

# Winter School 2024

29 January - 1 February 2024 / Thessaloniki, Greece



eosc.eu | #eoscwinterschool2024

Supported by



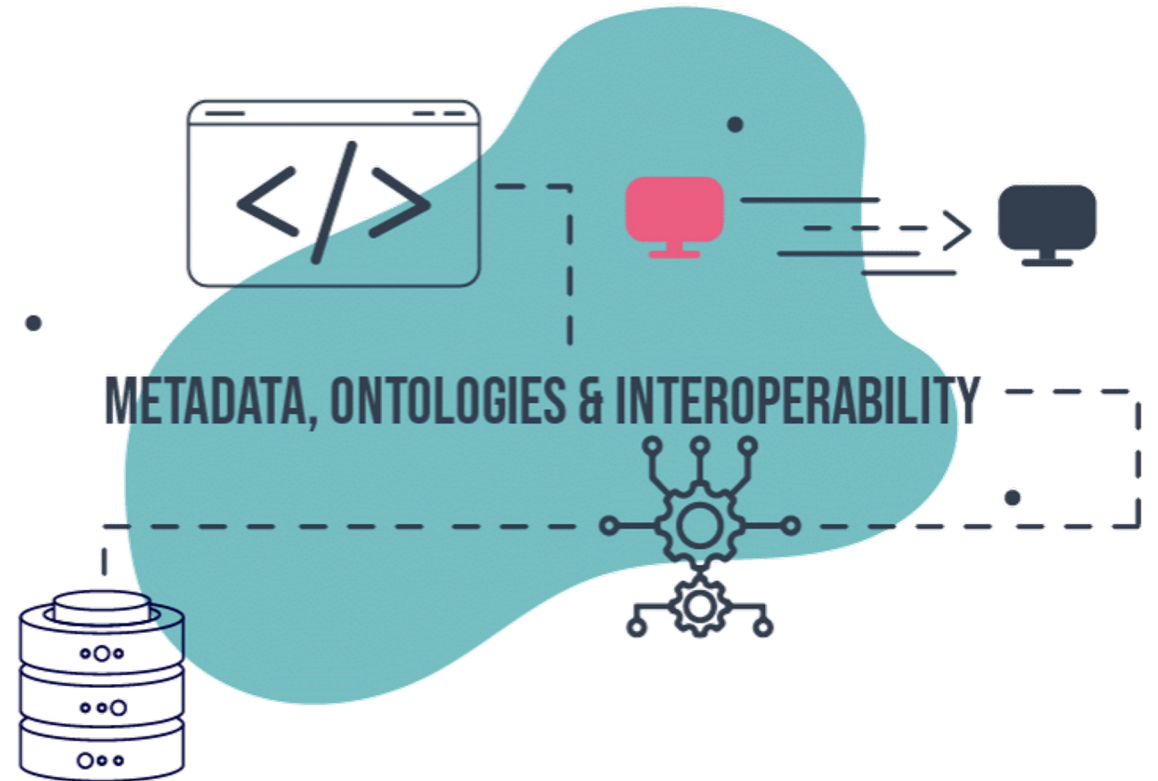
## Task Forces and projects synergy work around opportunity areas

01.02.2024

## Opportunity Area 2: **Metadata, Ontologies and Interoperability**

Wolmar Nyberg Åkerström

NBIS / ELIXIR Sweden (Uppsala University, SciLifeLab)  
On behalf of EOSC Semantic Interoperability Task Force



## OA 2 Participants (17+1)

- **Wolmar Nyberg Åkerström**, (EOSC Semantic Interoperability Task Force, EJP-RD), European Joint Programme on Rare Diseases NBIS / ELIXIR Sweden (Uppsala University, SciLifeLab)
- **George Konstantinidis**, (RAISE), University of Southampton
- **Stian Soiland-Reyes**, (EuroScienceGateway, BY-COVID, EOSC-Life, FAIR-IMPACT, EOSC4Cancer, EVERSE, EOSC-ENTRUST), University of Manchester
- **Simon Hodson**, (WorldFAIR, FAIR Impact, RDA Tiger, Semantic Interoperability TF), CODATA
- **Arofan Gregory**, (WorldFAIR & FAIR-IMPACT), Observatoire de Paris-PSL
- **Alexandros Papadopoulos**, (FAIR-IMPACT), Radboudumc
- **Panagiotta Koltsida**, (STR-ESFRI), ATHENA RESEARCH CENTER
- **Baptiste Cecconi**, (OSTrails & FAIR-IMPACT), Observatoire de Paris-PSL
- **Marc Portier**, (Blue-Cloud 2026, FAIR-EASE), Vlaams Instituut voor de Zee
- **Peter Thijsse**, (Blue-Cloud 2026, FAIR-EASE), MARIS
- **Alexandra Kokkinaki**, (Blue-Cloud 2026, FAIR-EASE), National Oceanography Centre
- **Electra Makridou**, (RAISE), University of Thessaloniki
- **Joonas Kesäniemi**, (FAIRCORE4EOSC), CSC
- **Esteban Gonzalez**, (FAIR-IMPACT), Universidad Politécnica de Madrid
- **Clement Jonquet**, (FAIR-IMPACT), INRAE
- **Roksana Wilk**, (Rules of Participation Compliance Monitoring, FC4E, EOSC Future), ACC Cyfronet AGH
- **Teodor Ivanoaica**, EOSC Focus, EOSC Association
- +1 colleague from **Open Knowledge Foundation** - only attending day 1



## OA 2 Participants' EOSC project affiliations

Blue-Cloud 2026

BY-COVID

EOSC Focus

EOSC Future

EOSC-ENTRUST

EOSC-Life

EOSC4Cancer

EuroScienceGateway

EVERSE

FAIR-EASE

FAIR-IMPACT

FAIRCORE4EOSC

OSTrails

RAISE

RDA Tiger

STR-ESFRI

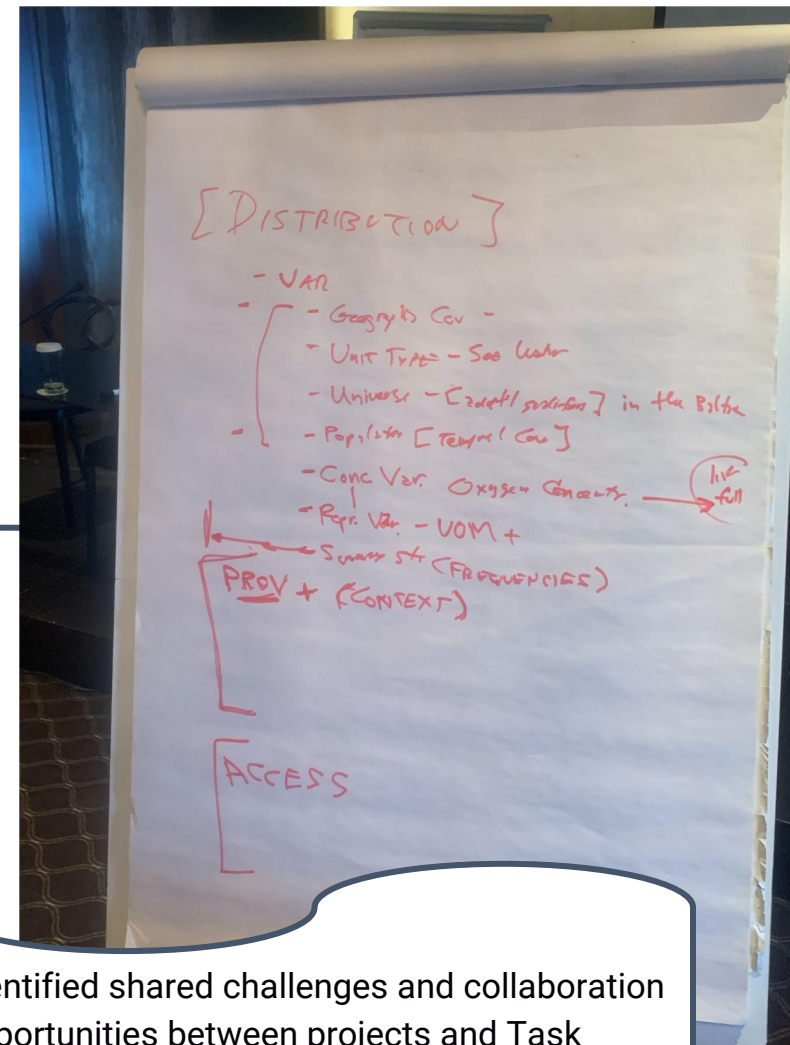
WorldFAIR



# OA 2 Objectives and Approach

## Pitch your topic

- Topic 1: **Mappings:** Joonas, Alexandra
- Topic 2: **Mappings:** Clement, Roksana
- Topic 3: **Vocabularies** - Roksana, Joonas
- Topic 4: **Vocabularies** - Roksana, Clement
- Topic 5: **Variable Measured** Alexandra, Stian, Roksana, Baptiste, Wolmar, Joonas -
- Topic 6: **Schema.org issue** - Alexandra,
- Topic 7: **Data integration** - Stian, Wolmar,
- Topic 8: **Provenance** - Stian, Arofan, Peter
- Topic 9: **Profiles for using vocabularies** - Stian, Mark, Alexandra (RoCrate)
- Topic 10: **Testing profile for assessing the interoperability of EOSC Services (based on TF recommendation)** - Esteban, Peter
- Topic 11: **Data Privacy** - George, Arofan
- Topic 12: **Hosting and mapping vocabularies in IVOA Portal (an OntoPortal Instance)** - Clement, Baptiste, Stian
- Topic 13: **Earth Portal** - Clement, Alexandra
- Topic 14: **Worldfair CDIF** - Arofan



Identified shared challenges and collaboration opportunities between projects and Task Forces on developments surrounding OA2 FAIR Assessment, for both the present day as well as the future.





# OA 2 Session – Tuesday Afternoon

## Opportunity Area Matrix

SRIA-challenges covered/not-covered by EOSC-related project activities and examples of solutions.

## Task Force Results

Reference architecture, interoperability profiles, maturity for semantic artefact catalogues, mappings and crosswalks, shared/common use cases.

## SRIA 2.0 and future Task Forces

Task force deliverables and associated recommendations can serve as a conversation starters.

## → A balance act between optimism and despair

The solutions space for EOSC is heterogeneous and can be perceived as a mess to someone looking to align/contribute.

## → Working together provides the scaffolds

An overview of what we have and produce a consolidation layer to see how to align.



# OA 2 Session – Wednesday Morning

## Topic proposals

14 topics covering mappings, vocabularies, representation of variables, metadata, data integration, provenance, services.

## Cross-Domain Interoperability

Cross-domain Interoperability Framework (CDIF), focus on tasks/use cases such as data integration.

## Domain and upper ontologies

Linking general and more specific conceptual models and common data elements, examples from earth observations and rare diseases.

## → From examples to generalisable solutions

Opportunity to showcase and explore synergies seems to be a promising approach to converge on a shared understanding.



# OA 2 Session – Wednesday Afternoon

## **Web of FAIR services (and data)**

Scenarios around service discovery and composition and examples of how to describe them, FAIR signposting, DCAT-AP.

## **Tools for mappings & crosswalks**

User interfaces and “smart” solutions to generate and execute data transformation from one format to another.

## **Enabling future collaboration**

Fora for “groups” such as EOSC-A, RDA, incentives, resources and coordination.

## **→ Want more hands-on collaborative work**

Future EOSC-A Task forces could support coordination, discussions across projects, creating opportunities for hands-on collaborative work etc.

## **→ Look beyond EOSC**

Help projects engage with research communities and actively liaise and align with global initiatives.





## OA 2 Next Steps

### **What could an EOSC Interoperability Board do for “us”?**

< 6 months – collaborations between EOSC projects and TFs.

### **How to align Task Force learnings and EOSC projects?**

6–12 months – consolidate problems and gaps from TF and project outputs for SRIA 2.0 and provide input to calls 2026/2027.

### **What is the EOSC approach to metadata and ontologies?**

18+ months – increasing potentials for HE EOSC-related projects sustainable results.



## OA 2 Commitment

### **More hands-on collaborative work**

- Form an informal group that is open for those who can contribute to join (mailing list?).
- Co-located event(s) to create opportunities for hands-on collaborations in connection with EOSC Symposium and other events.



## OA 2 Participants' EOSC project affiliations

Blue-Cloud 2026

BY-COVID

EOSC Focus

EOSC Future

EOSC-ENTRUST

EOSC-Life

EOSC4Cancer

EuroScienceGateway

EVERSE

FAIR-EASE

FAIR-IMPACT

FAIRCORE4EOSC

OSTrails

RAISE

RDA Tiger

STR-ESFRI

WorldFAIR

