euroCRIS
Current Research Information Systems
The International Organisation for Research Information
CERIF

FORCE11
The Future of Research Communications and e-Scholarship

FSCI 2024

V03: Research Information Management and Expertise Systems: Implementation, Administration, Staffing, and Utilization

25/07/2024

Research Information Management Systems: an Overview from Europe

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What CRIS/RIMS are – Current Research Information Systems

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]

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.

https://en.wikipedia.org/wiki/Current_research_information_system

What CRIS/RIMS are *for*

Current research information system

4 languages

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From Wikipedia, the free encyclopedia

Research assessment [edit]

As mentioned in the "Practices and Patterns" report, research assessment is one of the key drivers for the implementations of CRIS systems, especially at research-performing organisations. This is due to the need for all institutional research outputs to be collected and described in a standardised way in a single institutional system that is also able to gather information on impact indicators. A particularly important example of this connection is the UK Research Excellence Framework (REF), whose 2014 edition resulted in a widespread adoption of commercial CRIS systems by UK institutions.[13]

Research administration [edit]

As a one-stop-shop for storing all the information related to the institutional research activity, CRIS systems play a key role in the area of research administration by institutional Research Offices. Among many others, this involves aspects such as:

- Research impact and its analysis
- Research collaborations across institutions and with Industry
- Preparation of project proposals and subsequent management of awarded grants
- Knowledge Exchange

Open Science implementation [edit]

Where available, CRIS systems are often key components in the Open Science implementation strategy at research-performing organisations[14] due to their systematic use for collecting information on all research outputs produced at institutions.

Business intelligence [edit]

Their comprehensive aggregation of contextual research information makes CRISs very suitable tools for extracting business intelligence indicators for decision-making purposes at institutions and beyond. Emerging areas of work like the Knowledge Exchange Framework (KEF) in the UK[15] provide further practical applications for these systems.

https://en.wikipedia.org/wiki/Current_research_information_system

CERIF: Common European Research Information Format

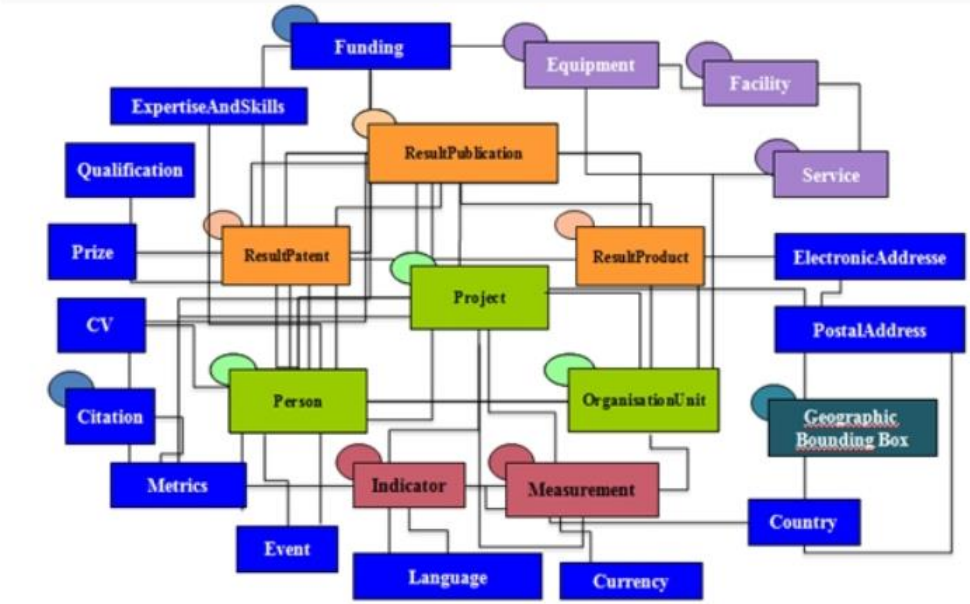
euroCRIS
Current Research Information Systems

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)



https://www.eurocris.org/cerif/main-features-cerif

CERIF: Common European Research Information Format

CERIF: Common European Research Information Format

CRIS2024 conference programme

Pre-Conference | May 14th | Day 1 | May 15th | Day 2 | May 16th | Day 3 | May 17th | Virtual Sessions

10:30-12:30

Parallel sessions

Session 5.1: Artificial Intelligence

Location: Kuppelsaal

Session chair: Hanna-Mari Puuska (euroCRIS)

- Thomas Gurney: *The Good, the Bad and the AI: the New Frontier of Research Management*
- Simone Hartmann and Daniel Niederlechner: *Leveraging AI for Current Research Information Systems: Opportunities and Challenges*
- Anna Guillaumet and Aurelia Andrés Rodríguez: *The power of generative AI for CRIS systems: a new paradigm for scientific information management*
- Otmane Azeroual, Joachim Schöpfel, Uta Störl and Ana Marušić: *Ethical aspects using AI in CRIS*

CERIF: Common European Research Information Format

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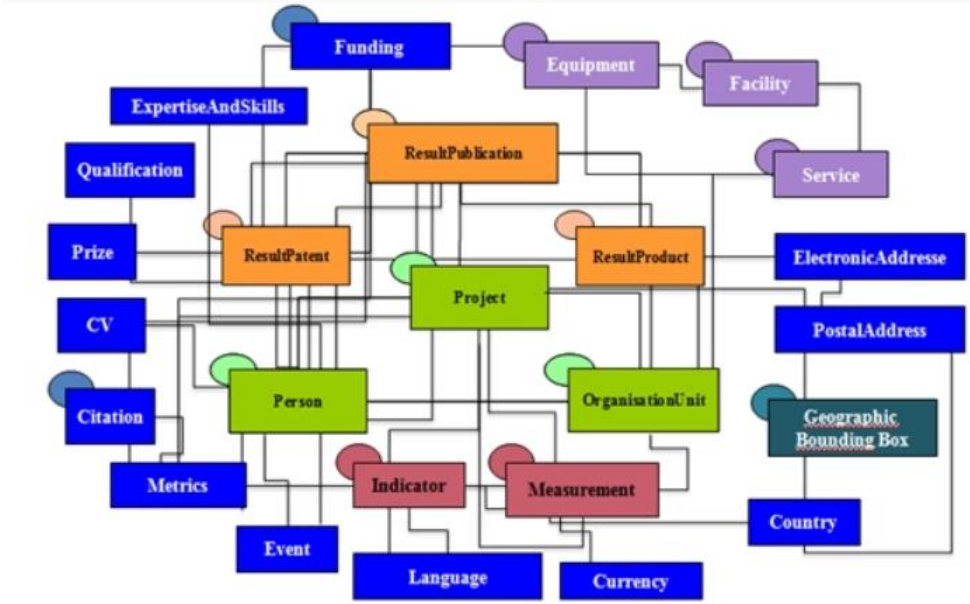

https://www.eurocris.org/cerif/main-features-cerif

Social interoperability

Medical Library Forum 2021;14(2):3-20
DOI: 10.34738/mlf.0056

Pablo de Castro

Roles and Competencies of CRIS Managers

Zadania i kompetencje menedżerów systemów CRIS

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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.

P De Castro (2021). Roles and Competencies of CRIS Managers. Medical Library Forum 2021;14(2):3-20. https://doi.org/10.34738/mlf.0056

Social interoperability

Medical Library Forum 2021;14(2):3-20
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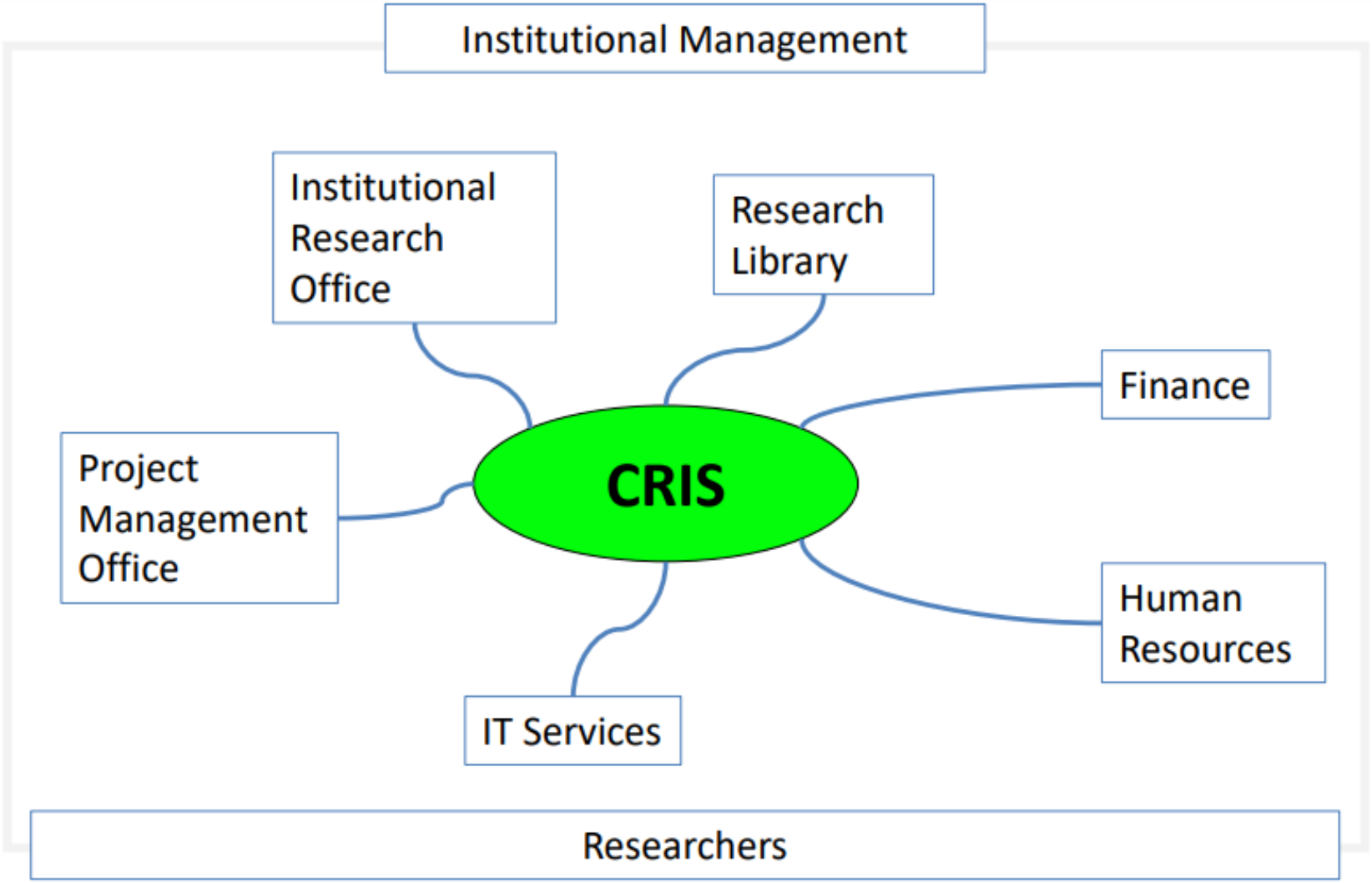
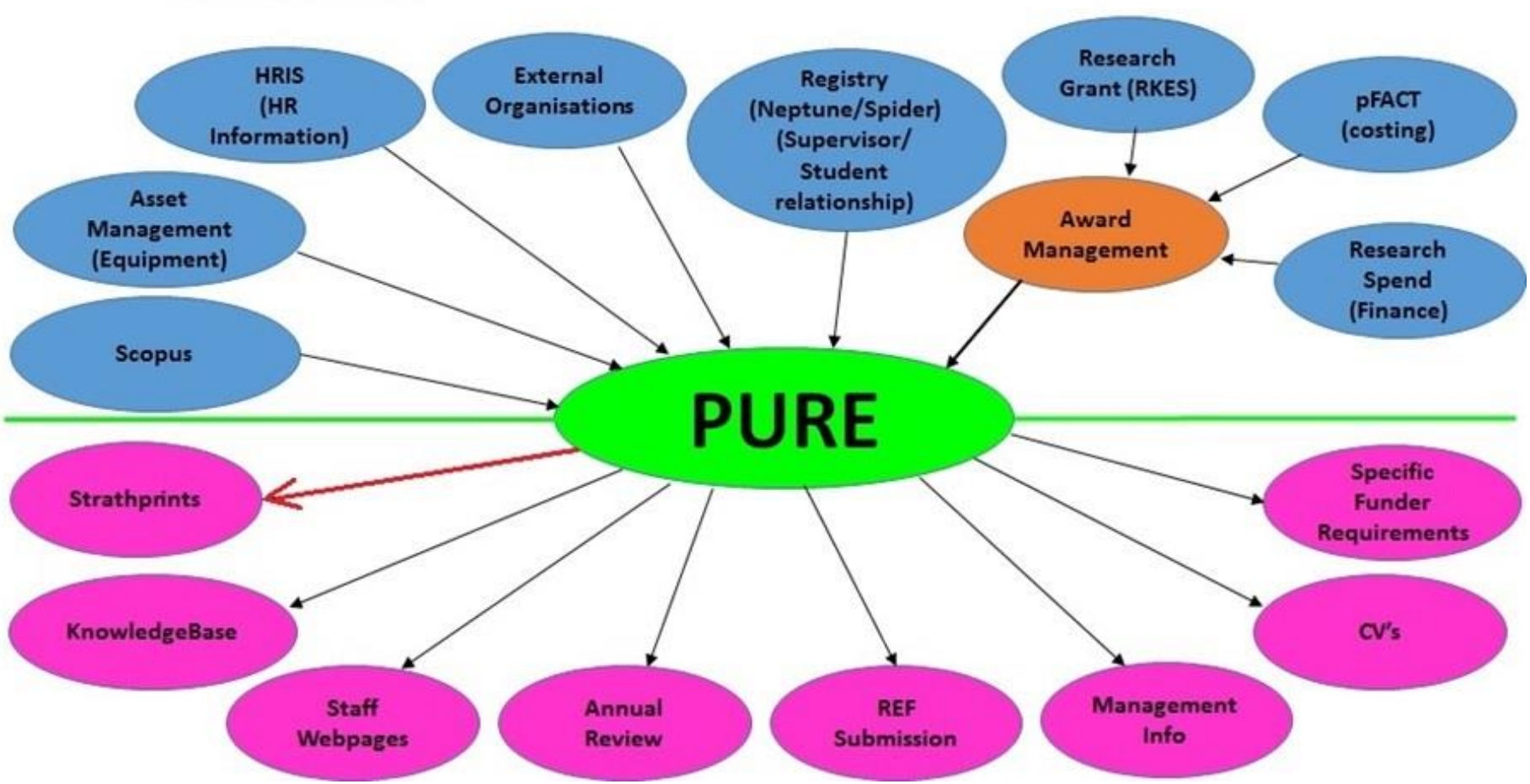
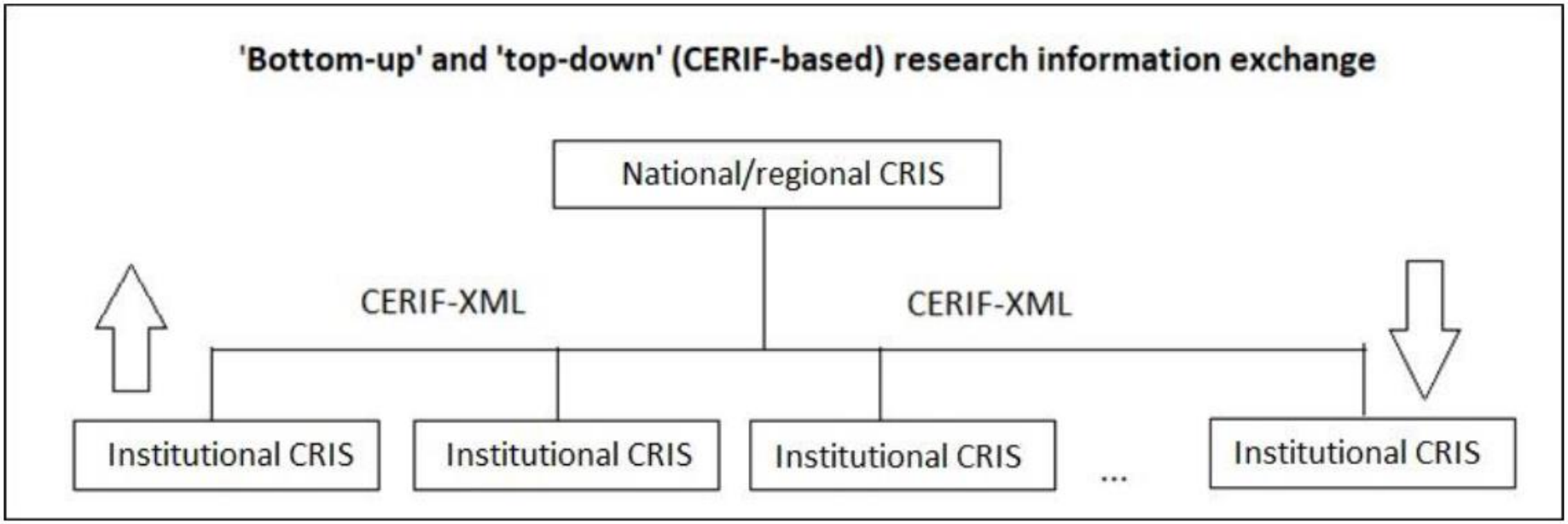


"Internal" Technical Interop: Institutional CRIS at U Strathclyde

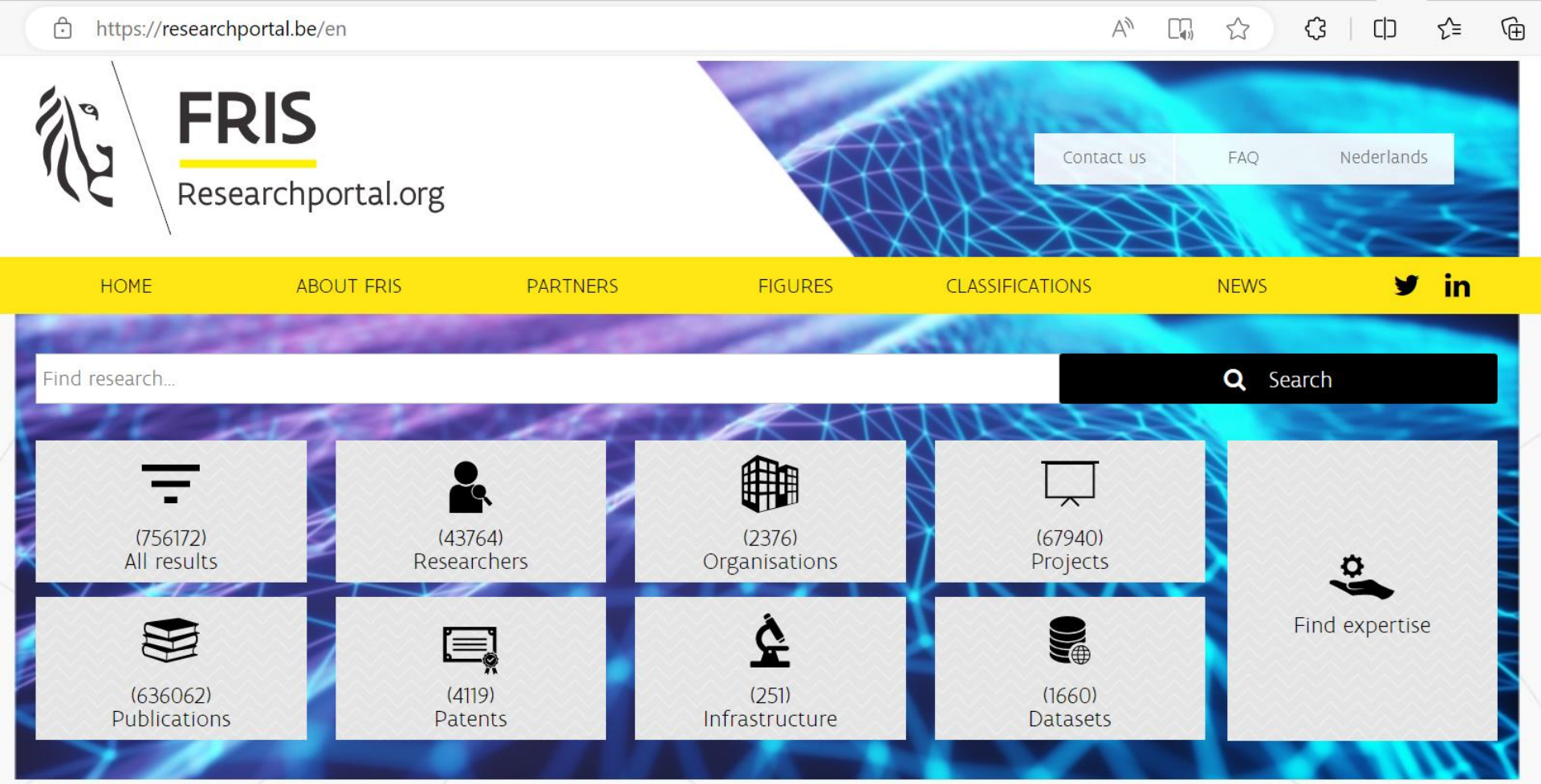


“External” Technical Interop: National & Regional CRIS



“External” Technical Interop: National & Regional CRIS

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



Socio-technical interoperability: the CRISCROS 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 CRISCROS WG

euro CRIS
THE INTERNATIONAL ORGANISATION FOR RESEARCH INFORMATION

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1

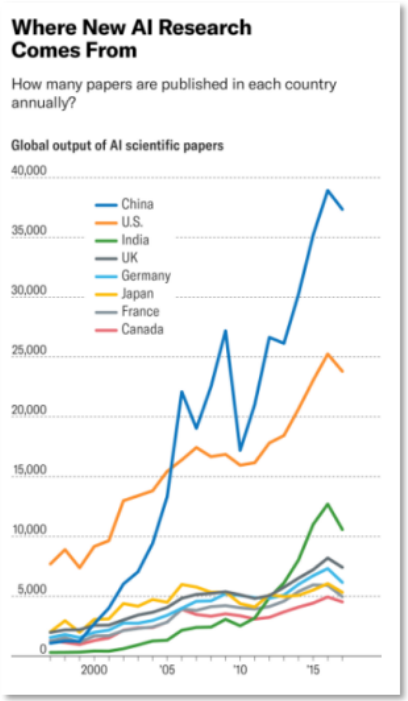
CRISCROS – A working group to bring together national and regional CRIS initiatives

There's been frequent presentations for national and regional CRIS in past euroCRIS membership meetings and CRIS conferences – see for instance SK CRIS, CRIStin, the Finnish Research Hub, POL-on and FRIS – but there was no initiative thus far to bring together all these projects in order to share best practices and try to learn from each other. This is a particularly valuable conversation given that plenty of the workflows for running these systems are in fact common even if each platform tends to design and implement them on its own.

This changed when the Austrian RIS Synergy project to explore the feasibility of developing a national research portal in the country sent a proposal for a half-day workshop to the CRIS2022 Conference in Dubronik called "The do's and dont's of building a sustainable portal". As explained in the Nov 2022 blog post announcing the launch of what would eventually become the CRISCROS Working Group, the round table discussion held in Dubrovnik laid the foundations for a regular collaboration and discussion forum across national and regional CRIS initiatives.

A 3rd Layer of Technical Interop: Supranational

How much does the EU invest in AI research?



FUNDING AND INVESTMENTS! AI INVESTMENTS BY TOP 10 COUNTRIES

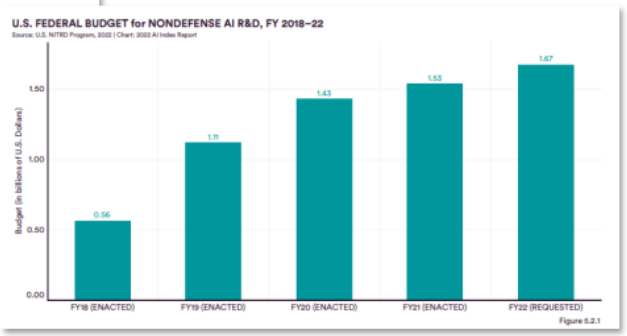
ARTIFICIAL INTELLIGENCE LATEST NEWS
by Analytics Insight / May 3, 2022

Australia must invest to secure a place in the AI race

2022 | Misha Schubert

Is China Emerging as the Global Leader in AI?
by Daitian Li, Tony W. Tong, and Yangao Xiao

February 18, 2021



Selected headlines on AI research.
Sources: Analytics Insight, ASPI, HBR, The AI Index 2022 Report

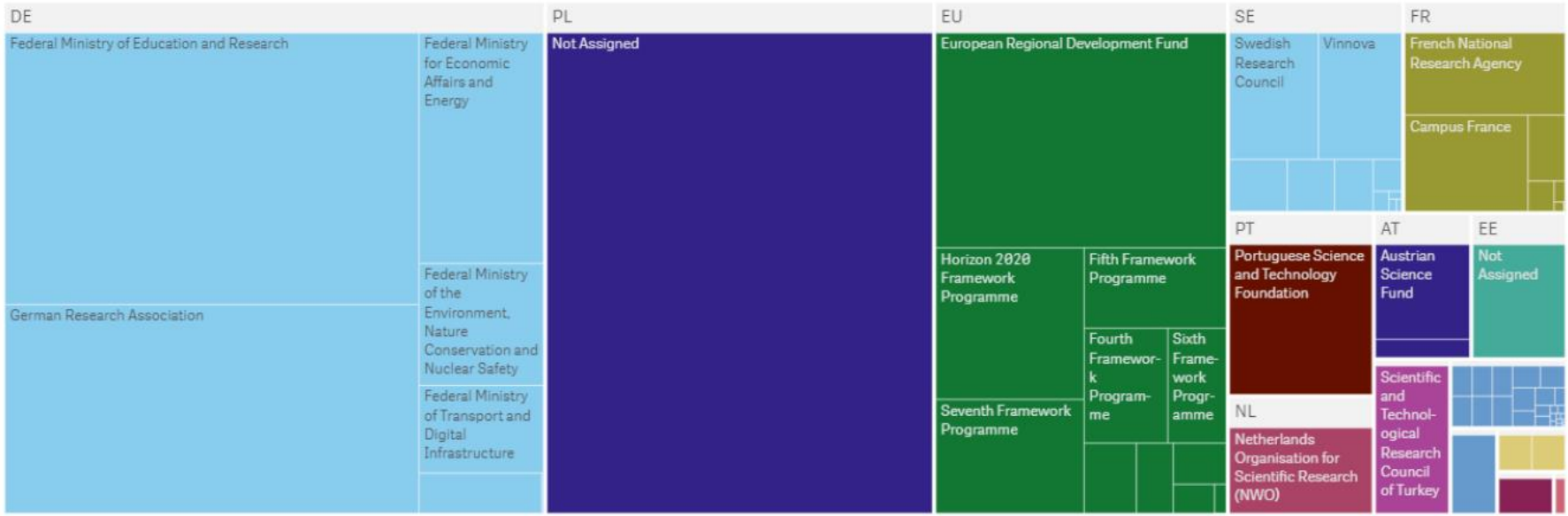
European Commission

Paul Schlag (2022). The Data4RI Policy Initiative and the do's of National Research Portals.
CRIS2022 Conference Dubrovnik, http://hdl.handle.net/11366/2022

A 3rd Layer of Technical Interop: Supranational

The European R&I funding landscape is quite fragmented

Number of research projects in D4RI by funder



* The data set contains negative or zero values that cannot be shown in this chart.

Sources: Data4RI

A 3rd Layer of Technical Interop: Supranational

D4RI: Where do we stand?

Key metrics

31 sources[1)]
... from 21 countries

5.3 million projects
... of 200+ funders

400,000 organisations

750,000 researchers

11 million outputs

Overview of sources

Albania
- E-CRIS

Austria
- FFG
- FWF

Bulgaria
- BulCRIS

Bosnia-Herzegovina
- E-CRIS.BH
- E-CRIS.RS

Switzerland
- ARAMIS
- P3

Czech Republic
- IsVaVAI

Germany
- FoKat
- GEPRIS

Estonia
- ETIS

Spain
- FECYT

EU
- Cordis
- Kohesio

Finland
- ResearchFI

France
- scanR

Croatia
- HRZZ

Hungary
- NFKI
- NRDI

Latvia
- ScienceLatvia

North Makedonia
- E-CRIS

Norway
- CRISTIN

Poland
- RADON

Serbia
- E-CRIS

Sweden
- SWECRIS

Slovenia
- SICRIS

United Kingdom
- UKRI-GTR

Kosovo
- E-CRIS

OpenAIRE

Re-searchAlps

Sources: D4RI Policy
1) Raw, non-unique data

Paul Schlag (2022). The Data4RI Policy Initiative and the do's of National Research Portals. CRIS2022 Conference Dubrovnik, http://hdl.handle.net/11366/2022

European Commission

Directory of Research Information Systems (DRIS)

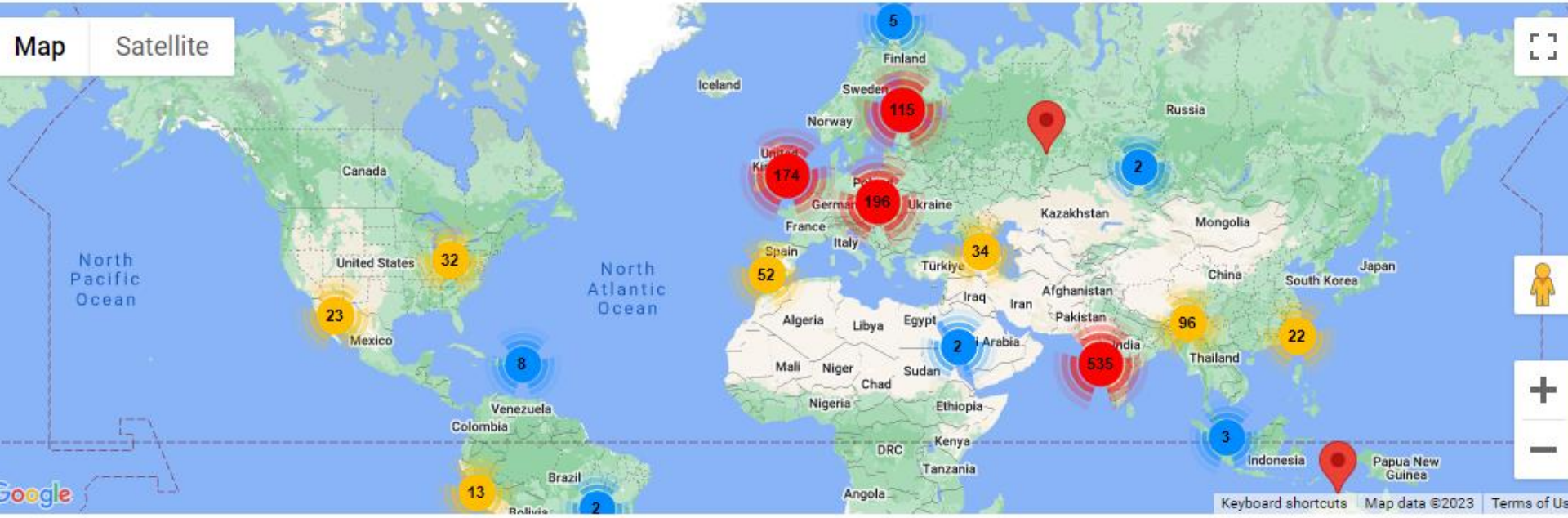
EuroCRIS

Search the DRIS

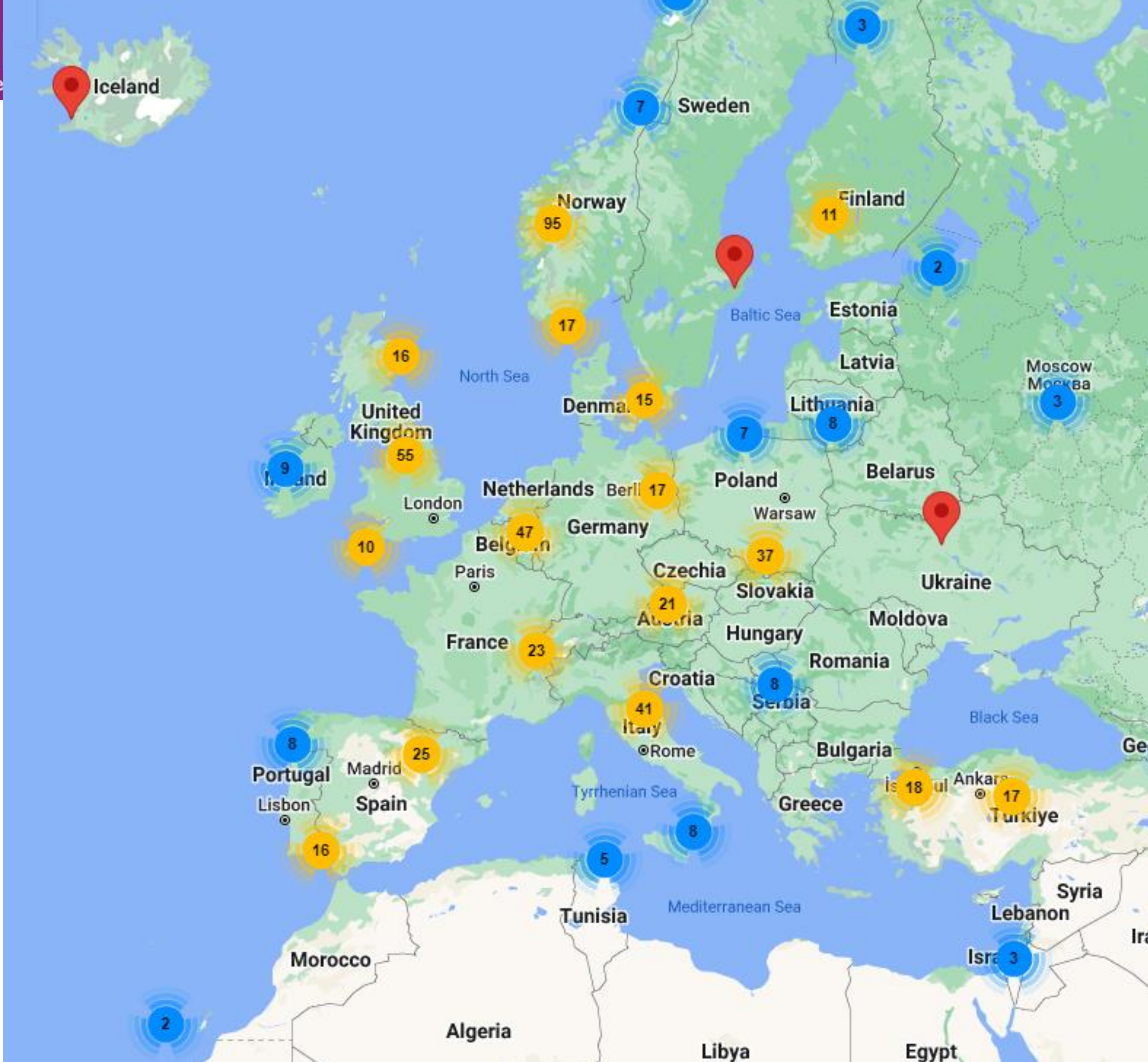
for [ ] Go | Start a new search

› Add Filters

Results 1-10 of 1430 (Search time: 0.001 seconds).



https://dspacecris.eurocris.org/cris/explore/dris



Iceland
Sweden
Norway
Finland
Baltic Sea
Estonia
Latvia
North Sea
Moscow
United Kingdom
Poland
Belarus
Netherlands
Warsaw
Germany
London
Paris
Czechia
Slovakia
Ukraine
Moldova
Hungary
France
Romania
Croatia
Black Sea
Rome
Bulgaria
Portugal
Madrid
Spain
Lisbon
Tyrrhenian Sea
Greece
Tunisia
Mediterranean Sea
Syria
Lebanon
Morocco
Algeria
Libya
Egypt

xplore/dris

(Non-Comprehensive) DRIS Snapshot for US Systems

Search the DRIS

for driscountry:(United States) Go Start a new search

Add Filters

Results 11-20 of 60 (Search time: 0.005 seconds).
Results/Page 10 | **Sorted by** Relevance

previous 1 2 3 4 5 ... 6 next

DRIS Entries

Acronym	Name	Scope	Organisation
	Experts@Syracuse	*Institutional*	Syracuse University
	Pure University of Arizona	*Institutional*	University of Arizona
	Illinois Experts	*Institutional*	University of Illinois Urbana-Champagne
	Pure UMiami	*Institutional*	University of Miami
	Research Nebraska	*Institutional*	University of Nebraska
	Pure MD Anderson Cancer Center	*Institutional*	The University of Texas MD Anderson Cancer Center

Discover

By type

DRIS	60

Country

United States	60

Software

Pure	36
Esploro	14
Symplectic Elements	6
VIVO	4

Status

Operational	60

https://dspacecris.eurocris.org/cris/explore/dris

Software solutions: a comment

"It's the workflows and the use cases, not so much the software"

Discover

Country

India	630
Norway	132
United Kingdom	83
Italy	78
Spain	66
United States	60
Poland	51
Germany	40
Turkey	38
Peru	27

next >

Software

IRINS	629
Pure	199
CRIStin	131
In-house-built	81
IRIS	70
Omega-PSIR	48
DSpace-CRIS	45
Symplectic Elements	45
Dialnet CRIS	34
Avesis	32

next >

https://dspacecris.eurocris.org/cris/explore/dris

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Thanks!

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