EOSC for Data & Service Providers

26 April 2022

EOSC Future with C-SCALE DICE EGI-ACE OpenAIRE NEXUS Reliance ARCHIVER

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Outline

- **The EOSC Platform in a nutshell**
  John Shepherdson, CESSDA

- **EOSC providers: who they are and what they can provide**
  Diego Scardaci, EGI Foundation

- **Why become a provider?**
  Paolo Manghi, OpenAIRE

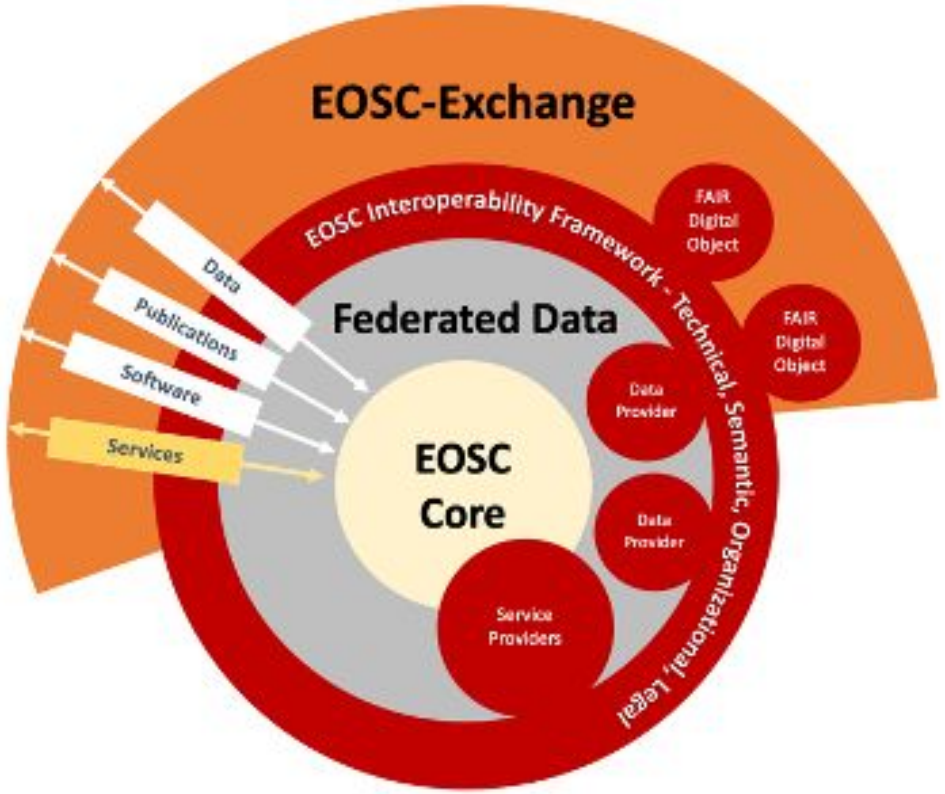
- **Q&As**

EOSC Platform in a nutshell

John Shepherdson, CESSDA

The EOSC Vision

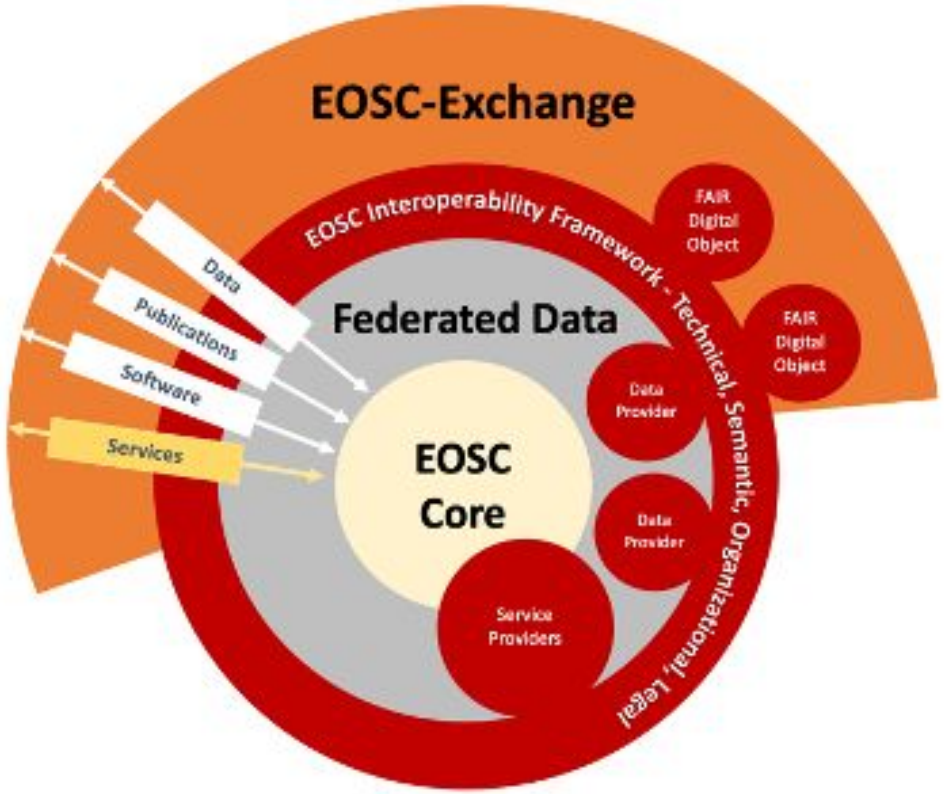
- A web of FAIR data and services
- Federation of eInfra and Research Infrastructures (RIs)
- Environment in which data can be brought together with services
  - perform analyses
  - address societal challenges



The EOSC Future Mission

To deliver an operational **EOSC Platform**

- Minimum Viable EOSC
  - Core Services
  - EOSC Portal & Market Place
  - Interoperability Framework
  - Support Service



EOSC Platform in a nutshell - EOSC Core

- The ‘bread and butter’ elements of the EOSC Platform
  - Acting as enablers, supporting routine activities
- Used by many other elements
  - Building blocks for more advanced EOSC services
- Often behind the scenes
  - Users don’t interact directly with most of them

Service monitoring, alerting and reporting

Accounting for use of shared computing facilities

Controlling access to resources

Support and help for Users

Managing orders for resources

EOSC Platform in a nutshell - EOSC Portal

- The public face of the EOSC Platform
- For resource Providers
  - e-Infrastructures, private sector, tool providers, research infrastructures
- For resource Consumers
  - researchers, research communities/projects, public sector, citizen scientists…
- For resource Facilitators
  - Funders, policy makers, institutions, research administrators

Providers can:

Add resources

Modify resource descriptions

See usage and rating information

Consumers can:

Find, order and use resources

Personalise their experience, get recommendations

Facilitators can:

Use Open Science monitor to see FAIRness and Open Science indicators

EOSC Platform in a nutshell - Interoperability and Support

- EOSC Interoperability Framework
  - overarching standards and guidelines for interoperability and composability of resources in EOSC-Core and EOSC Portal & Marketplace
- EOSC Support Services
  - human-centric activities (including monitoring, training, and engagement)
  - support the operation of the platform and make EOSC attractive and easy to use

EOSC Platform in a nutshell - Benefits

- Open Science practices and skills are rewarded and taught, becoming the ‘new normal’
- Standards, tools and services allow researchers to find, access, reuse and combine results
- Open sharing of scientific results
- Co-creation - Users as 'experts' of their own experience; Industry engagement and technical pilots via Digital Innovation Hub
- Enhanced Open Science Monitor
- Knowledge Hub - learning platform, training catalogue
- Improved Provider portal (details/benefits to follow)

EOSC Providers: Who they are, what they can provide

Diego Scardaci, EGI Foundation

EOSC PROVIDERS: Who they are & what they provide

e-Infrastructures

Ex: EUDAT, EGI, national e-Infrastructures (e.g. national research clouds), OpenAIRE, PRACE, FENIX, D4Science

- Software & other research products
- Computing
- Services
- Storage
- Training

Research Infrastructures

Ex: ERICs, ESFRIs, EMODnet, Copernicus, DIAS (Data and Information Access Services), clusters

- Software & other research products
- Computing
- Services
- Storage
- Training
- Datasets

Higher Education Institutes (HEIs)

- Software & other research products
- Services
- Storage
- Publications
- Datasets

Research Institutes

Ex: Research performing organisations, universities, research centres

- Software & other research products
- Datasets
- Publications

Archives & Repositories

Ex: Institutional thematic and national repositories, archives and aggregators

- Software & other research products
- Datasets
- Publications

Computing & Data Centers

Ex: BCS, CSC, PSNC, CERN

- Software & other research products
- Computing
- Services
- Storage
- Training

Publishers & Journals

- Publications

Libraries

Ex: University libraries, institutional libraries, national libraries, LIBER

- Publications
- Training
- Datasets

Commercial Providers

- Software & other research products
- Computing
- Services
- Storage
- Training
- Datasets
- Publications

EOSC Resources

Services

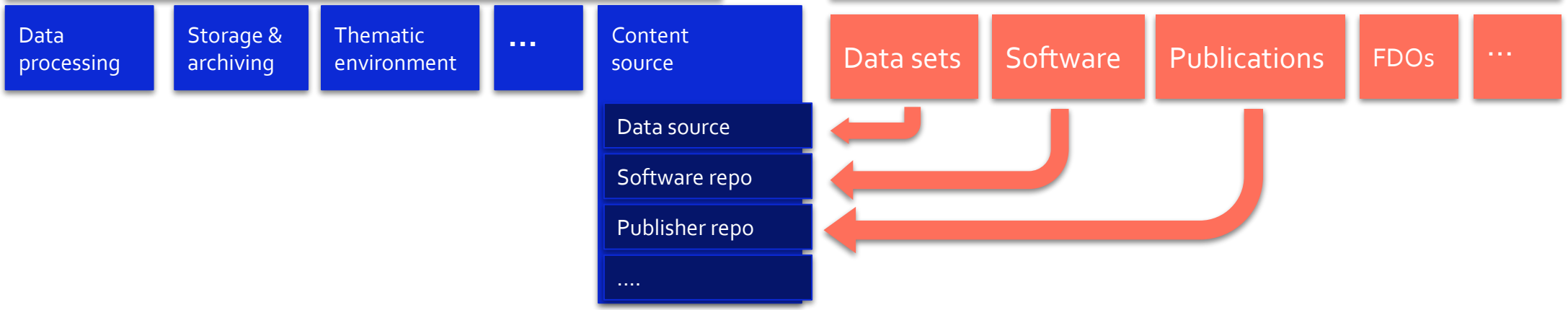
Combine human activities (operations, support etc) with Research products (software, data, documentation etc)

Operational, active, delivered, managed

Research Products

Digital objects. Contain value which is realised through their examination, processing, combination or other use.

Object, storeable, FAIR

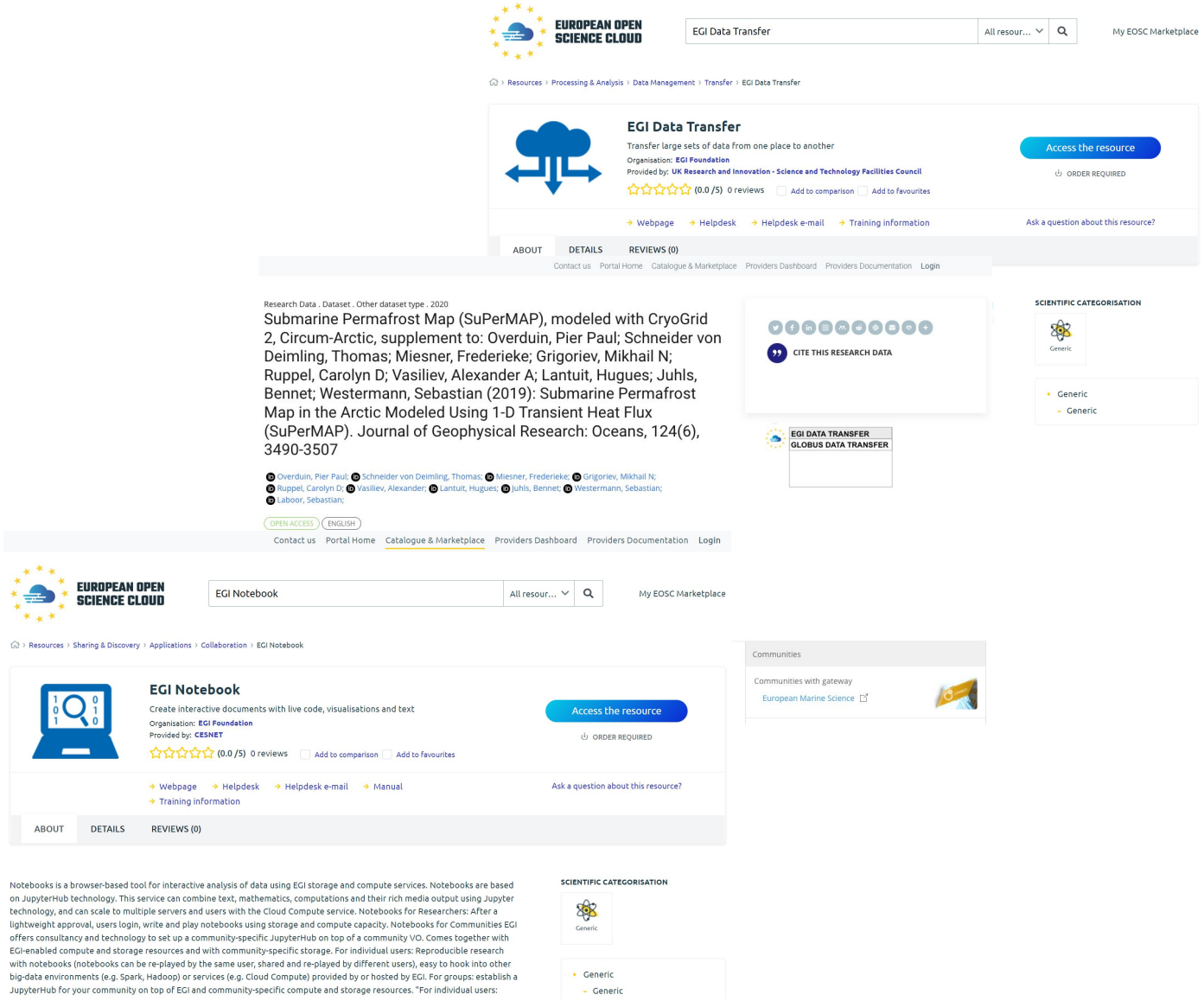


What providers can offer to EOSC

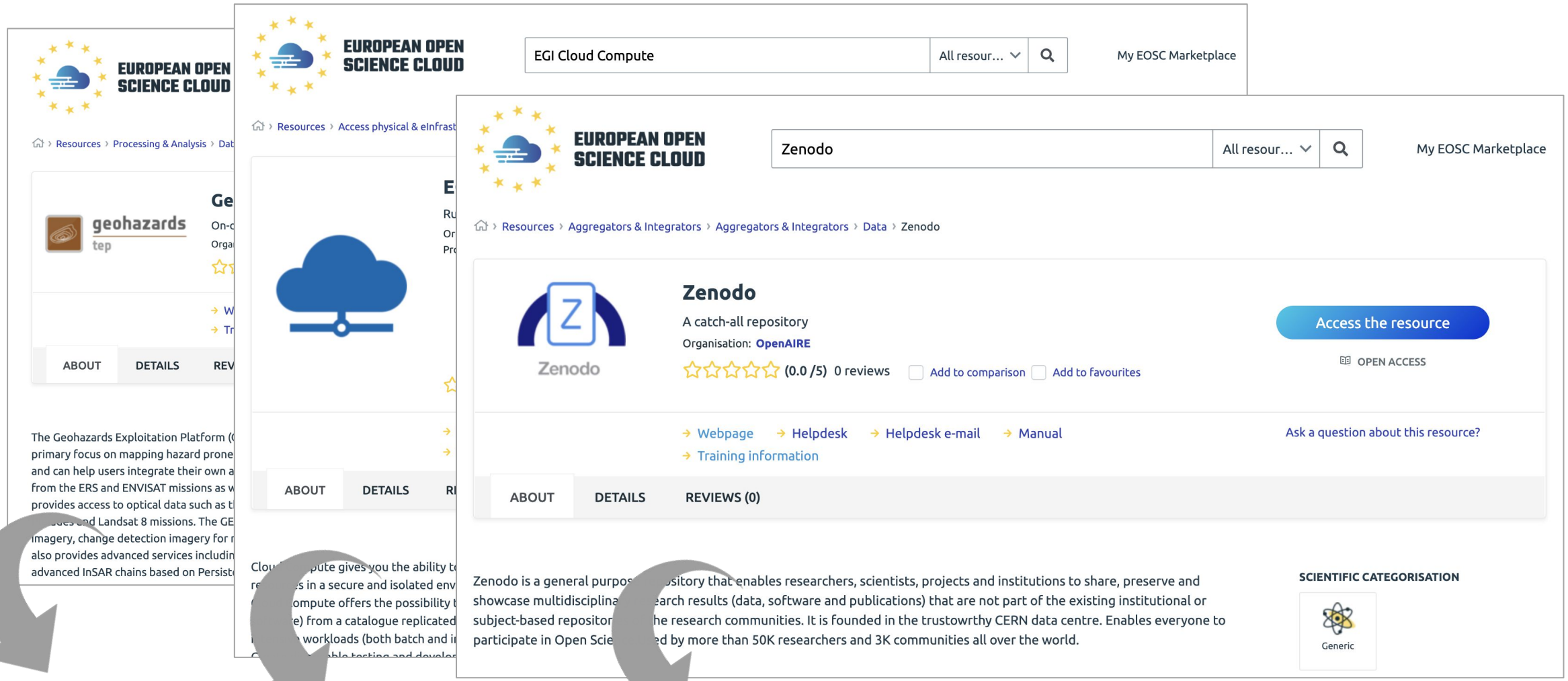
- Services
  - Compute Resources
  - Orchestrators
  - Data management services
  - Virtual Research Environments
  - Data Analysis tools
  - …

- Research products

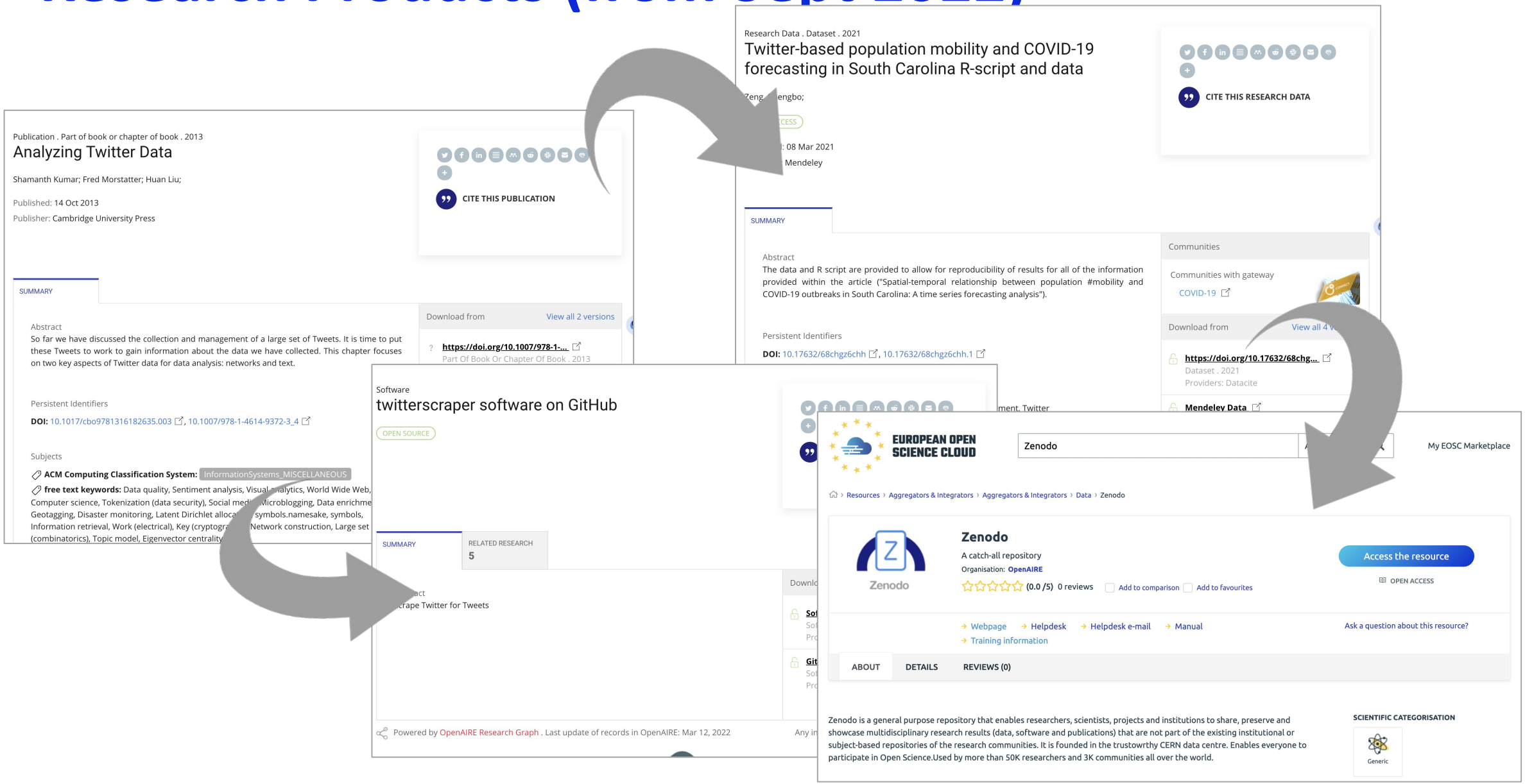
  (coming soon - Sept 2022)
  - Datasets
  - Software
  - Publications
  - …



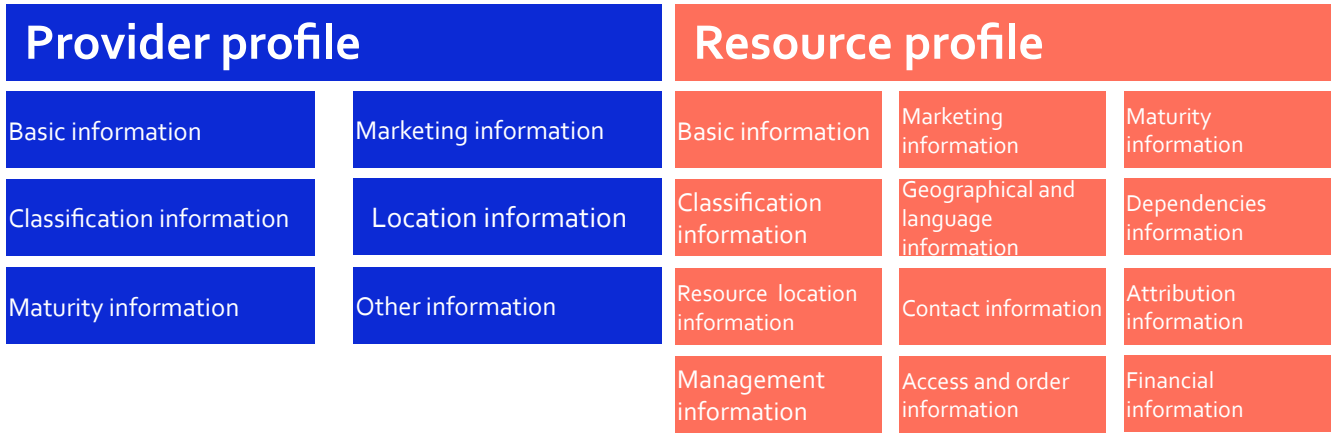
Providers and Services and data sources



Research Products (from Sept 2022)



Rules Of Participation (ROP)



Criteria 1: Acceptable onboarding groups
- Representative of Provider fulfilling necessary information in the Provider Profile
- Legal entities

Criteria 2: Acceptable onboarding people
- Deliverer of resource
- In the case of a federated resource, onboarder should be lead provider

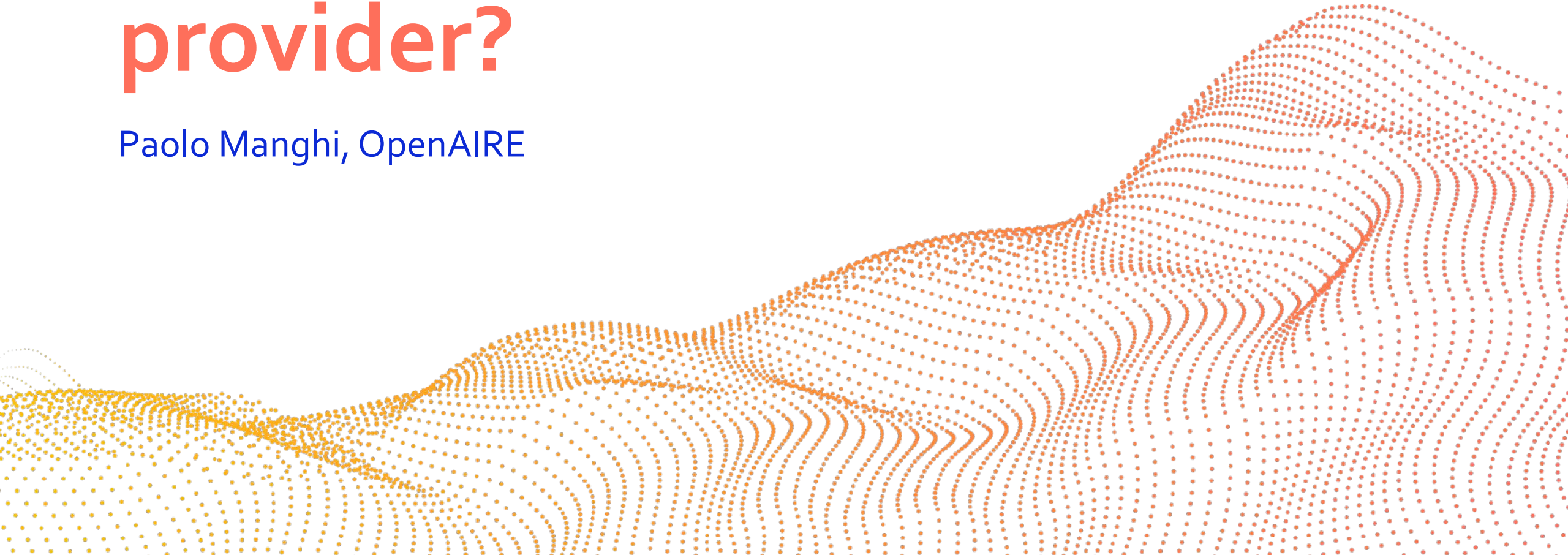
Criteria 3: Acceptable resource
- Specific service offered 'live' to customers. Not a research product (sw/document)
- Sufficient maturity (>=TRL8)
- Targeted to EOSC/EOSC communities OR build on/leverage EOSC capability
(note: other resources - data set, publication etc. will be eligible later)

Criteria 4: Completed profile meeting following requirements
- Provider/resource profile with (at least) all required fields, in English
- Basic information of resource, policies etc. in English
- Helpdesk/support function capable of answering queries in English
- Resource available in Europe (and in a European language)

Criteria 5: Maintain up-to-date information
- Agreement to keep EOSC Profile information (and resource) updated

Why become an EOSC provider?

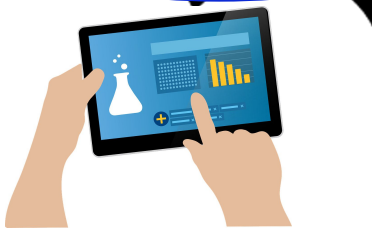
Paolo Manghi, OpenAIRE



Sharing resources beyond community boundaries

Create and Share resources!

Community catalogue of resources

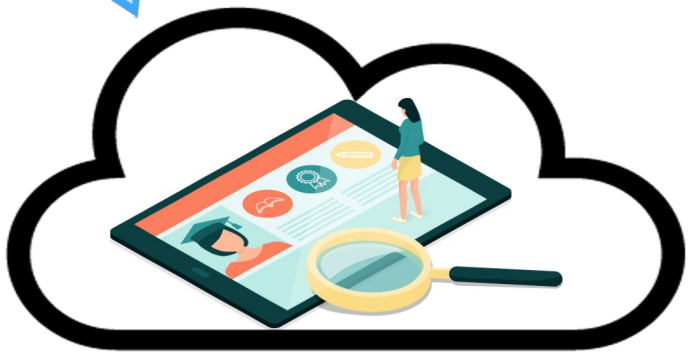


Research Communities (e.g RIs, clusters, e-infra, long tail)

EOSC Future

Resource Catalogue

Search, find, identify, compose, and reuse resources!

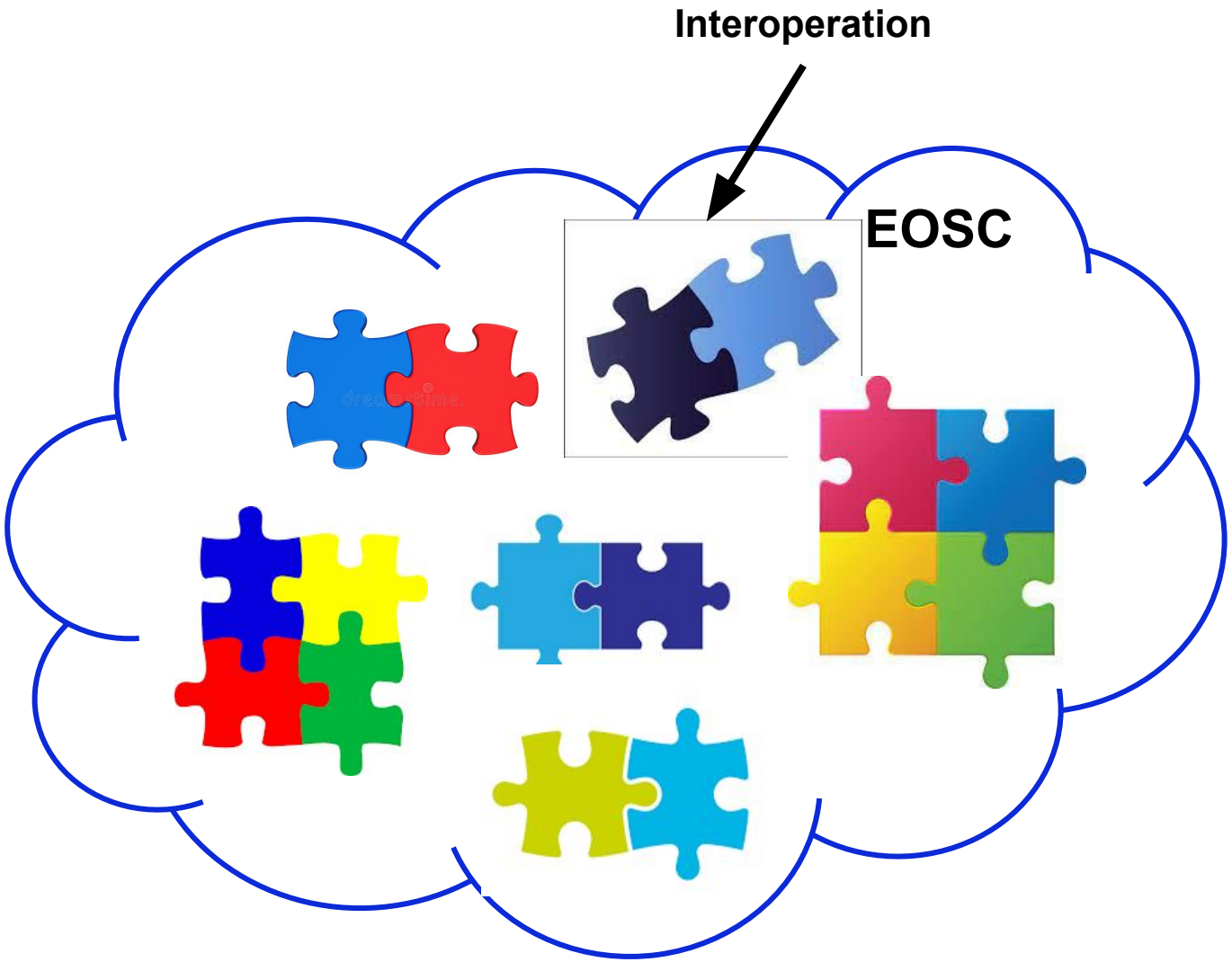


Research communities: RIs, clusters, e-infras, long tail, libraries, organizations, funders

SMEs, industry

EOSC interoperability framework to facilitate resource integration and composability

- EOSC resources provide descriptions of their interoperability capabilities (formats, protocols, guidelines)
- Providers can discover and combine resources based on their common interoperability capabilities



Reporting scientific production to funders, Commission, and scholarly communication services

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Community catalogue of resources

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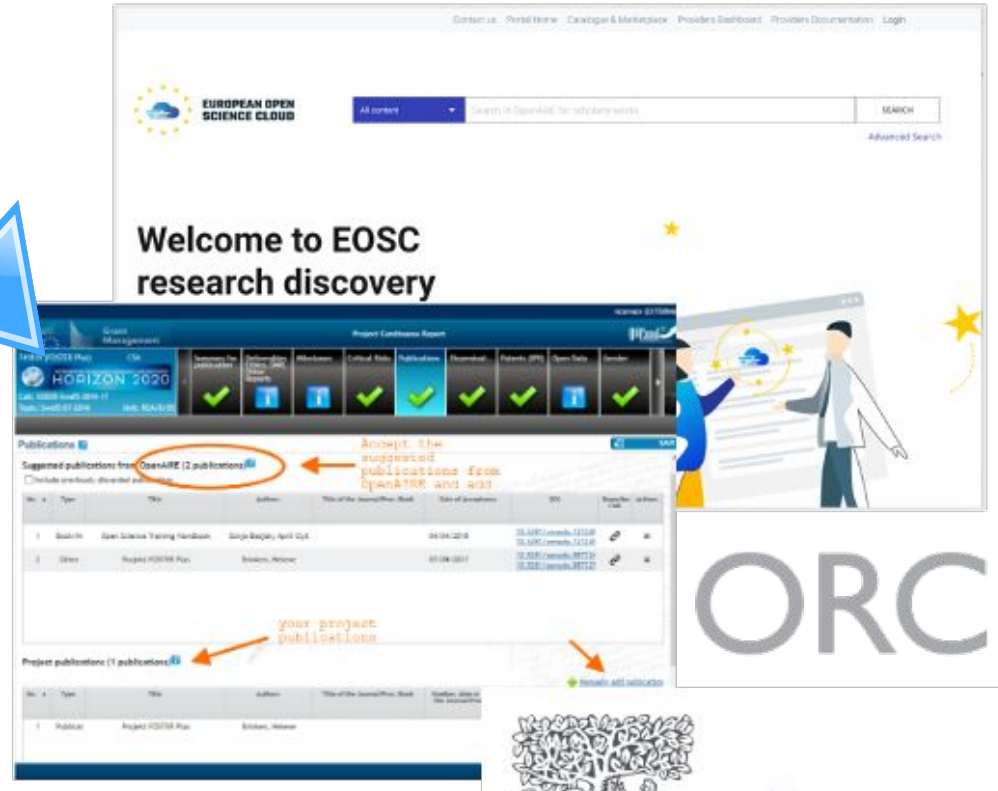
EOSC Future

Resource Catalogue



ORCID

Scopus

SciVal
ELSEVIER

EOSC Core functionality