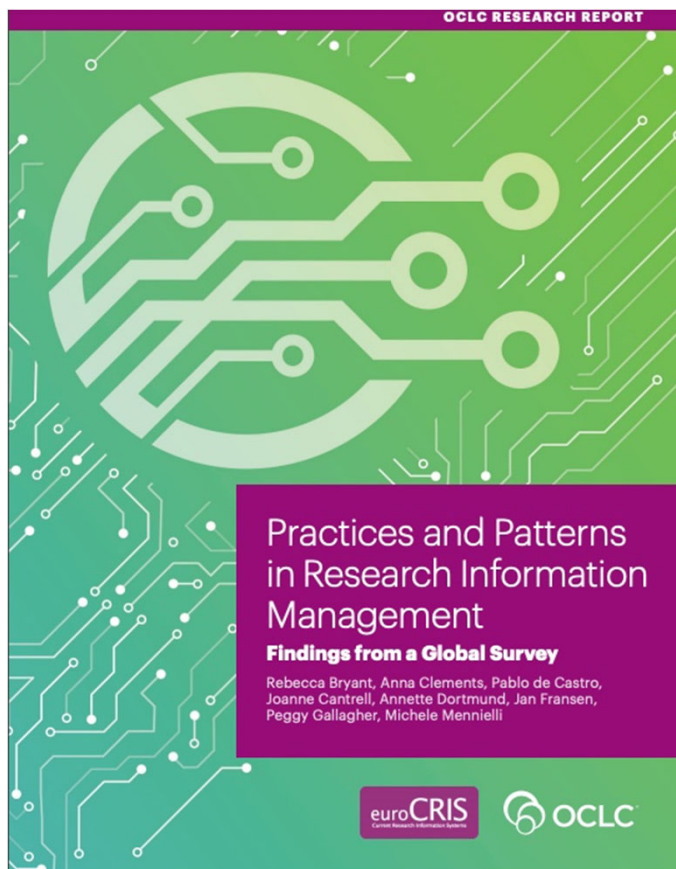
- Case study for Haplo-based integration where repo & CRIS are *one and the same (open source) platform*
- Seamless Worktribe/DSpace integrations
- Case study for Pure-based interoperability
- Best practice (integrated) DSpace-CRIS implementation at UnityFVG

More importantly: the **application of integrated/interoperable systems to areas like** Open Science implementation, reporting for research assessment, research data management surpasses the functionality achieved by repository-only or CRIS-only solutions

# References

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# Discussion



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