



The 9th Seminar of University Knowledge Bases

online 22–24 March 2023

24/03/2023

Recent Advances in CRIS Interoperability

<http://hdl.handle.net/11366/2409>



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Research Information Management (RIM) and CRIS Systems: a socio-technical infrastructure

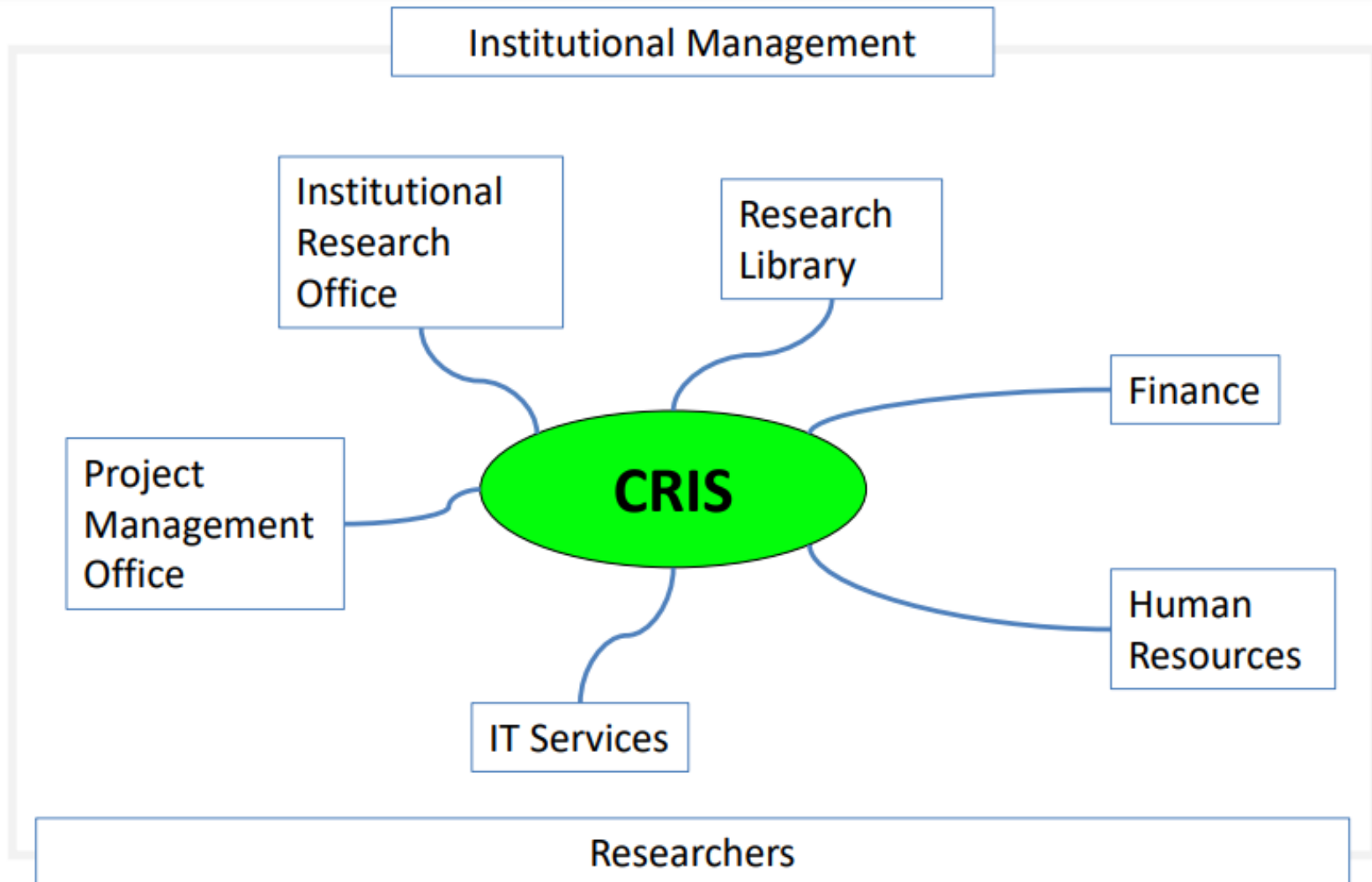
Pablo de Castro

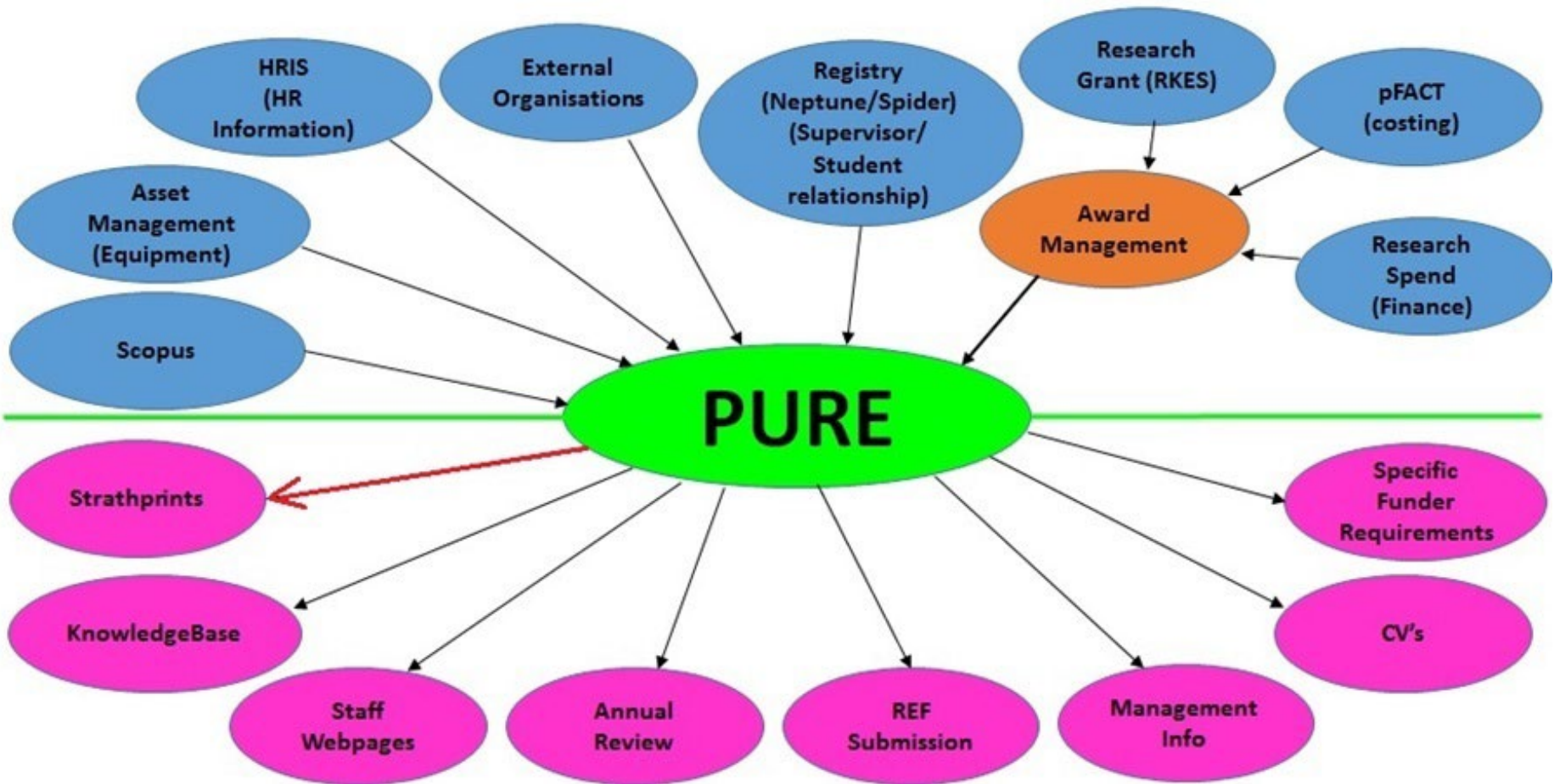
Roles and Competencies of CRIS Managers

Zadania i kompetencje menedżerów systemów CRIS

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Correspondence to: pablo.de-castro@strath.ac.uk

SUMMARY: CRIS managers are by default assumed to be persons, but this paper's description of the tasks and competencies associated with a CRIS manager role emphasizes that this is a role rather than a person. While mentioning that other kinds of research information systems exist – e.g. CRIS aggregators such as the Polish Platform of Medical Research – the description focuses on the institutional CRIS manager role. The different institutional units usually involved in CRIS management are summarised, highlighting the increasingly relevant role played by research libraries in the domain of research information management. Insight into the technical and social interoperability requirements for smooth CRIS operation is provided, together with some reflections on training opportunities in the area.





What are CRIS systems?



WIKIPEDIA
The Free Encyclopedia

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Current research information system

From Wikipedia, the free encyclopedia

A **current research information system** (**CRIS**) is a [database](#) or other [information system](#) to store, manage and exchange contextual metadata for the research activity funded by a research funder or conducted at a research-performing organisation (or aggregation thereof).^[1]

CRIS systems are also known as Research Information Management or RIM Systems (RIMS).^{[2][3]}

Contents [hide]

- Features
- Use case
 - Research assessment
 - Research administration
 - Open Science implementation
 - Business intelligence
- See also
- References
- Further reading
- External links

Double function:

- Visibility: “showcasing research”
- Internal analysis: evidence-based decision making

Features [edit]

The data model underpinning a CRIS relies on a set of basic entities as defined by the Common European Research Information Format ([CERIF](#)) model maintained by the non-profit organisation euroCRIS.

The links connecting these entities provide a standardised semantic layer that provides consistency to the data model. The basic CERIF entities are **people, organisations, projects and outputs** (publications, research data, patents). Further second-level entities in the comprehensive snapshot of research provided by CERIF are for instance funding, research facilities and equipment or skills.

CERIF: Common European Research Information Format



Mission

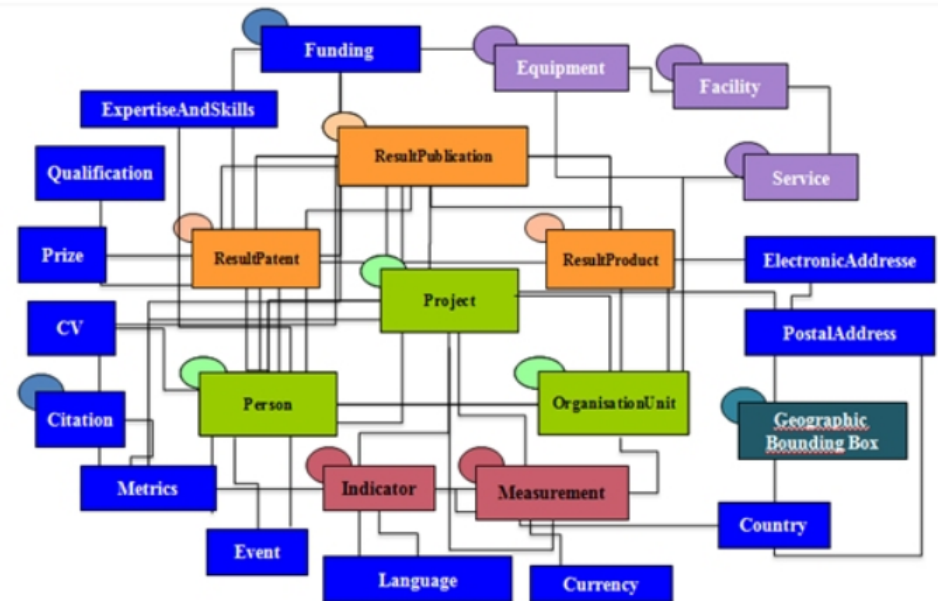
"To promote collaboration within the research information community and advance interoperability through CERIF"



Main features of CERIF

CERIF (the Common European Research Information Format) is:

- A concept about research entities and their relationships – Specification (Conceptual Level)
- A description of research entities and their relationships – Model (Logical Level)
- A formalization of research entities and their relationships – Database Scripts (Physical Level)



CERIF: Common European Research Information Format



Mission

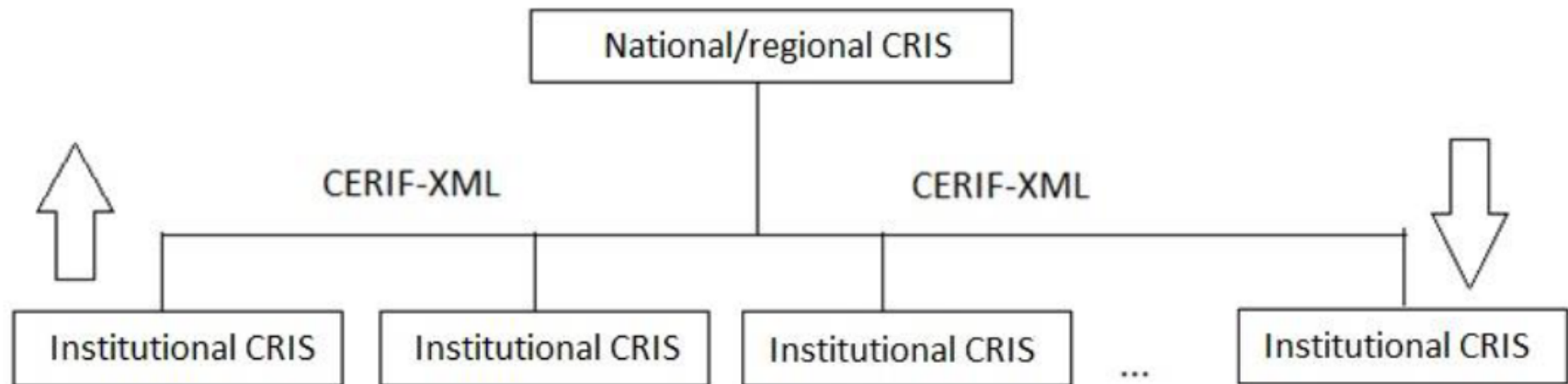
"To promote collaboration within the research information community and advance interoperability through CERIF"

Main features of CERIF

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- A formalization of research entities and their relationships – Database Scripts (Physical Level)

'Bottom-up' and 'top-down' (CERIF-based) research information exchange



Socio-technical interoperability: the NatResPort WG

Introducing the National/Regional Research Portals Working Group

Fri, 25/11/2022 - 01:14 euroCRIS Secret...

On Fri Dec 2, 2022 the new euroCRIS 'National/Regional Research Portals' Working Group will be launched within the Autumn 2022 Strategic Membership Meeting in Nijmegen. The WG will bring together representatives from various national and regional CRIS in Europe and beyond to jointly discuss the workflows associated with these portals. The group will be coordinated by the Austrian RIS Synergy project team led by TU Wien. This team held a half-day workshop on this very topic at the CRIS2022 Conference in Dubrovnik last May, of which the international WG being launched now is a direct outcome.

Introducing the National/Regional Research Portals Working Group

A half-day workshop was held on May 12th this year at the [CRIS2022 Conference in Dubrovnik](#) called "*The Do's and Dont's of of Building a Sustainable Portal*" to explore the similarities and differences in the workflows followed by a number of national and regional CRIS initiatives when operating their research portals. The activity was jointly organised by the RIS Synergy project team in Austria and euroCRIS and a paper in the CRIS2022 Conference proceedings [has now been published](#) with the outcomes of the discussion.

← Tweet



euroCRIS_Org
@euroCRIS_Org

...

top-qualify panel at the [#RISynergy](#) WS at [#CRIS2022](#). Good representation for the wide 'family' of European national/regional [#CRIS](#)

[#PRC @rdelavega](#), [#FRIS IIs de Bal](#) [#ResearchFI](#)
[@HPuuska](#) among others

Socio-technical interoperability: the NatResPort WG



Snapshot taken from
“Overview of CRIS
infrastructure in Europe”
presentation at 8th
Seminar of University
Knowledge Bases,
<http://hdl.handle.net/11366/1921>

Some changes since:

- Icelandic Research Information System (IRIS)
- CRIS.NRW – regional CRIS in Germany
- BrCris and PeruCRIS in Latin America
- CRIS-IL in Israel

Socio-technical interoperability: the NatResPort WG



RIS
SYNERGY

KICK-OFF MEETING: WORKING GROUP ON NATIONAL/REGIONAL RESEARCH PORTALS

COORDINATED BY EUROCRIS AND RIS SYNERGY

01/02/2023



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TU
Graz



di:'Angewandte



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für musik und
darstellende
kunst wien



]a[akademie der bildenden künste wien



WIENER WISSENSCHAFTS-,
FORSCHUNGS- UND TECHNOLOGIEFONDS

Socio-technical interoperability: the NatResPort WG



TOPICS ON THE TABLE 1/2

- Lessons learned
- Persistent identifiers (PIDs)
- CERIF-based interoperability: top-down & bottom-up
- Implementation of OpenAIRE Guidelines for CRIS managers
- Promotion of a national/regional portal to different stakeholders/target groups

Socio-technical interoperability: the NatResPort WG



TOPICS ON THE TABLE 2/2

- National/regional research portal contents and modules
- National/regional research portals and funders
- National/regional research portals and research instruments and facilities
- Indicators arising from portals for research policy decision-making
- GDPR issues with national/regional research portals
- ...

Why isn't POL-on in this NatResPort WG?

EuroCRIS / EuroCRIS Research Output / Conference

Title: Central systems for collecting data on science and higher education -- role and evolution in the light of the Polish Legislation


Authors: Michajłowicz, Marek 
Paszowska, Małgorzata 

Keywords: research information management;national CRIS;POL-on;Polish National Scientific Bibliography (PBN);National Information Processing Institute (OPI);Poland

Issue Date: 27-Nov-2018

Publisher: euroCRIS

Series/Report no.: euroCRIS Strategic Membership Meeting Autumn 2018 (Warsaw University of Technology, Warsaw, Poland, Nov 26-28, 2018)



Conference: Strategic Membership Meeting 2018 – Autumn (Warsaw) 



Abstract: The Polish National Information Processing Institute (OPI) in Warsaw runs and maintains a suite of research information services and systems the most important of which are the national CRIS POL-on and the Polish National Scientific Bibliography (PBN). The presentation summarises the goals achieved by the current national-level system configuration and the challenges posed by the siloed character of certain systems and the frequent changes in the national-level legislation on research and higher education. New opportunities have arisen with the recent passing of the new "Act 2.0" that will allow the integrated system architecture to be revamped, extended and standardised.


Description: 24 slides.-- Presentation delivered in session "CRIS at National Level in Poland"

URI: <http://hdl.handle.net/11366/716>

Appears in Collections: Conference

 Page view(s)
183 
checked on Mar 7, 2023

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90 
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 Google Scholar™
Check

POL-on REST API

REST {API} **POL-on** **PBN** Polska Bibliografia Naukowa **ORPPD** Ogólnopolskie Repozytorium Pisemnych Prac Dyplomowych

Usługa zdalnej sprawozdawczości zrealizowana w ramach:

🔍 Search

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POL-on Rest API (v9.121.0)

Download OpenAPI specification: [Download](#)

License: [Apache 2.0 License](#)

API shares resources (entities) by Uniform Resource Identifier (URI). Each data set in POL-on has its own URI which is the English name of this data set, for example: employees, conferences. In our project we implemented a human readable URI convention.

Authorization

Data access is based on POL-on accounts. Almost all POL-on REST API requests require an access token. Learn more about POL-on REST API authorization on the [POL-on Help Page](#)

Changelog

[Changelog page](#) details changes to the POL-on REST API since its public release in version.

Reference

This API reference provides information on the specific endpoints available through the API, their parameters, and their response data format. To learn more about endpoints visit [POL-on Help Page](#)

PIDs, CRIS and interoperability



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February 1, 2023

Report Open Access

Building the plane as we fly it: the promise of Persistent Identifiers

3,278

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See more details...

de Castro, Pablo; Herb, Ulrich; Rothfritz, Laura; Schöpfel, Joachim

Report:

- Building the plane as we fly it: the promise of Persistent Identifiers, <https://zenodo.org/record/7258286>

Case studies:

- Adoption of the DAI in the Netherlands and subsequent superseding by ORCID/ISNI, <https://zenodo.org/record/7327505>
- The gradual implementation of organisational identifiers (OrgIDs), <https://zenodo.org/record/7327535>
- Persistent identifiers for research instruments and facilities: an emerging PID domain in need of coordination, <https://zenodo.org/record/7330372>
- IGSN – building and expanding a community-driven PID system, <https://zenodo.org/record/7330498>
- RePEc Author Service: An established community-driven PID, <https://zenodo.org/record/7330516>
- Failed PIDs and unreliable PID implementations, <https://zenodo.org/record/7330527>
- The role of research funders in the consolidation of the PID landscape, <https://zenodo.org/record/7258210>

PIDs, CRIS and interoperability

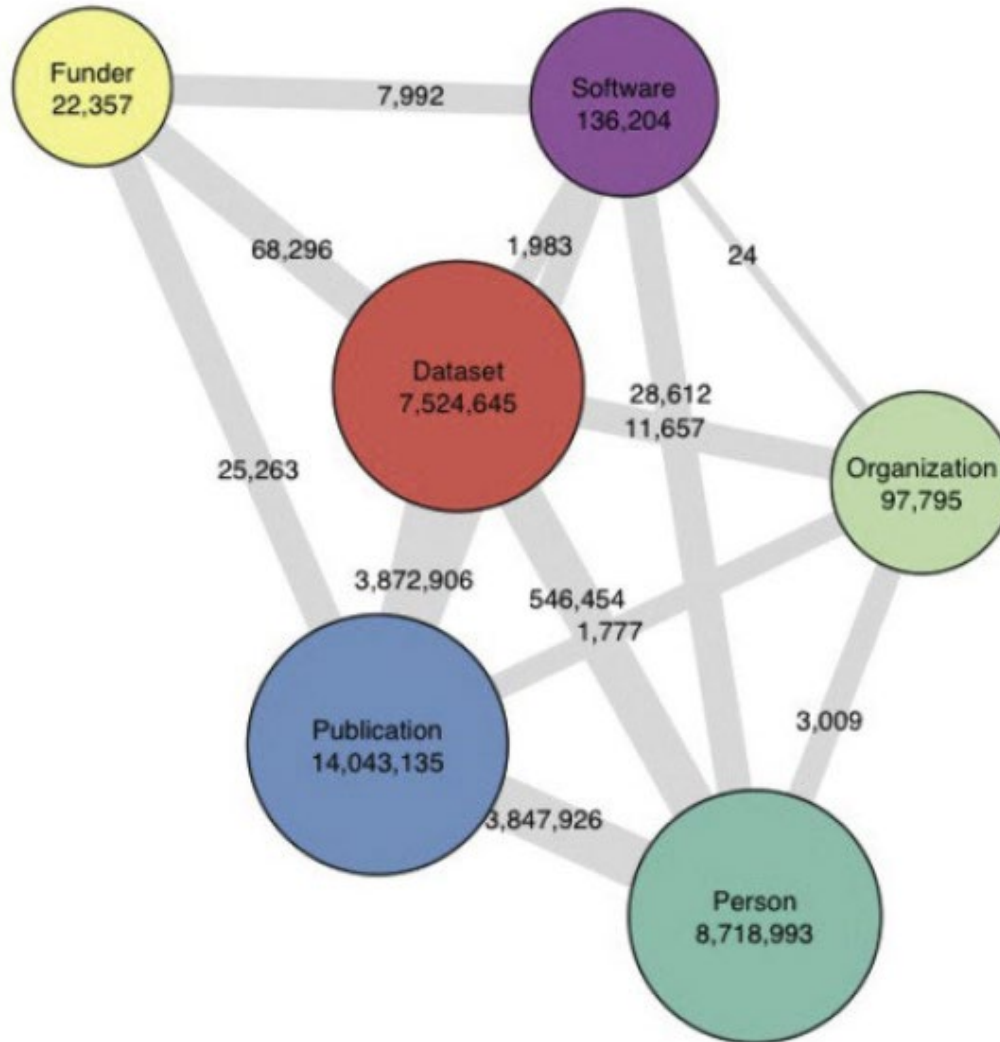


Figure: PID graph as described by FREYA in Aug 2020 – with a strong focus on research outputs

PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs



November 29, 2022

Report Open Access

The role of research funders in the consolidation of the PID landscape

de Castro, Pablo; Herb, Ulrich; Rothfritz, Laura; Schöpfel, Joachim

This case study is part of a series that has been produced within the study on "Risks and Trust in pursuit of a well-functioning PID infrastructure for research" commissioned by the Knowledge Exchange in July 2021. The main outcome of this work will be a report examining the current PID landscape with an emphasis on its risks and trust-related issues.



<https://zenodo.org/record/7258210>

PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs



CORDIS
Wyniki badań wspieranych przez UE

polski

 Szukaj

STRONA GŁÓWNA | BROSZURY RESULTS PACK | MAGAZYNY RESEARCH*EU | PODCASTY I WIADOMOŚCI | PROJEKTY I WYNIKI | O NAS | SZUKAJ | ZALOGUJ SIĘ

HORIZON
2020

The strong interaction at the frontier of knowledge: fundamental research and applications

STICHTING NEDERLANDSE WETENSCHAPPELIJK ONDERZOEK INSTITUTEN Wkład UE netto
€ 98 750,00
 Niderlandy

NARODOWE CENTRUM BADAN JADROWYCH Wkład UE netto
€ 60 000,00
 Polska

POLITECHNIKA WARSZAWSKA Wkład UE netto
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€ 130 920,00
 Polska

UNIwersytet Jagiellonski Wkład UE netto
€ 30 000,00
 Polska

Informacje na temat projektu

STRONG-2020

Identyfikator umowy o grant: 824093

DOI
10.3030/824093

Data rozpoczęcia
1 Czerwca 2019

Data zakończenia
30 Listopada 2023

Finansowanie w ramach
EXCELLENT SCIENCE - Research Infrastructures

Koszt całkowity
€ 10 000 000

Wkład UE
€ 10 000 000



<https://doi.org/10.3030/824093>

PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs

Publikacje

Peer reviewed articles (222)

PANDA collaboration [↗](#)

Autorzy: Gianni Barucca; Fabrizio Daví; Giovanni Lancioni; Paolo Mengucci; L. Montalto; Nicola Paone; Lorenzo Scalise; B. Krusche; Zhengtai Liu; X. Y. Shen; G. Zhao; S. Bökelmann; S. Coen; T. Holtmann; M. Kümmel; M. Küßner; L. Linzen; C. Schnier; H. Denizli; N. Er; S. Yerlikaya; Ali Yilmaz; V. Chauhan; J. Müllers; B. Salisbury; Ch. Schmidt; M. Urban; Grzegorz Filo; Edward Lisowski; M. Michałek; J. P

Opublikowane w: The European physical journal / A 57(6), 184 (2021). doi:10.1140/epja/s10050-021-00475-y, 18, 2021, ISSN 1434-6001

Wydawca: Springer Verlag

DOI: 10.15120/gsi-2021-01050

Unveiling the $K_{1(1270)}$ double-pole structure in the $\bar{B} \rightarrow J/\psi \rho \bar{K}$ and $\bar{B} \rightarrow J/\psi \bar{K}^* \pi$ decays [↗](#)

Autorzy: Dias, J. M.; Toledo, G.; Roca, L.; Oset, E.

Opublikowane w: PHYSICAL REVIEW D, 11, 2021, ISSN 1550-7998

Wydawca: American Physical Society

DOI: 10.1103/physrevd.103.116019

Data-driven study of timelike Compton scattering [↗](#)

Autorzy: O. Grocholski, H. Moutarde, B. Pire, P. Sznajder, J. Wagner

Opublikowane w: The European Physical Journal C, 80/2, 2020, ISSN 1434-6044

Wydawca: Springer Verlag

DOI: 10.1140/epjc/s10052-020-7700-9

Szukaj

ZALOGUJ SIĘ

tal

ktu

grant: 824093

Data zakończenia
30 Listopada 2023

Research Infrastructures



<https://doi.org/10.3030/824093>

PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs

← Tweet

 **Pablo de Castro**
@pcastromartin

first ever @EU_H2020 #DOI-based #grantID in funding acknowledgements for a @FiberEUse project paper at @UniStrathclyde - "Enhancing circularity in the car sharing industry" by Nikoletta Trivyza @strath_msrc, doi.org/10.1016/j.spc....

@EUPublications #PIDs @CrossrefOrg @g3om4c

Acknowledgments

The research leading to these results received funding from European Union's Horizon 2020 research and innovation programme, FiberEUse (<https://doi.org/10.3030/730323>), under grant agreement No 730323.

10:26 AM · Jun 16, 2022

PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs

← Tweet

● The recommendations

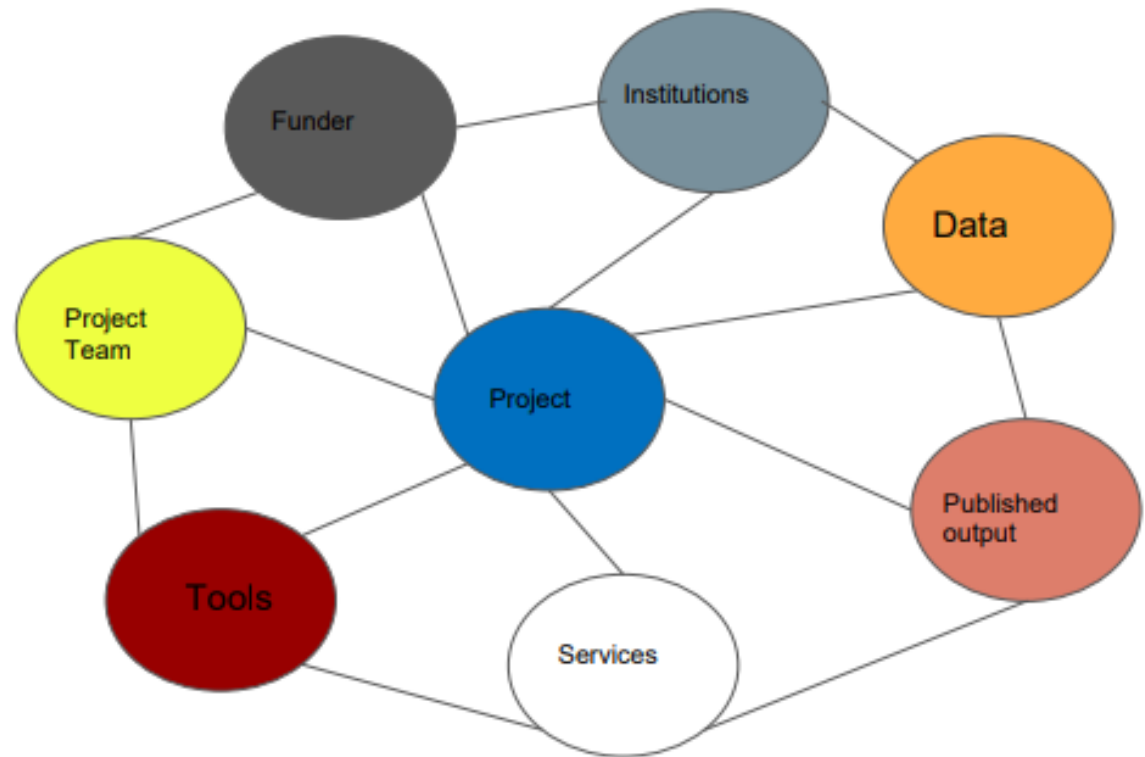
● Institutions (Research-Performing Organisations, RPOs)

1. **Make sure you are represented in** – or at least informed about – national-level coordination initiatives.
2. Consider the possibility of drafting an **institutional PID policy**.
3. **Raise awareness** of the existing and emerging PID landscape among institutional researchers, including prompting them to use the appropriate ones.
4. **Be aware of your key role in the implementation of specific, admin-oriented PIDs.**
5. **Include as many PIDs as possible** in your research information management systems such as institutional repositories and CRIS systems (plus any other institutional system that feeds these).
6. **Be aware of technical PIDs** directly emerging from researcher communities in a bottom-up fashion.
7. **Stay informed about (still to come) mechanisms to issue (and share and use) institutional PIDs** such as RAiDs or PIDINSTs.

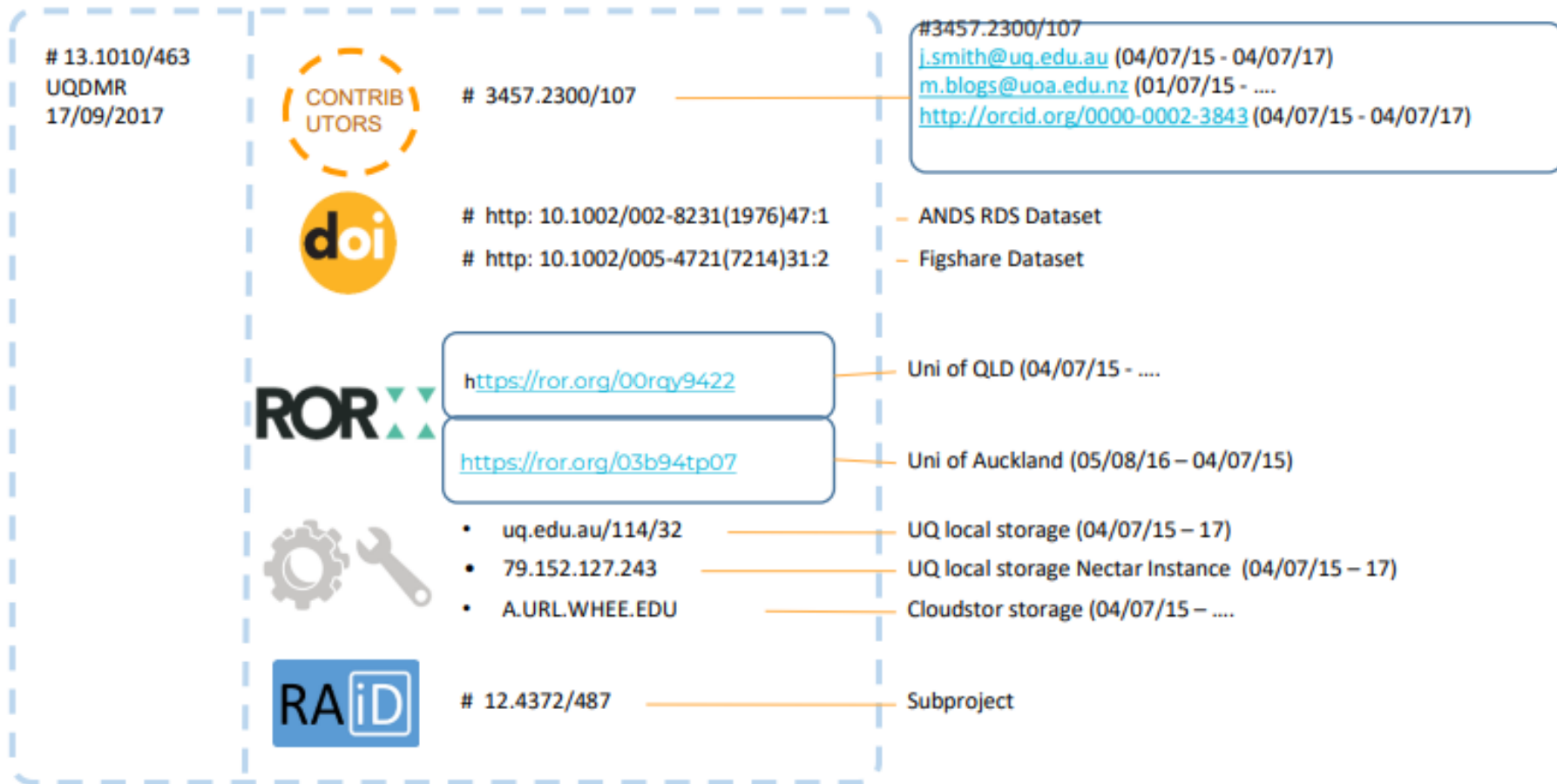
PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs

Project Centred Model

- **Project has Persistent ID**
- **Entities recorded in Metadata**
- **Research actions reflected in project timeline**
- **Related PIDs recorded in metadata**



PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs



PIDs for grants and projects: Crossref DOI-based grantIDs and RAiDs



RAiD
EOSC Research Activity Identifier Service

The EOSC RAiD will mint PIDs for research projects, which will allow authorised EOSC users and services to manage information about project-related participants, services, and outcomes. The EOSC RAiD will thereby collect the relationships between research objects, which enriches analysis, tracking, and reporting (including EOSC service utilisation), and indirectly supports reproducibility and extends the ability to discover research entities in the EOSC RDGraph/PIDgraph.

Fundamental data

Additional data

Record ID

SUM8a2de7eec4344847b06feec2d6c913df

Status Record

Verified

Registration number

FNB-801-00019/20

Name in Polish

REFRAKTOMETR KIERUNKOWY 410-Solar

Keywords in Polish

W OPISIE

Acquisition date

21-01-2020

Purpose of infrastructure use

Scientific

Specification in Polish

Wyposażenie:

1. Moduł sterujący s/n PHA0030-8

2. Głowica reflektometru s/n PFA0039-5

Amortization

Not applicable

Condition

Ok



Unia Europejska



Researchers

You are here: Start > Rese

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REFRAKTOMETR

Sławomir Wilczyński

Description

nie uzupełniono

Fundamental data

Add

PIDs for instruments and facilities



RRID Portal

ABOUT ▾

Resource Summary Report

🔍 New Search

Home / Resource Reports / Tools / [Resource Summary Report](#)



Usage and Citation Metrics ? !

We found 2 mentions in open access literature.

[View full usage report](#)

Most recent articles:

Kuszynski DS, et al. (2021) Clopidogrel treatment inhibits P2Y-Mediated constriction in the rabbit middle cerebral artery. *European journal of pharmacology*, 174545. (PMID:34606835)

Heathcote HR, et al. (2019) Endothelial TRPV4 channels modulate vascular tone by Ca-induced Carelease at inositol 1,4,5-trisphosphate receptors. *British journal of pharmacology*, 176(17), 3297-3317. (PMID:31177523)

Check [Google Scholar](#) for all resource mentions.



Collaborator Network ?

A list of researchers who have used the resource and an author search tool

Find mentions based on location



City

Search

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Ratings and Alerts ?

No rating or validation information has been found for VasoTracker.

No alerts have been found for VasoTracker.

Report Information ?



Data and Source Information ?

Source: [SciCrunch Registry](#)

PIDs for instruments and facilities: a possible way forward

www.ppm.edu.pl

Registering DOIs with DataCite

- Need to register DOIs for the PPM documents without DOIs.
- Joint decision of PPM project partners that we will register DOIs with DataCite.

PPM entered into a contract for registering DOIs with DataCite through Poznan Supercomputing and Networking Center, a DataCite member.

- 6 PPM institutions decided to register DOIs for their documents:
 - ❑ 1,500 documents until the end of 2021
 - ❑ PhD dissertations, books, book chapters, research data
 - ❑ DOIs are registered for the document records on the central platform



- Next step – making the DataCite DOIs visible in PPM.



The 9th Seminar of University Knowledge Bases

online 22–24 March 2023

24/03/2023

Thanks!

Questions?



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<http://orcid.org/0000-0001-6300-1033>