Instructions: Metadata, Ontologies and Interoperability

Dear participants,

On behalf of the Winter School Organising Committee, we are writing we are happy to share with you some initial details to introduce the OA2 (Opportunity Area 2) Metadata Ontologies and Interoperability session of the School.
The program of Metadata, Ontologies & Interoperability combines current results and discussions about future developments with a very practical hands-on experience based around the integration of existing solutions in the development of projects

The general approach of the OA2 Session:
The hands-on approach of the Metadata, Ontologies & Interoperability approach, led by projects FAIRCORE4EOSC and Task Forces Semantic Interoperability and Technical Interoperability, starts by providing a clear current-day overview of the developments made by projects and Task Forces related to Metadata, Ontologies, and interoperability. Walking away from this session, the participants will not only be aware of the results of other projects and Task Forces, but they will also have identified future challenges and new collaborations to tackle these challenges. The second day will continue the hands-on approach with a hackathon on Semantic Artefacts, with the goal for participants to leave the Winter School with the development of solutions that can be deployed immediately.

General objectives:
- Scoping the landscape by mapping contributions from both projects and Task Forces on Metadata, Ontologies & Interoperability
- Identify future synergies, collaborations, and needs between the projects and Task Forces
- Integrate and advance on the different developments around semantics in Metadata, Ontologies & Interoperability

General expected outcomes:
- Deployable solutions to the challenges surrounding semantic artifacts
- Identified shared challenges and collaboration opportunities between projects and Task Forces on developments surrounding FAIR Assessment, for both the current day and the future

The discussions and presentations will focus on presenting the progress of projects tackling SRIA key challenges related to Metadata Ontologies and Interoperability. The **Strategic Research and Innovation Agenda(SRIA) of the European Open Science Cloud (EOSC) - Version 1.2** has the overall purpose of defining the general framework for future research, development, and innovation activities in relation to the European Open Science Cloud. The current version of the SRIA (1.2), including MAR 2025-2027, was approved by the EOSC Partnership Board at their 5th meeting on 06 December 2023.

1. **We are expecting OA2 Session participants to be familiar with the SRIA and SRIA Key Challenges and be able to present feedback and details about the progress and developments of the project they're representing in addressing the SRIA key challenges.**

Opportunity Areas represent the response of the projects to SRIA key challenges. Over the last period, the SRIA key challenges have been addressed by the Horizon Europe projects, as their contribution to the development and deployment of the European Open Science Cloud is mostly focusing on addressing the key challenges of SRIA.

2. **We expect each participant to be able to update and contribute with updates to the [Matrix of Opportunity Areas](#)**, therefore, as a representative of one of the Horizon Europe Projects, each participant should discuss internally with their Project Technical Coordinator the details captured in the Opportunity Area Matrix and be able to contribute to the document during the session.

Hands-on experience included in the OA2 Session of EOSC Winter School focuses on demonstrating the interoperability of tools and services developed by the Horizon Europe Projects. The hands-on approach of the Metadata, Ontologies & Interoperability approach, led by projects FAIRCORE4EOSC and Task Forces Semantic Interoperability and Technical Interoperability, starts by providing a clear current-day overview of the developments made by projects and Task Forces related to Metadata, Ontologies, and interoperability. Walking away from this session, the participants will not only be aware of the results of other projects and Task Forces, but they will also have identified future challenges and new collaborations to tackle these challenges.

Wednesday morning & afternoon: Hands-on Semantic Interoperability sessions kicks off by identifying objectives, synergies, and collaboration opportunities between projects based on the mapping of project participation on the related SRIA challenges. These identified objectives will provide the base for the session where it will be discovered how already developed tools and solutions can be used and integrated into other projects, or show how future planned developments can facilitate the interoperability of tools and services.

3. **We would like to kindly ask the participants to team up and form teams of 2-3 people. A team should have participants from two different Horizon Europe Projects**. The team should identify objectives (synergies/collaboration opportunities with projects developing complementary solutions). The hands-on session should focus on implementations demonstrating how/if solutions developed by one of the projects could be integrated into the other project.

Note: To be more efficient, we strongly recommend that the participants think about (or even form) their team before joining the Winter School. **The sub-committee members of the OA2: Metadata, Ontologies and Interoperability will contact you in the near future to facilitate this process.** In case the teams are not completed beforehand, the teams will be completed during the Hands-on preparatory session. (Wednesday January 1st, starting 09:40)

In case more details are needed, the projects FAIRCORE4EOSC and FAIR-IMPACT, together with the Task Force Semantic Interoperability and EOSC Association, as facilitators of the OA2 Session of the EOSC Winter School will be able to organise a short Zoom meeting to walk you through the agenda.

Should you have any questions or require further information, please do not hesitate to contact us at: teodor.ivanoaica@eosc.eu