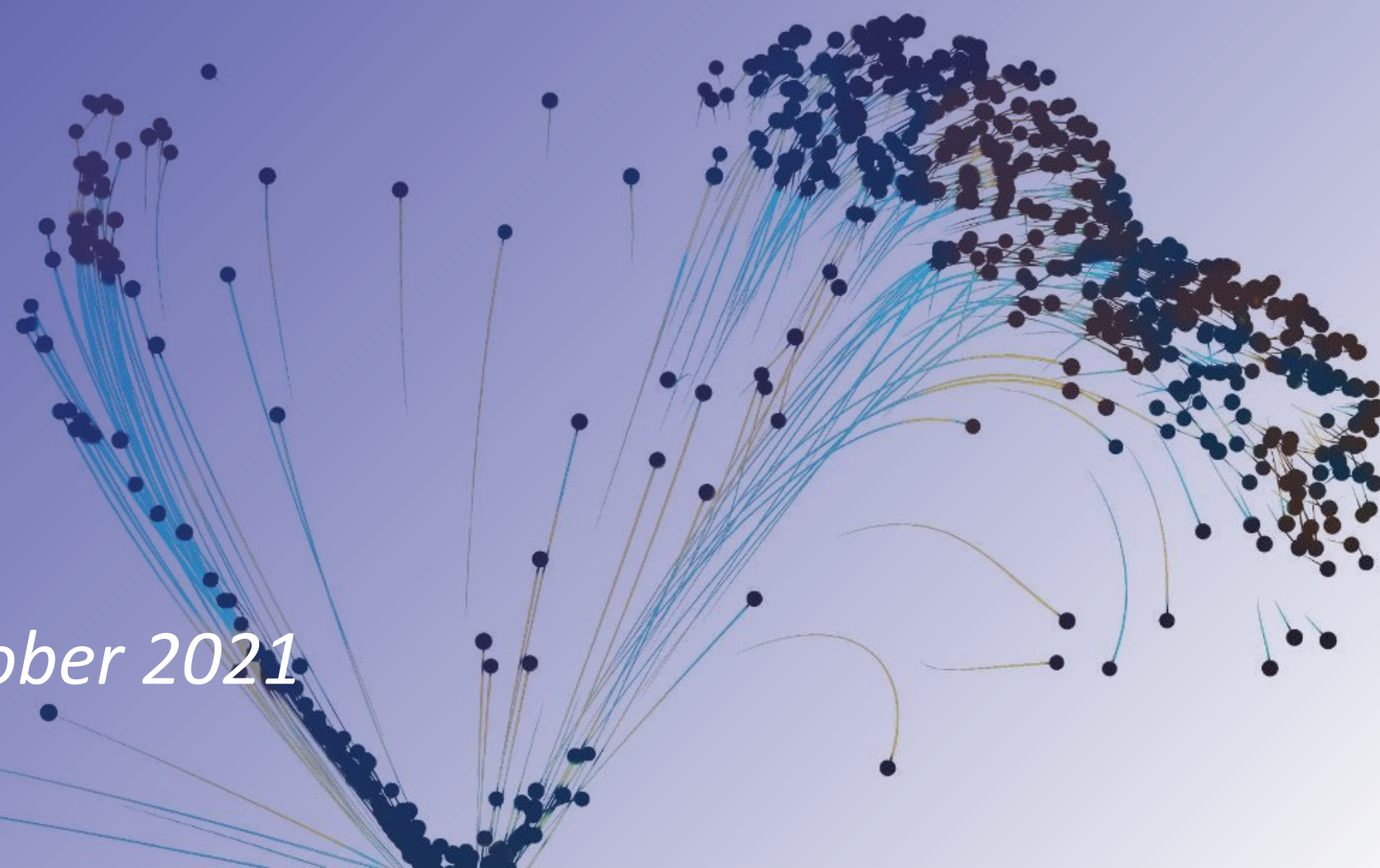# The Open Scholarly Communication Research Graph in the EOSC

Alessia Bardi, Andrea Mannocci
ISTI-CNR, Italy

"Open Science Days in Greece" 21st October 2021

OpenAIRE | NEXUS
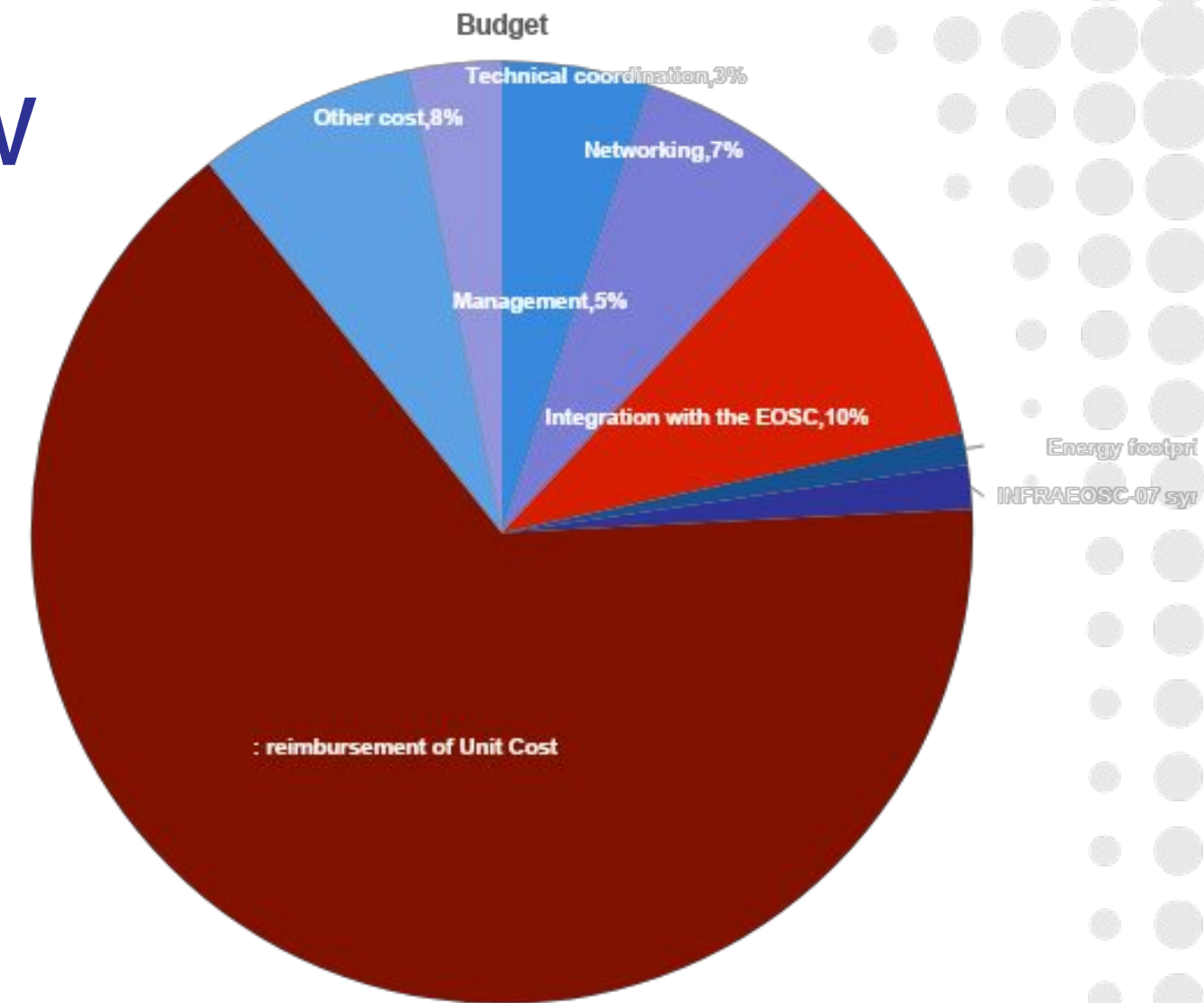
European Commission

🐦 **@openaire_eu**

OpenAIRE AMKE

- Non-profit legal entity

- Est. 2018 to ensure a permanent presence and structure for a European-wide national policy and open scholarly communication infrastructure.

- **Mission:** establish, maintain and operate an open and sustainable scholarly communication infrastructure and provide the necessary services, resources and network for supporting a common European open e-research and e-science environment.

- **https://www.openaire.eu/openaire-amke**

OpenAIRE NEXUS - Overview

- **Call:** H2020-INFRAEOSC-2020-2

- **Scheme:** RIA

- **Topic:** INFRAEOSC-07-2020
  Increasing the service offer of the EOSC Portal

- **Duration**: 30M

- **Budget**: €3,999,923

- **Coordinator**: OpenAIRE AMKE

- **11 Partners**: CNR, ARC, ICM, UNIBI, CNRS, CERN, UNIBO, CITE, UGOE, UMINHO, GRNET/ARC

Budget

Technical coordination,3%
Other cost,8%
Networking,7%
Management,5%
Integration with the EOSC,10%
Energy footpri
INFRAEOSC-07 syn
: reimbursement of Unit Cost

Project objectives

OBJECTIVE 1. Publishing in support of research-life cycle: DMPs, data anonymization, catch-all repository, overlay open access journals

OBJECTIVE 2. Tracking and monitoring the evolution and impact of (Open) Science across disciplines, for institutions, funders, RIs, clusters

OBJECTIVE 3. Supporting cross-discipline discovery of EOSC resources for research communities, ministries, funders, and any other relevant stakeholder/user
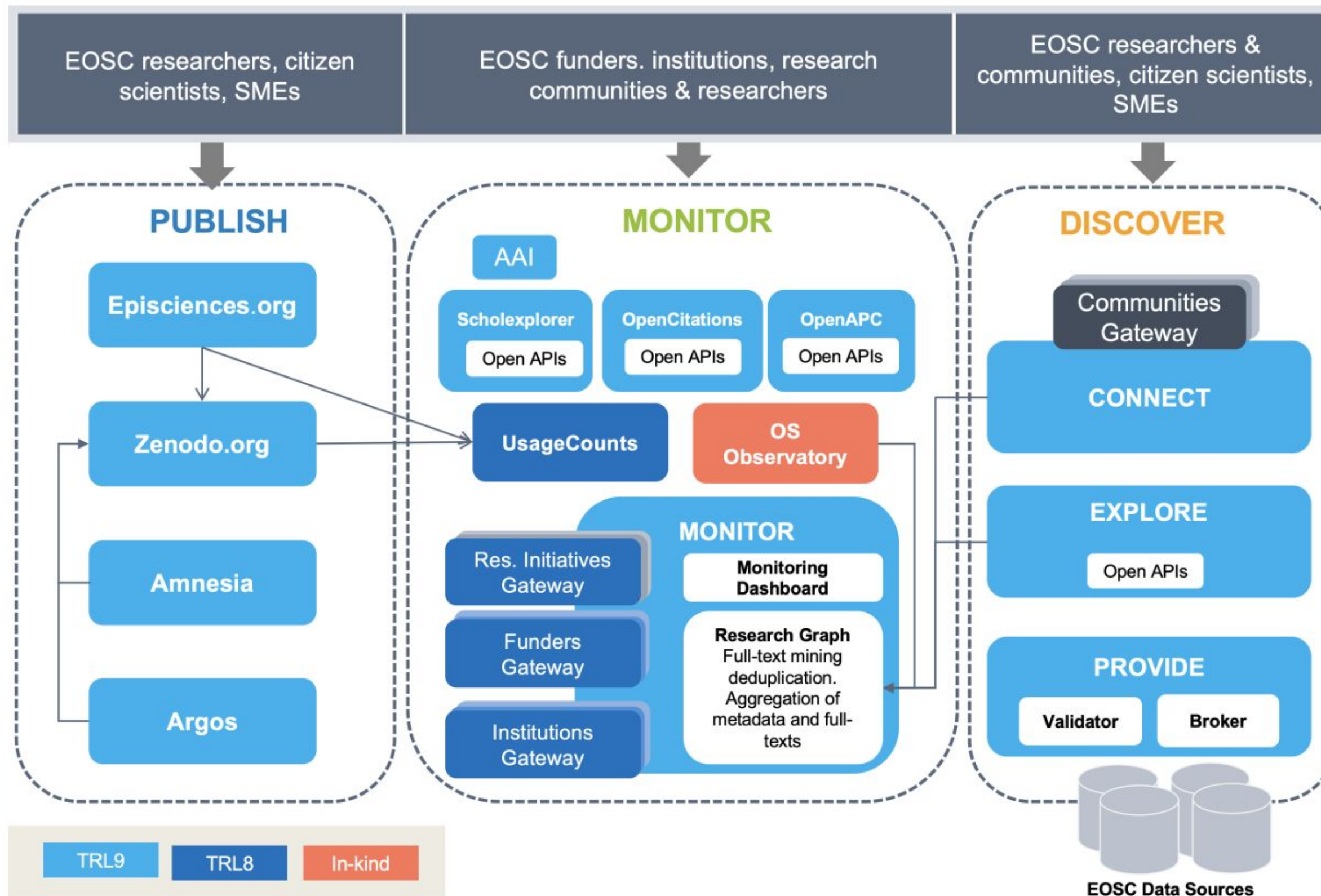
OBJECTIVE 4. Publishing commons: EOSC Interoperability Frameworks in support of publishing EOSC resources across communities via the EOSC-Core
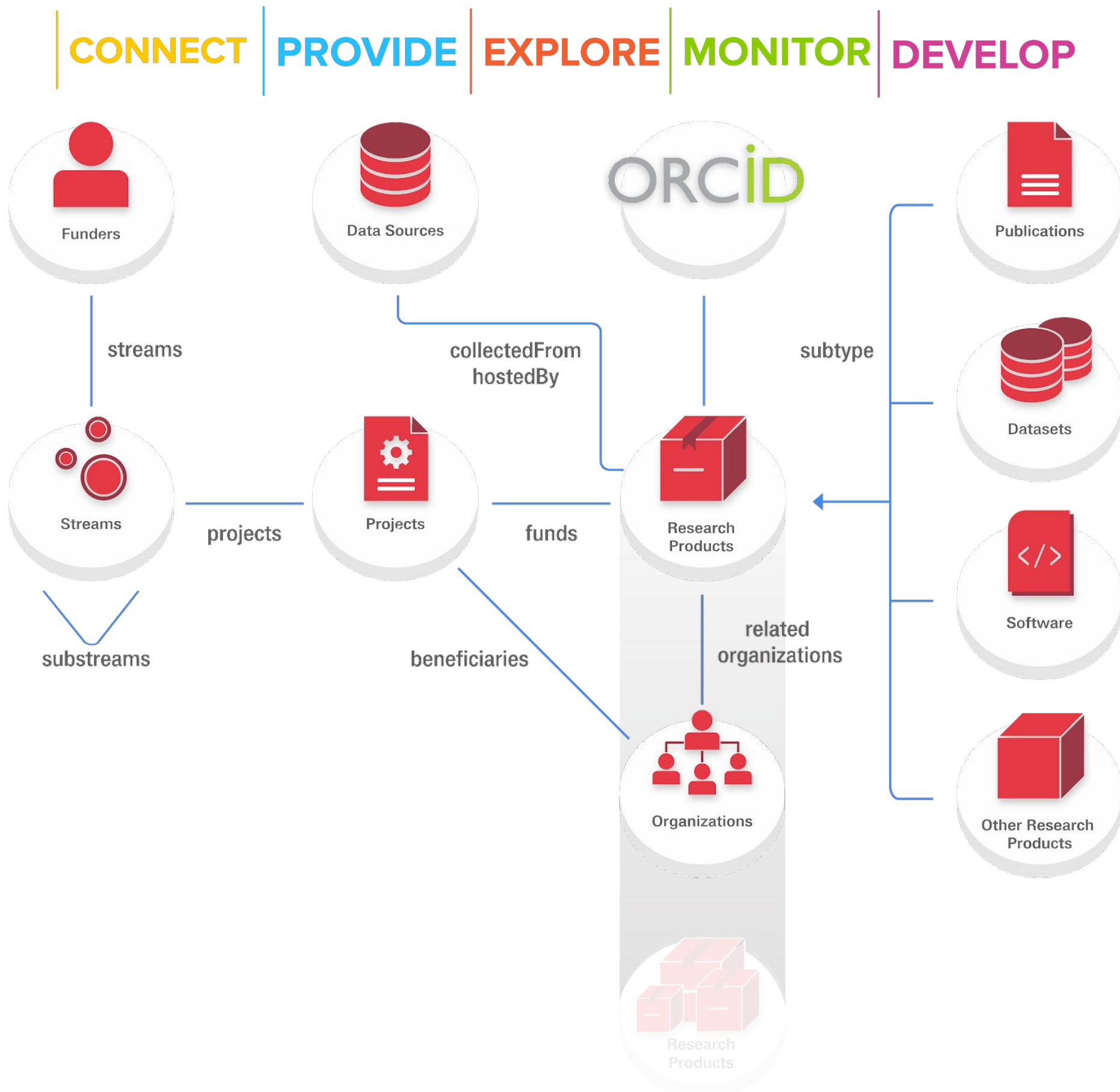
OBJECTIVE 5. Revenue models for Open Science services, Global Reach, Global Open Research Commons

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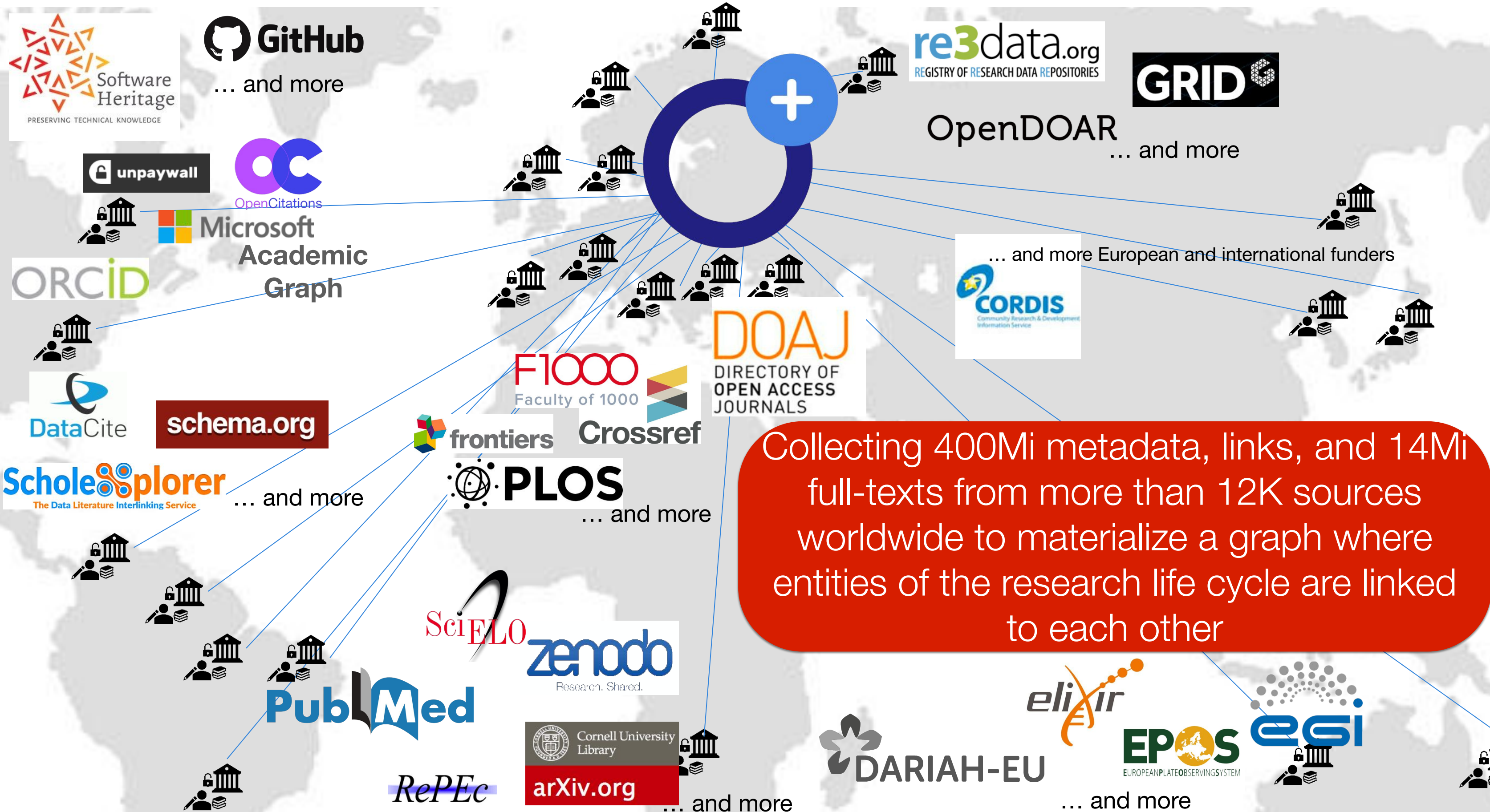
OpenAIRE-NEXUS Service Portfolio

An open metadata research graph of interlinked scientific products, with access right information, linked to funding information and research communities
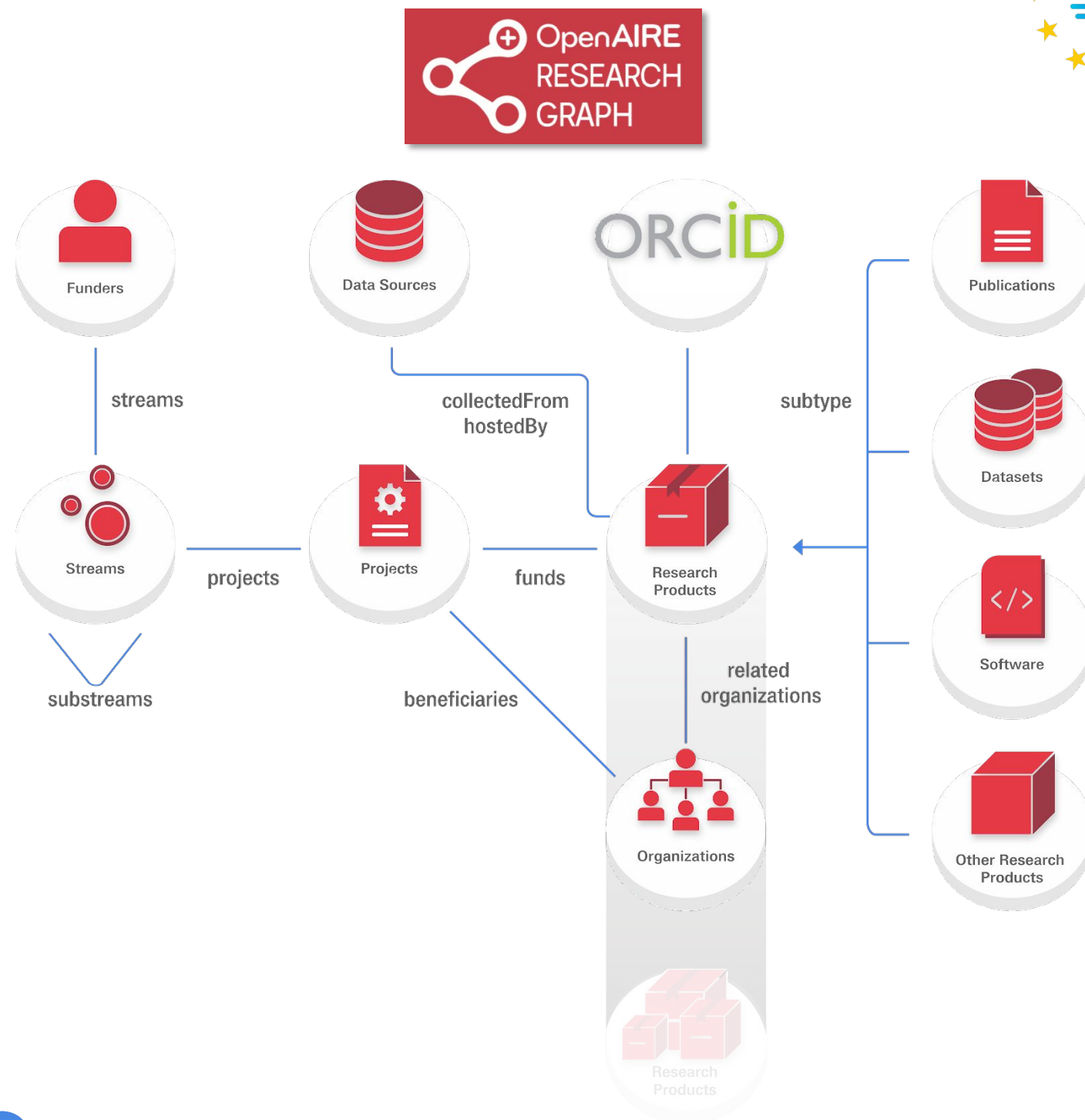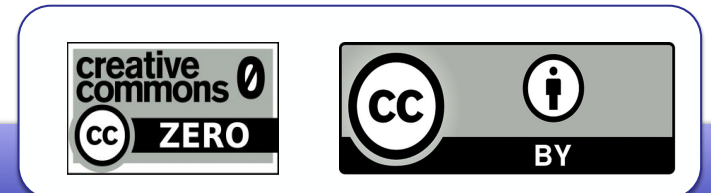
CONNECT | PROVIDE | EXPLORE | MONITOR | DEVELOP

Funders

Data Sources

ORCID

Publications

streams

collectedFrom
hostedBy

subtype

Streams

Projects

Research Products

Datasets

projects

funds

Software

substreams

beneficiaries

related organizations

Organizations

Other Research Products

Research Products

OpenAIRE

European Commission

Collecting 400Mi metadata, links, and 14Mi full-texts from more than 12K sources worldwide to materialize a graph where entities of the research life cycle are linked to each other

Core values

- Open
- Complete
- De-duplicated
- Transparent
- Participatory
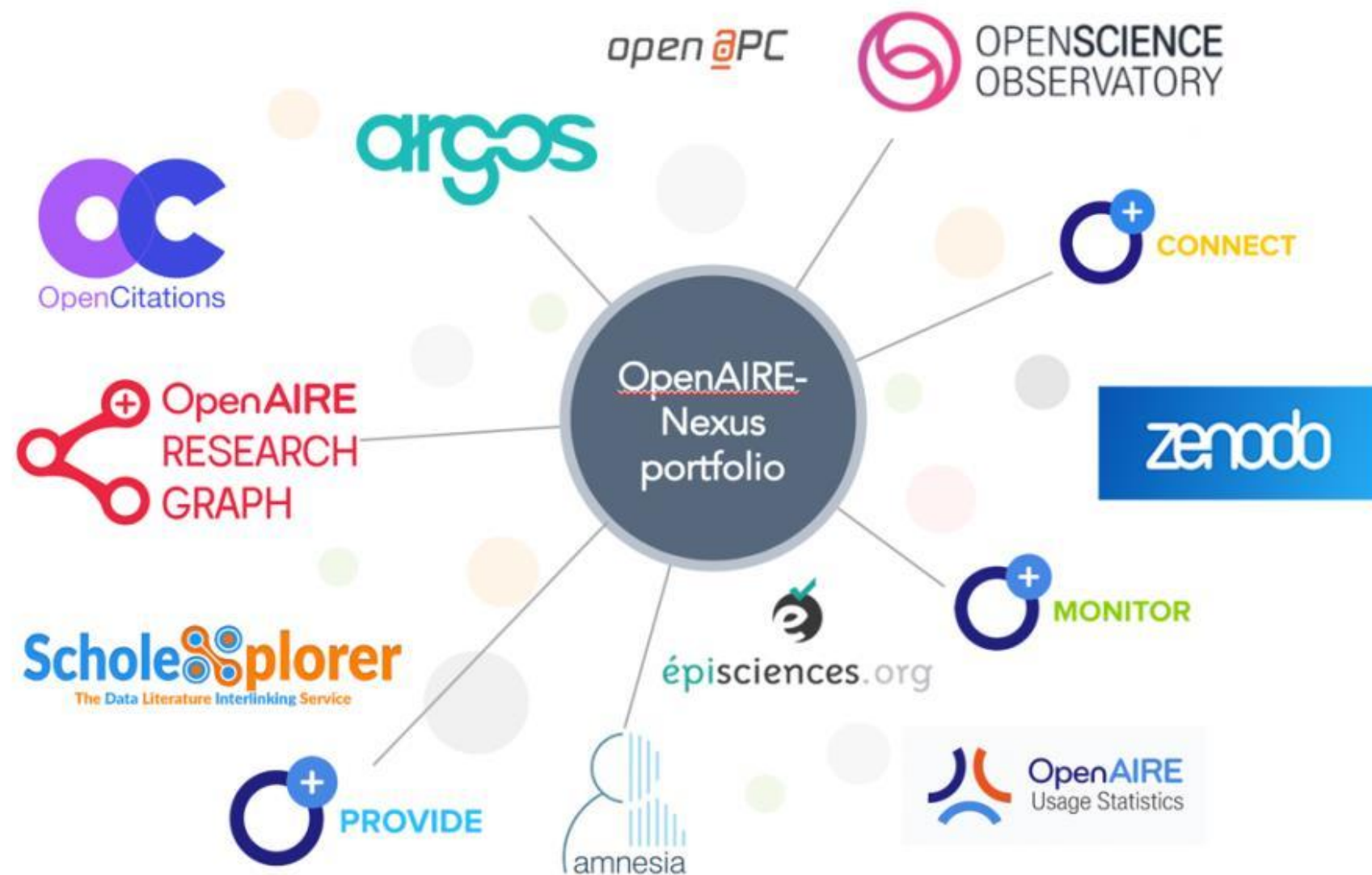- Decentralized
- Trusted

Integration with EOSC architecture

Technical integration

- Service onboarding
- AAI
- Accounting and monitoring

Semantic integration

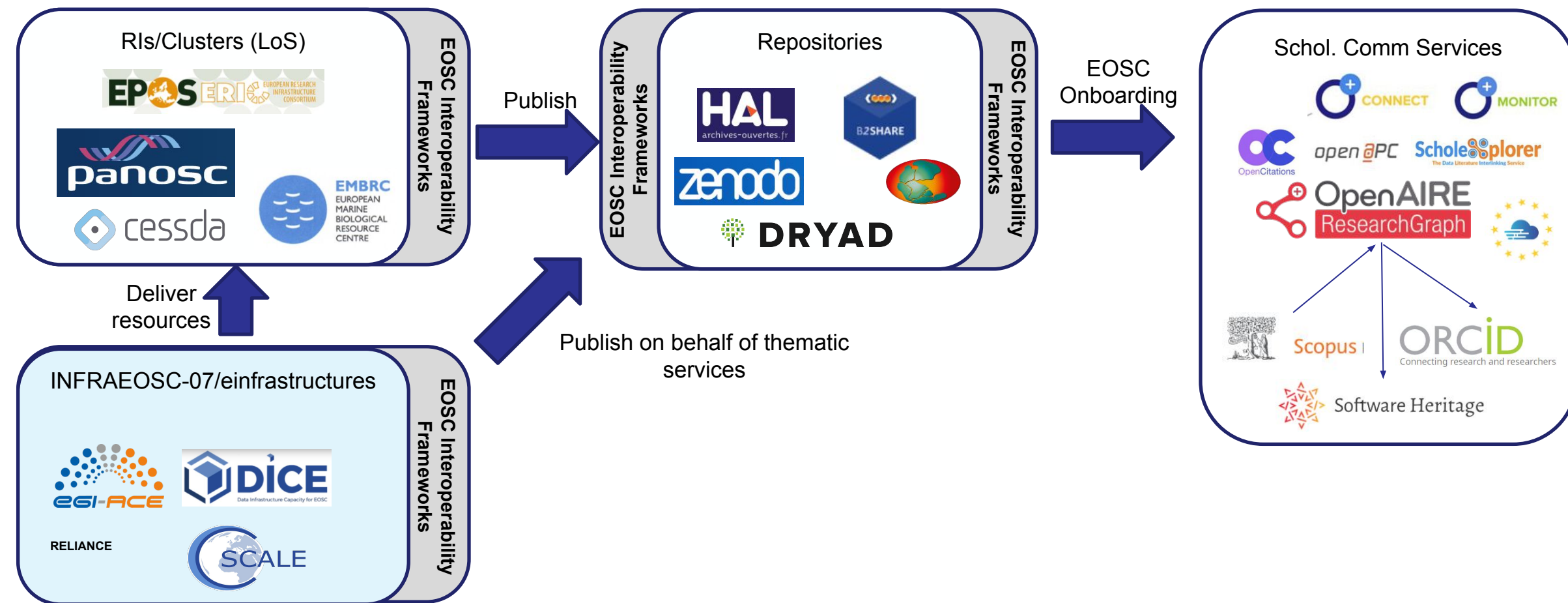- EOSC Resource/Service profiles
- EOSC Usage Statistics
- EOSC Concepts: PIDs, FAIRness
- EOSC Interoperability frameworks
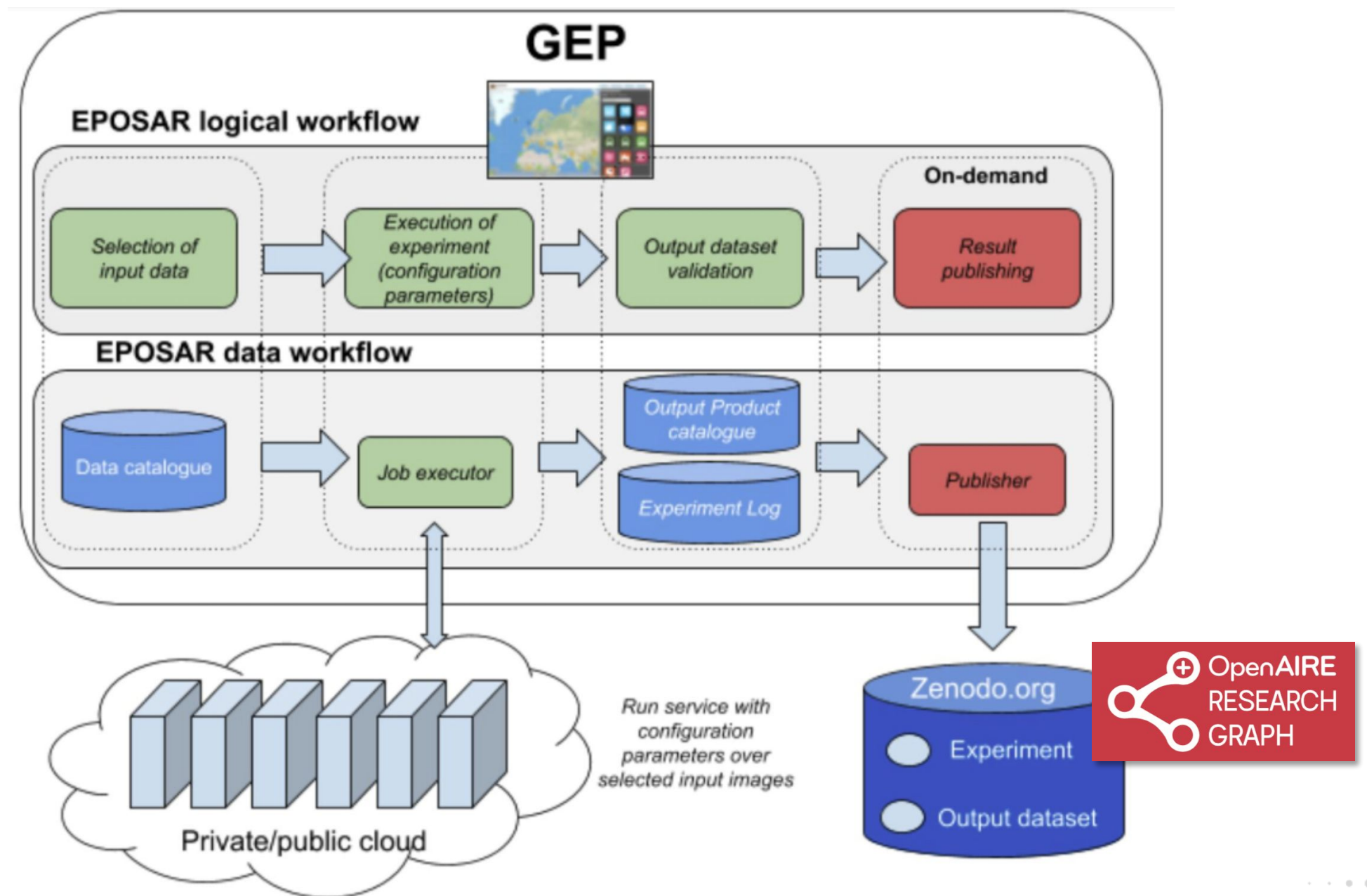
EOSC Interoperability Framework

- Enabling seamless publishing of research outcomes via the EOSC-Core Services

- Bi-lateral and cross-activities with INFRAEOSC-07
  - **Interoperability**
  - **Policies**
  - **Methodologies**

Open Science publishing workflows

- **EPOS Research Infrastructure**
  - **Reproducibility**
  - **Transparency**
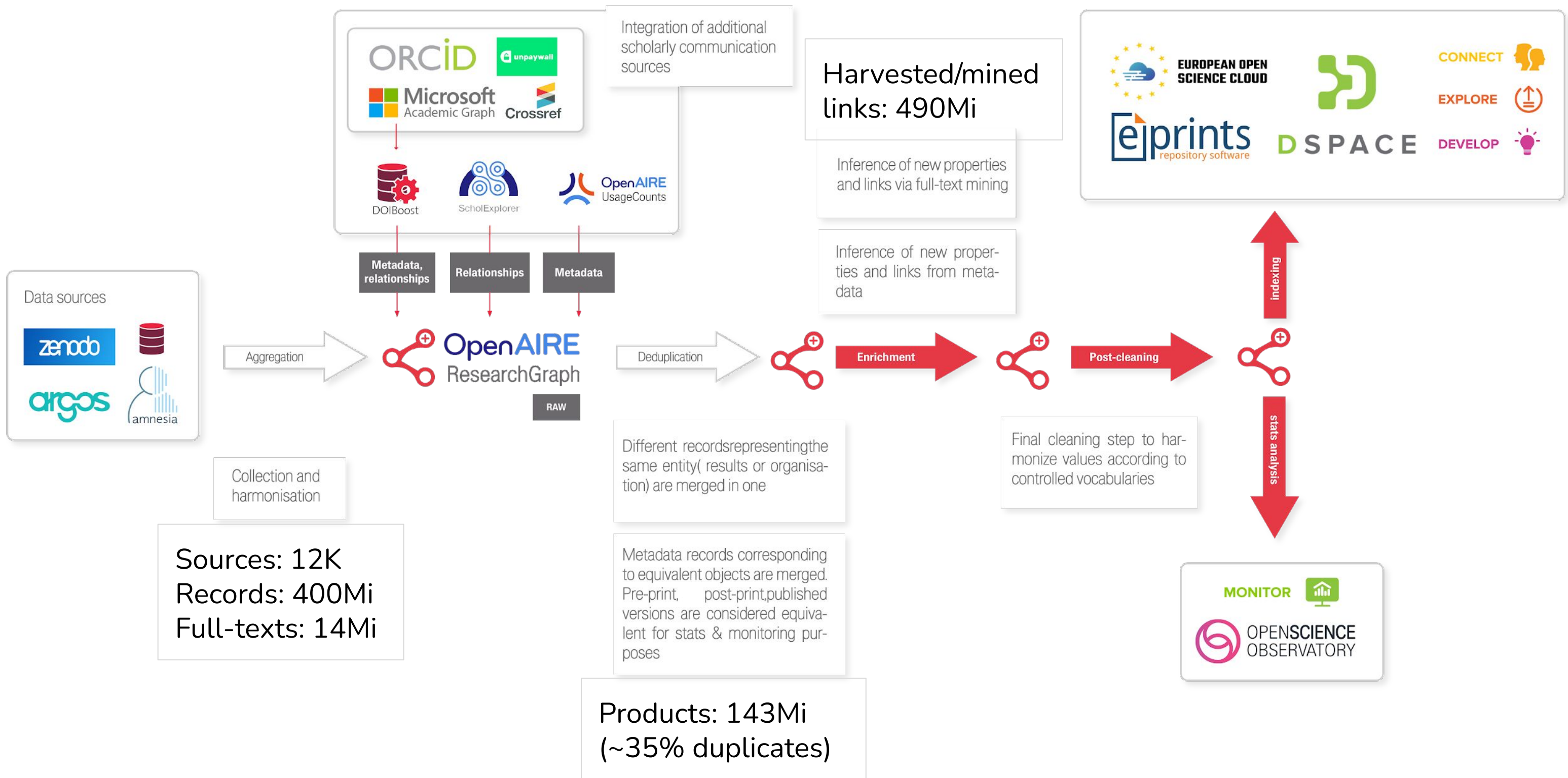 - **Seamless publishing**
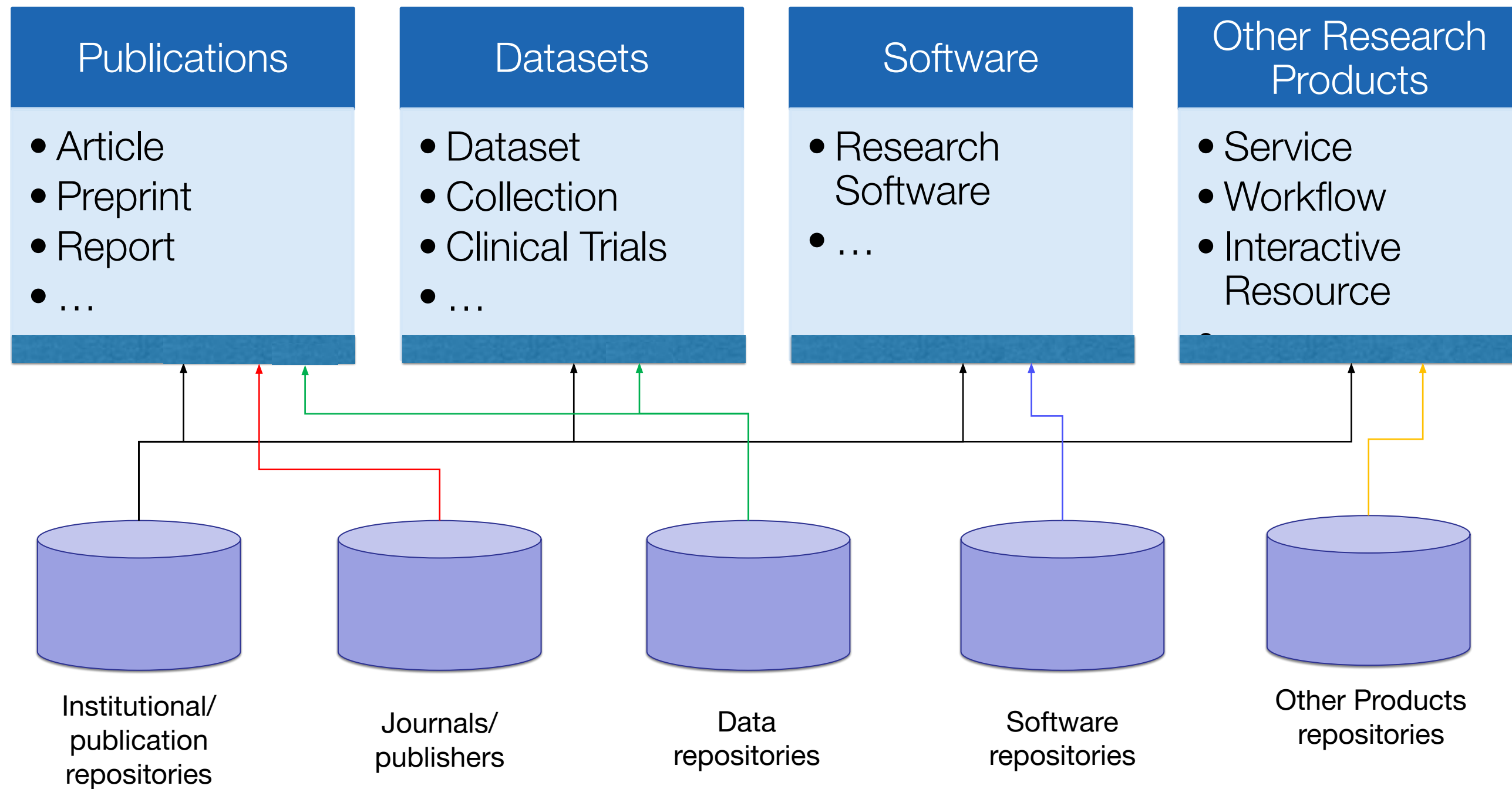
Thank you!

Andrea Mannocci (ISTI-CNR)

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OpenAIRE Research Graph: the supply chain

Harvesting: Revised Classification of Research Products

Publications
- Article
- Preprint
- Report
- …

Datasets
- Dataset
- Collection
- Clinical Trials
- …

Software
- Research Software
- …

Other Research Products
- Service
- Workflow
- Interactive Resource

Institutional/ publication repositories

Journals/ publishers

Data repositories

Software repositories

Other Products repositories

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User support and training

3 pillars of action

Connecting

Services

Training

Policies

Aligning

Empowering

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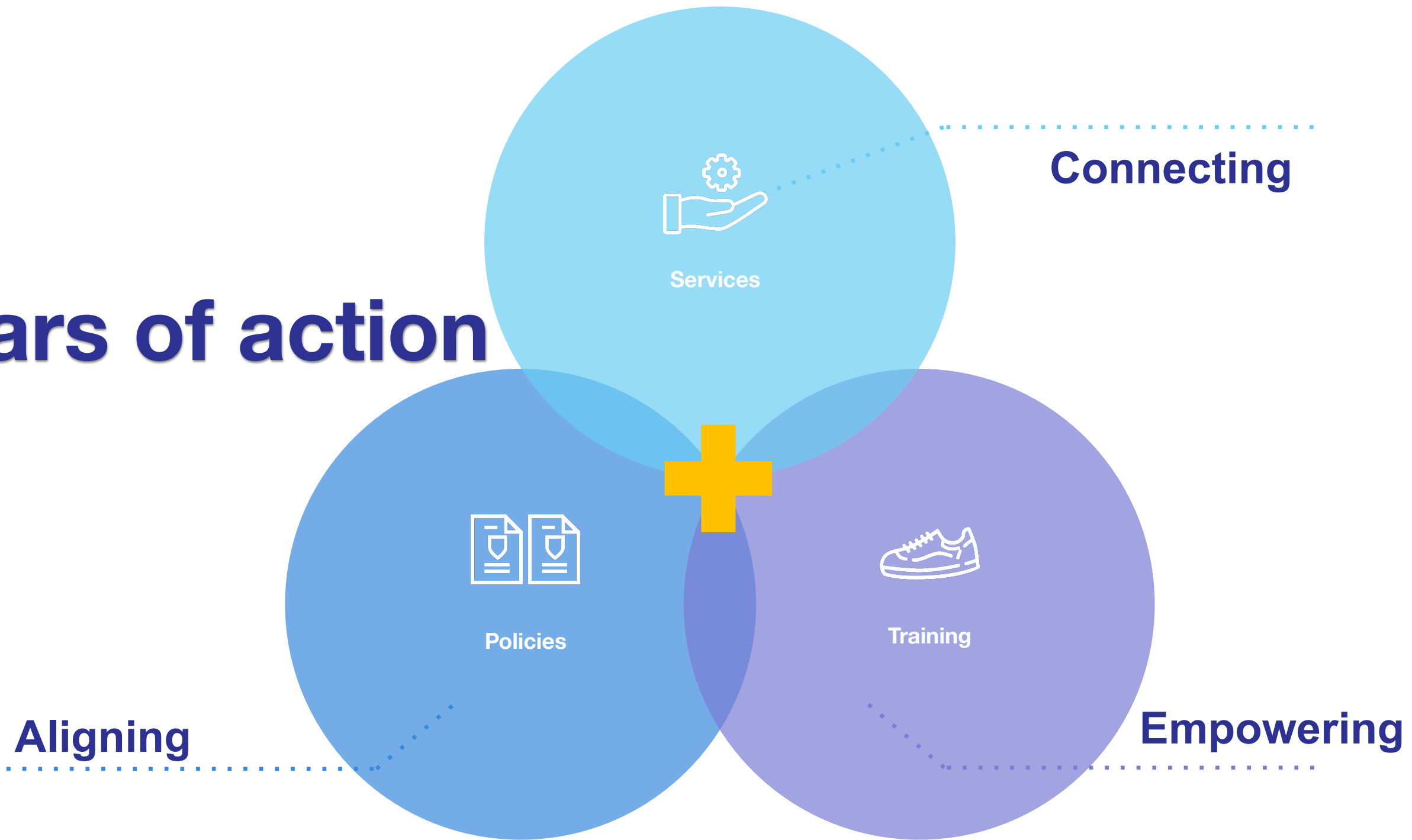
User engagement

Move from…	To…
Product centricity	Customer centricity
Supply optimization	Demand sensing and aggregation
Analysing segment-based customer needs	Analysing customers jobs to be done
Transactional experiences	Connected experiences
Scale through standardization	Personalized journeys at scale