

CRIS SYSTEMS (IN A NUTSHELL)

Paolo Manghi

Istituto di Scienza e Tecnologie dell'Informazione (CNR)

paolo.manghi@isti.cnr.it

What is a CRIS?

This is a reasonable 'starting point'...

A **current research information system** (CRIS) is a database or other **information system** to store and manage data about **research** conducted at an institution.

[Current research information system - Wikipedia, the free ...](https://en.wikipedia.org/wiki/Current_research_information_system)
en.wikipedia.org/wiki/Current_research_information_system

...But far too simplistic really.

CRIS: content scope

Very broad in coverage, servicing institutional research needs;

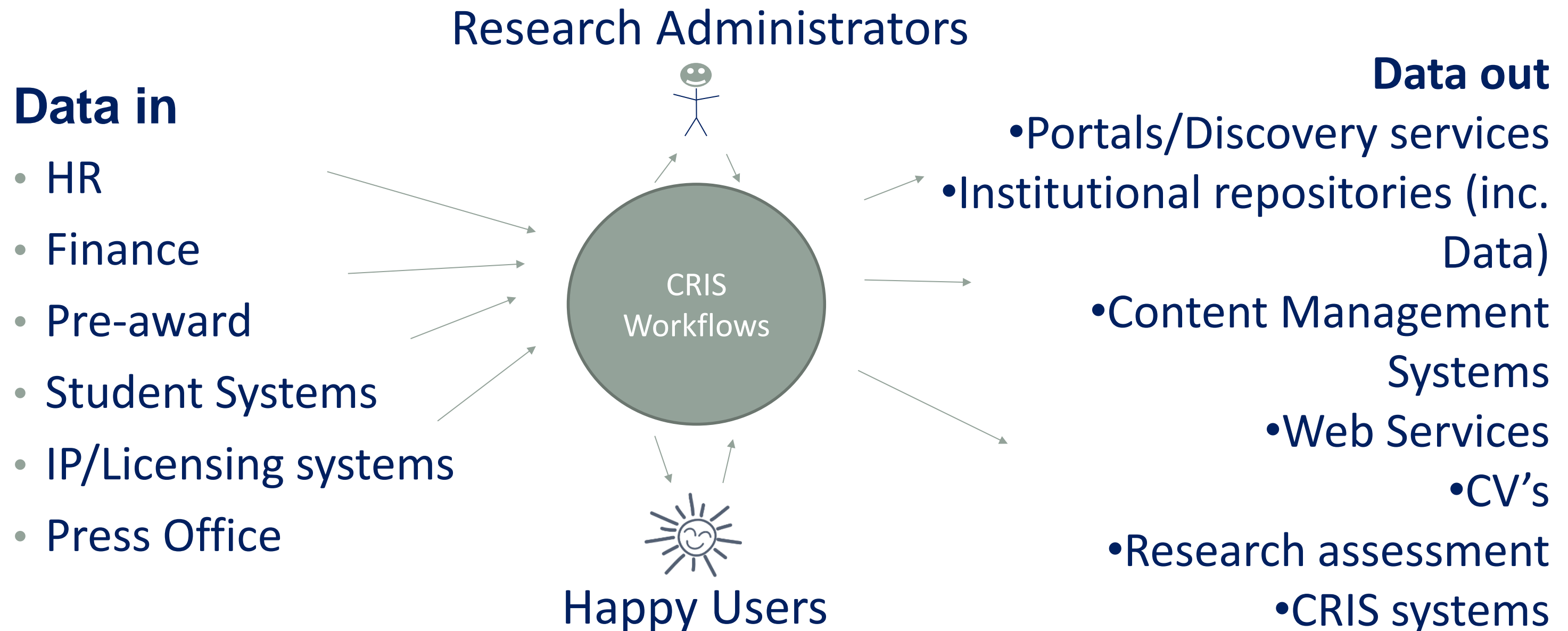
- Pre-award (funding discovery, applications management)
- Post-award (funding awarded, projects, management process)
- Research outcomes (i.e. publications, press, patents, impact, research data)
- Professional activities and accolades (i.e. invited presentations, peer/editorial review, prizes or awards)
- Research assessment and compliance
- Management information (KPI, metrics, bibliometrics)
- People (Academic attributes, profiles, CV's, supervisions)
- Student (i.e. workflows for thesis deposit)

CRIS: Beneficiaries

- **Researchers:** facilitate access to research output and associated software and facilities
- **Research managers and administrators:** measurement and analysis of research activity and easy access to comparative information
- **Research councils:** optimisation of the funding process
- **IT companies, media and general public:** easy retrieval of novel ideas and technology in a knowledge-assisted environment, easy identification of competitors and previously done similar research

Integrated architecture

Allows integration with corporate systems (such as HR and Finance) for data that is managed as the 'golden copy' elsewhere in the institution



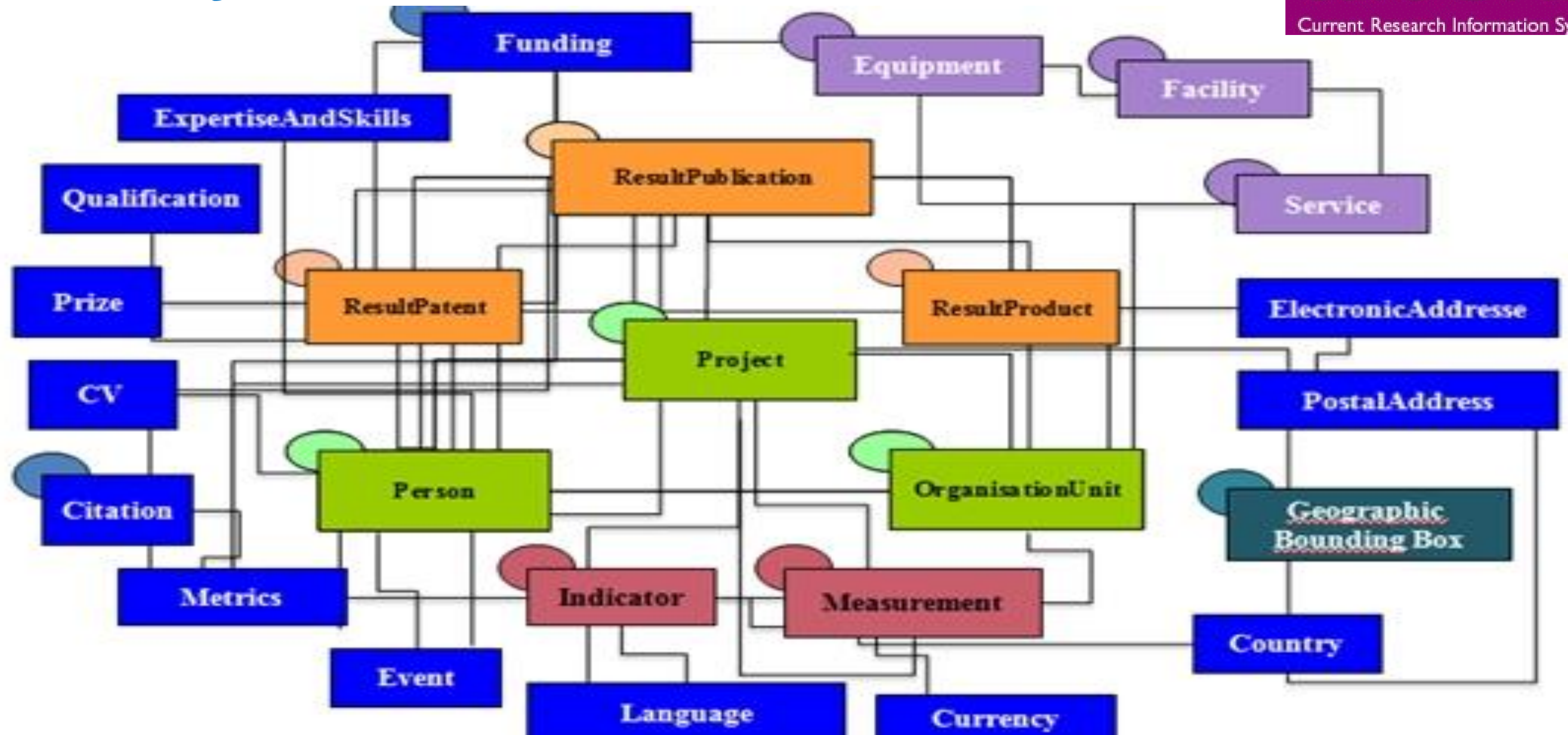
7. Standardisation and data quality

Content is consistent, well formed and subject to quality controls

- Content policies ie. Syntax for describing external organisations
- Taxonomies for content type (i.e. activities, impact evidence)
- Use of identifiers (i.e ORCID)
- Use of common data models (i.e. CERIF, VIVO) allow for benchmarking and data transfer



CERIF-euroCRIS: a standard data model for CRIS systems



CRIS “geography”

- Institutional CRIS
 - **THE question:** co-existence with or replacement of external repositories?
 - They can replace repository functionality, e.g. publication deposition, OAI-PMH
 - But distinct roles are involved: librarian and finance, research, resources administrators
- National CRIS
 - Integration of institutional CRIS or top-down organization
 - Alignment on international standards, author IDs, project IDs

CRIS Vendors

- Pure (Atira A/S)
- CONVERIS Research Information System (Avedas AG)
- SIGMA CRIS (Gestión Universitaria, A.I.E.)

The OpenAIRE infrastructure: an international CRIS system

Human Network



e-infrastructure



- NOADS: National Open Access Desks
- Monitor and foster the adoption of Open Access policies at the local level
- Support researchers at the implementation of the Data Pilot
- Gold OA: FP7 post grant APCs Pilot

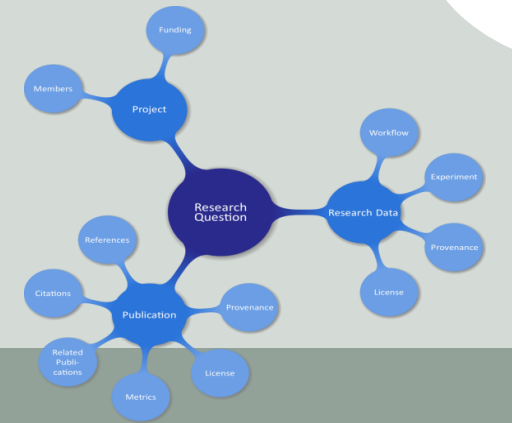
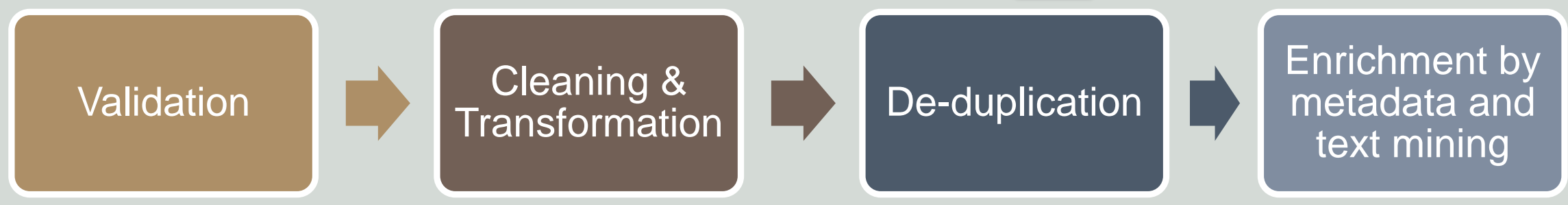
- e-infrastructure for monitoring impact of OA mandates and research projects
- OpenAIRE guidelines for metadata exchange
- Zenodo Repository for the deposition of research products

50 Partners: EC countries, data centers, universities, libraries, repositories

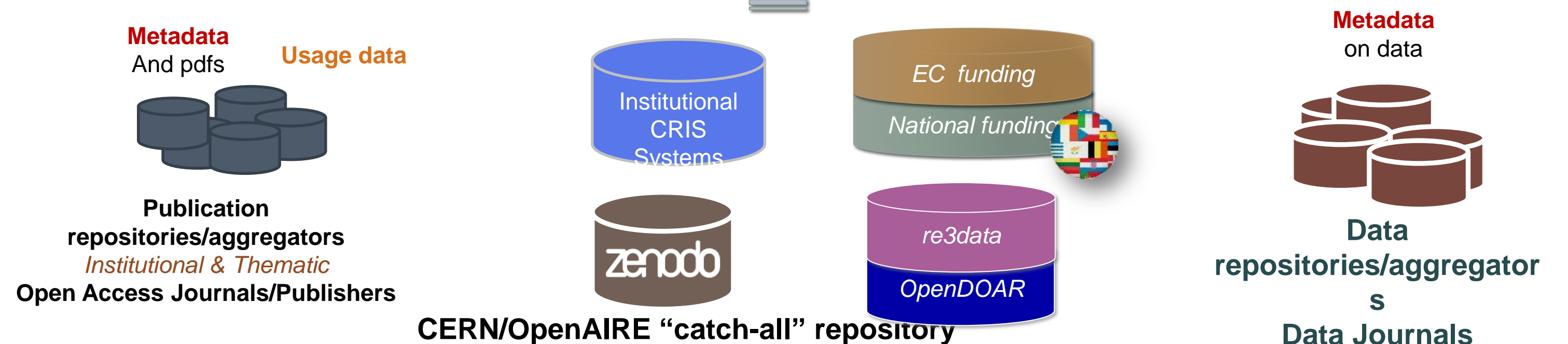


Guidelines for use services

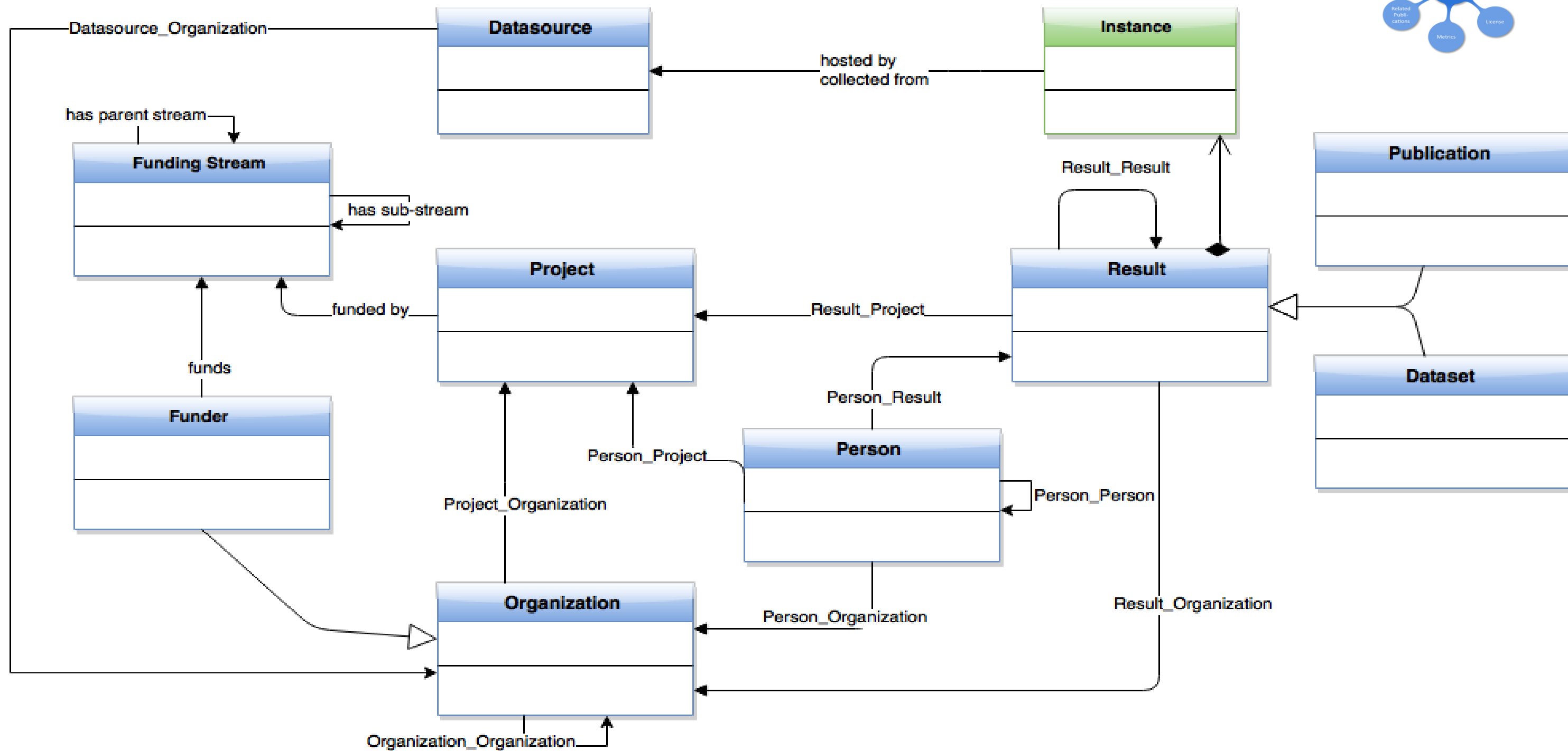
APIs: OAI-PMH, LOD, REST search



Guidelines for data interoperability



OpenAIRE data model: inspired by CERIF



Questions?