

Call:

RDA / EOSC Future Call for Interoperability Framework Contributions

Provider:

EOSC Future

Category of call:

Research Data Alliance

Opening date:

06 October 2022 - 12:00 am CET

Closing date:

13 December 2022 - 04:00 pm CET

For whom:

Individuals or Organisations

Max per grant:

€30.000

Description:

Read the description

This call is seeking European consortiums or interdisciplinary groups to validate and demonstrate the value of EOSC Interoperability Framework. In particular, this call targets the RDA community and aims to fund short projects that can test and demonstrate practical use cases of the new EOSC Interoperability Framework to enable further integration and take up of EOSC services. The demonstrators can be in the form of case studies, reference architectures, or software-based solutions or services.

The projects should demonstrate the use of the interoperability framework in a novel cross-organisational or interdisciplinary setting with heterogeneous components. The project funding is primarily intended to cover additional personnel costs but could also include event organization costs where the scope, objectives and dependencies/requirements of the event are clearly defined in the project proposal. The projects should also reserve sufficient resources for dissemination activities, such as event participation (including travel costs) or developing outreach material (such as posters or videos). We encourage leveraging the RDA groups as a clearing house and engaging the global research data community in this testing exercise. Working documentation around the framework can be found here. More information can be found on these slides and in this video.

Context and Background

The European Open Science Cloud (EOSC) is a new area of collaboration for many scientific research communities and this call will provide an opportunity to engage more deeply on interoperability across disciplines. RDA is running a series of calls, in the context of the **EOSC Future project**. The purpose of these RDA Open Calls is to



engage the research communities with a bottom-up approach to make their contributions to the shared body of knowledge more FAIR by integrating them on EOSC. The interoperability of research services and outputs is considered to be the 'glue' that makes EOSC work and a critical issue for sharing and finding research outputs and requires common agreements and standards across disciplines. Ultimately these grants should contribute to the enabling of communities outside of EOSC leverage EOSC services, and to support and encourage examples of adoption of existing RDA recommendations and outputs which can benefit the community around EOSC and to promote examples and lessons learnt. This call is also designed to benefit RDA Groups who are already tackling interoperability, especially in the disciplinary context.

This call is closed

Meet the grantees ROSC FUTURE FUTURE FOR





How to engage regional and European data infrastructure communities with relevant RDA and EOSC communities

What:

This initiative supports and creates synergies around a selection of five activities that will serve as case studies and demonstrator initiatives on how to engage regional and European data infrastructure communities with relevant RDA and EOSC communities to converge on interoperability solutions.

Who:



Wolmar Nyberg Åkerström is an IT professional at Uppsala University and the National Bioinformatics Infrastructure Sweden (NBIS) / ELIXIR Sweden.

Scientific Domain:

Interoperability; Reproducibility; Computational workflows; Knowledge organisation; Information retrieval

Your Domain specific Engagement:

Wolmar works at the intersection of several distributed infrastructures focusing on research data for national, Nordic and European life science research. He is involved in EOSC as chair for the EOSC Association Semantic Interoperability Task Force, as contributor to implementing ELIXIR's strategy for engagement with EOSC, and as an active stakeholder—providing input to EOSC initiatives on local, national and European level. He is also engaged with the RDA as a new member of its Technical Advisory Board (TAB), co-chair for the Life Science Data Infrastructures IG, and a frequent contributor to IG/WG sessions at the plenaries.

Wolmar is employed as a data steward at National Bioinformatics Infrastructure Sweden (NBIS), which is the Swedish node of the European data infrastructure ELIXIR and the Bioinformatics platform of the national life science infrastructure Science for Life Laboratory (SciLifeLab). The services are aimed at a wide spectrum of molecular biosciences—ranging from platforms for advanced and large-scale data acquisition to study design and bioinformatics support to HPC and data storage, and to data sharing solutions for large and sensitive data. Some examples of national services with links to European data infrastructures that he is involved in include the Swedish node of the Federated European Genome-phenome Archive (EGA) for sensitive human data, the Swedish COVID-19 Data portal and Pandemic Lab Preparedness activities for data mobilisation, and the SciLifeLab Data Platform for support emerging data driven life science research.

NBIS is well represented in EOSC Association's Task Forces and is actively supporting the execution of ELIXIR's EOSC Strategy and concerted efforts in the Nordic-Baltic Region through EOSC Nordic, the Nordic e-Infrastructure Collaboration (NeIC), and national coordination activities. Wolmar is an active member of ELIXIR's RDA Activities and EOSC Focus Groups, he has coordinated activities to FAIRify data and tools for NeIC's Nordic Pandemic Research Infrastructure (PaRI) Project, and he regularly present and organise workshops on Open Science, FAIR and reproducible research aimed towards the life science and research infrastructure community.

Wolmar is part of a team at NBIS that focuses on data management support, training and collaborations to ensure that Swedish research outputs are available to the global research community, and to society at large, according to the principles of Open Science, Reproducible Research, and FAIR. The team offers hands-on support, resources, tools and recommendations to research projects. The team also provides training and guidelines on how to put Open Science, FAIR and reproducible research into practice. And they collaborate to build capacity and resources across Sweden, the Nordic-Baltic region and Europe.

Your Promotion and Networking:

Promotion of domain specific Open Science practices/EOSC/RDA at meetings and conferences, publications and presentations.



The project's activities and outputs are featured on the RDA website.

Your Connection to RDA WG/IG or CoP:

Wolmar is regularly contributing to activities in the following RDA groups

- Life Science Data Infrastructures IG (Co-chair)
- Technical Advisory Group (newly appointed member)
- RDA in Sweden (member)

At the RDA 19th plenary he reported from sessions organised by the following groups

- Global Open Research Commons (GORC) IG (member)
- Professionalising Data Stewardship IG (member)
- Vocabulary Services IG (member)
- CURE-FAIR WG (member)

See also:

• ELIXIR Report of the 19th Plenary of the RDA, June 2022, https://doi.org/10.5281/zenodo.7053713

Wolmar's member profile at the RDA website, https://www.rd-alliance.org/user/20093

Your Outputs:

Zenodo, Publications, ORCID, Youtube...

Country:

Sweden







Data and metadata interoperability through the incorporation of PIDs in a research infrastructure

What:

This project will provide a concrete demonstration of the benefits of data and metadata interoperability through the incorporation of PIDs in a research infrastructure.

Who:

- Rory Macneil is CEO of Research Space and host of the FAIR Data Podcast.
- Xiaoli is the Implementing FAIR Workflows project lead and is responsible for the outreach effort in the APAC region while co-chairing the DataCite APAC Experts Group.



Scientific Domain:

Persistent Identifier, Interoperability, Metadata, FAIR, RDM

Your Domain specific Engagement:

Shared perspectives and joined conversations, discussions, and communication of domain-specific requirements between EOSC/RDA and the specific community

Your Promotion and Networking:

Promotion of domain specific Open Science practices/EOSC/RDA at meetings and conferences, publications and presentations.

The project's activities and outputs are featured on the RDA website

Your Connection to RDA WG/IG or CoP:

Co-chair of the RDA Working with PIDs in Tools Interest Group

Co-chair of the Research Data Architectures in Research Institutions IG

Active participant in the GORC International Model WG

Your Outputs:

Zenodo, Publications, ORCID, Youtube...

Country:

Scotland and China

FAQs



Who can apply?

Call target: EOSC Future Interoperability Framework

This call is to fund projects which will focus on contributions to the EOSC Interoperability Framework (EOSC IF) by leveraging the RDA community and specific RDA groups tackling issues related to interoperability. These could include - but are not limited to - the registering of existing interoperability guidelines, development of crosswalks or ontologies between schemas or practical use cases and demonstrations of applying the EOSC-IF. The aim is to have outputs that show an understanding of the needs for data and service integration in EOSC, by making data resources and services interoperable, and to support the creation and uptake of IF guidelines by disciplinary groups while contributing to the community driven developments under the RDA umbrella. The focus of this call is to support broader discovery and use of research outputs in EOSC and other similar research commons-like initiatives. The work could also complement internal EOSC activities e.g. working groups around the IF which could dovetail efforts for a practical implementation of the EOSC IF or RDA interoperability focused working or interest groups . Community involvement is critical to the uptake and success of the Interoperability Framework and EOSC.

What type of activities can be funded?

Projects should be short and focused and last for no longer than a period of three to six months.

The EOSC IF consists of governance and services for the purposes of proposing, accepting, registering and promoting EOSC Interoperability Guidelines. The EOSC IF comprises the EOSC-Exchange Interoperability Frameworks and the EOSC-Core Interoperability Guidelines. The EOSC-Exchange Interoperability Frameworks implicitly consist of policies (organisational intent) refined as guidelines (operational recipes) implemented as appropriate in IT architecture as assets such as: documents, procedures, workflows, scripts, code, datasets, formats, and guidelines used in science, which are inter-related with rich semantics and can be (re-)used by IT services, provided they meet the criteria defined by the EOSC IF governance. The EOSC-Core Interoperability Guidelines relate to the interoperability of services and resources with the EOSC-Core Services (such as monitoring, help desk, order management, and so on).

The EOSC IF will be an open and flexible framework to:

- Allow the inclusion of appropriate guidelines (e.g., technical, non-technical and/or domain specific) by way
 of a well-governed but lightweight proposal process, where the guidelines should aim to lower the barrier
 experienced by communities or infrastructures when making use of resources made available through
 EOSC.
- The Interoperability Framework content will evolve over time when new standards and practices become popular replacing old and/or current standards and practices.

The EOSC is not a single monolithic organisation or resource providers but is rather a federation being built from many independent organisations and resource providers as in a System of Systems approach. This means that EOSC is rather inclusive than selective, i.e. in principle all metadata standards from communities are acceptable

This said, for a system of systems approach to work properly and to ensure interoperability some boundaries and



priorities need to apply and therefore a choice has to be made (based on rough consensus) to select standards, best practices, tools and APIs that are most widely accepted.

The EOSC IF will be a registry of guidelines and a source of functionalities for service composability. Therefore, it is two-fold, firstly in the sense that we will be accepting published guidelines into the Registry using a semi-formal propose>review>ratify>announce process, and secondly in the sense of collaborating in the curation or creation of guidelines that allow services and resources to be used in an interoperable or composable manner.

The guidelines could be documents, procedures, workflows, scripts, code, datasets, formats, and guidelines used in science. Interoperability Guidelines can be either EOSC-Core Interoperability Guidelines (i.e., how to interoperate with an EOSC-Core service) or EOSC-Exchange Interoperability Guidelines (i.e. guidelines that promote interoperability across domains and communities). Interoperability Guidelines can be proposed by a community (e.g. existing disciplinary standards) and are curated by the EOSC-IF governance procedures for use in EOSC.

For more on the IF see the online <u>webinar</u>: "Towards Composable Services: The EOSC Interoperability Framework".

The following list are examples of possible implementations for the call:

- Use-cases that demonstrate practical uptake of interoperation with the EOSC-Services.
- Provision of existing community interoperability guidelines that have the potential to apply across disciplines, to be registered as EOSC Interoperability Guidelines to populate the framework.
- Demonstrations of real-world use cases that show the advantage of making cross-disciplinary data interoperability guidelines available within the EOSC-Interoperability Framework, with related resources (e.g. APIs, software, etc) and guideline documentation published as EOSC.
- Demonstrations of different layers of interoperability across different services and data, for example Metadata cross-walks and leveraging current schemes.
- Demonstrations of interoperability of resources across infrastructures.
- Analysis of the framework in the context of other similar frameworks in data commons initiatives.

How to apply?

The project proposals will need to be submitted by using "apply now" on this EOSC Future Funding platform. You will have to describe your project plan, coals, milestones and intended impact in some detail. A consortium consisting of several organisations can apply, but a single legal needs to act as a contractual partner.

You need to submit your application by 13th December 2022 16.00 CET.

RDA welcomes applications from people or groups who are committed to RDA, sharing of data, and FAIR-isation of data. These can be junior/senior researchers, mid-career data professionals, and data scientists and anyone working on national or community interoperability guidelines. They can be based in research groups or institutions, or SMEs across Europe, provided they meet the criteria below.

Criteria and conditions

- Applicants should demonstrate that they have been or will be using the RDA Working Groups or Interest Groups in the future to support their disciplinary data activities.
- Be proactive and willing to contribute to RDA recommendations or outputs testing and adoption particularly



in European institutions.

- Have a good understanding of EOSC, active in the Open Science community and use of FAIR principles.
- Reside and/or work in a **EU** country or associate countries.

Further conditions

- This call is not open to organisations or staff members of the EOSC Future consortium (including Linked Third Parties). All applicants need to confirm independence from the consortium ("Declaration of Honour").
- If the evaluator's institution applies for an RDA Open Call, the evaluator should declare their conflict of interest in reviewing the application.
- All successful applicants must provide a sound plan for dissemination and exploitation. The outputs of the projects should be released under a suitable, open license.
- A mid-term and final term report will be submitted, following a contractual agreement, highlighting progress, use cases and lessons learned.
- All results will be made available on the RDA site for 4 years. Successful applicants may be asked to share their details (photo, bio) for dissemination purposes.

How we will evaluate your proposal?

The applications will be evaluated by experts with insights to the RDA and group recommendations who have no conflict of interest (the applicant is not employed by the evaluator's organisation nor is/are the recommendation(s) a direct result of their work).

Your proposal will take into account the RDA Guiding principles and demonstrate commitment to it. Proposals should drive the principles of openness and community activities.

Candidates will be asked to submit an application that will be evaluated according to the following criteria:

1. Excellence:

- a. A statement describing the commitment to the vision of EOSC, the FAIR principles, national Open Science agendas (implementation), links to European data infrastructures or similar federated infrastructures. (25%)
- b. A brief summary of previous and current activities demonstrating the applicant's involvement and contributions to RDA related activities, Working/Interest Groups, development and/or promotion and/or adoption of RDA Recommendations and Outputs in European Institutions. (15%)

2. Impact:

- a. Technical capacity Sustainability and impact potential of the proposal and how this can be carried forward within the context of EOSC and RDA. Applicants should put forward plans for continuing the work beyond the funding period. (20%)
- 3. Implementation (quality and efficiency):
- a. A summary of the proposed work. Outline the activities planned and associated timeline, the relationship to and



impact on EOSC, and how an accompanying technical update can be created. Methodology of application. The proposal must be thought through, well-written, clear and demonstrate the methodology works. (40%)

The Grants Committee will also consider the following criteria to establish balanced and diverse distribution of the grants: geographical balance, gender balance, preference to candidates in underrepresented fields within RDA.

Financial Contribution

ergi pe smail The RDA Open Calls programme will offer up to 2 grants of maximum EUR 30,000 per grant to support the work in this area over the course of the EOSC Future project. Grants applied for can also be smaller.

This call is closed