

# Advancing Research Assessment with a Focus on Open Science

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### **GraspOS** at a glance

Develop, pilot and put into operation an **open and trusted federated infrastructure to support and enable assessment reform towards "Open-Science-aware" Responsible Research Assessment** (OS-aware RRA).

Offering data, tools, services, and guidance to support assessment reform

Based on an **Open Science Assessment Framework (OSAF)** that assists translation OS & RRA principles into practice

#### At three levels

- individual/group researchers
- research performing and research funding organisation
- country

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### A multi-disciplinary consortium



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## **Key Results**

- The **Open Science Assessment Framework (OSAF)**, a living & collaborative resource for RRA that facilitates assessment OS taken into consideration a diverse range of contributions and roles.
- A set of Assessment Portfolios to support the collaborative collection of inputs for research assessment & an online Assessment Registry to facilitate publishing assessment protocols developed.
- A set of metadata enrichment tools & services for enriching missing attributes, semantics, context, and novel indicator values on research outputs & enriching the links among them with appropriate semantics.
- A set of **monitoring tools and services** offering OS indicators, contextual factors, qualitative information (e.g., narratives), and relevant evidence to support assessment processes & relevant types of analysis.
- A Federated Open Research Assessment Infrastructure that offers APIs to provide easy access to relevant services and data assets coming from well-established providers of scholarly metadata information, paving the way for the creation of a research assessment data space.
- A **Community of Practice** of responsible research assessment experts from relevant networks, to facilitate knowledge sharing and capacity building.
- A set of **Training material** relevant to the subjects of research assessment and OS.

### **Demonstrating & evaluating the key results**

- Nine pilots encompass a diverse array of use cases spanning various levels, scopes, and values.
- These pilots serve as co-development partners to showcase and practically test the assessment framework, infrastructure, tools, and services developed within the project.
- The pilots' vastly different formulations and contexts provide stakeholder feedback through real-world implementation of assessment reform.

### **Open Science Assessment Framework**

The Open Science Assessment Framework (OSAF) is focused on translating OS and RRA principles into practice. This encompasses the full assessment process.

The framework design includes

- 1. the SCOPE+i method
- 2. digital assessment portfolios
- 3. an assessment registry

Together, these elements form the OSAF framework and support the full assessment process.



### on context

Our approach to research assessment begins with the premise that context, purpose and values inform the assessment approach, and that each context is different.

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### **OSAF:** Translating Principles to Practice

### **Open Science Assessment Framework (OSAF)**

#### **SCOPE+i Method**

- assessment-specific infrastructure
- assessment resources
- RRA in general
- OS in particular

#### **Assessment Portfolio**

- facilitates collaboration
- narrative + Evidence
- diversity of inputs & roles
- researcher/group/institution

#### **Assessment Registry**

- contextualized assessment
- transparency & reuse
- community resource
- searchable database

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# **Qualitative inputs**

qualities	input
Values	Value statement (template)
Context	Contextual factors (template)
Purpose	Purpose statement (template)
Readiness	Infrastructure & culture change
Meaning	Narrative(s)
Peer review	Expert judgement





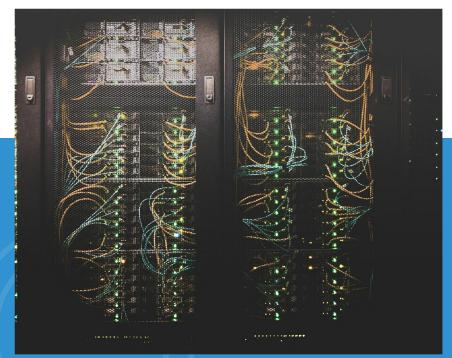


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## **The Infrastructure**

Open Science has many flavours & parameters Metadata is missing or incomplete Fragmented metrics data for openness & usage. Reliance on proprietary data.

Novel indicators are not just about numbers.



# What – in a nutshell

- Deliver **fit-for-purpose tools and services** with the necessary characteristics to accelerate adoption of and support for OS-aware RRA approaches:
  - **broad coverage** by including multiple types of research results beyond literature and enriching the existing data assets with additional information and semantics
  - novelty by introducing indicators related to the practice of OS
  - **inclusivity** by including diverse types of evidence beyond research results and indicators (e.g., qualitative input such as narrative CV, texts)
  - Interoperability by design of data sources
  - a mix of automated and manually curated and annotated metrics.
- **Develop and operationalize** an infrastructure for research assessment (data-tools-services-guidance)

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## **High-level Architecture**

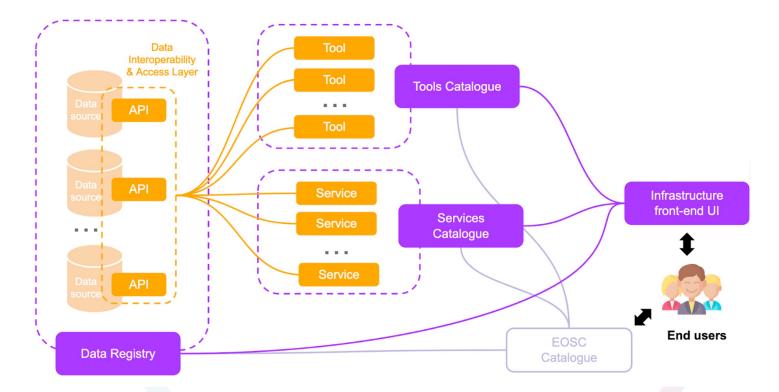




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## **The Community**

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#### Different types of pilots

- Funders & national stakeholders
- Universities (Research performing organisations)
- Thematic disciplines

## Community of Practice of OS and RRA experts

#### Capacity via training

## **Community of practice on assessments that value OS**

Focus on **binding the technical infrastructure** development and its operational aspects with the **RRA/OS community** and envisioned practices

**Complement COARA** by engaging different actors and stakeholders brought in by the partner networks as follows:

- Research performing & funding organisations
- Providers of data/metrics infrastructure
- Local and national monitoring infrastructures
- Research Infrastructures
- National Open Science initiatives and bodies
- Scholarly societies and other professional bodies
- Researchers who focus on R&I assessment tapping on the Super MoRRI network





### Let's make it happen! Together.

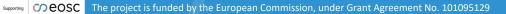
# THANK YOU

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