

Architecture and Interoperability

Objectives of WP3

WP3 work focuses on defining the architecture and interoperability guidelines and frameworks needed for the EOSC-Core and EOSC capabilities to offer an integration point towards Research Infrastructures (RIs), providers (both operating in the research sector as well as commercial ones) and researchers.

WP3 will define a scalable open federated architecture driven by cross-community use-cases, allowing for secure and robust deployment of the EOSC-Core and Portal capabilities, and the relationship of the core to the RIs, while being adaptable to new players and new functionalities which will grow the ecosystem.

WP3 will contribute to the overall project aim for facilitating researchers to better collaborate across disciplines and share research resources by pursuing the following objectives:

- Define an overarching federated EOSC architecture (building on the output of the Architecture WG under the EOSC Executive Board) and interoperability framework and its application to the EOSC-Core and EOSC capabilities, including interoperation with the RIs.
- Continuously define and improve the architecture collecting feedback from other WPs (notably WP4, W5, WP6, WP7) as well as via functional requirements from cross-community use cases to share, access, analyse and re-use resources via services.
- Define and continuously improve the interoperability framework and guidelines for all functional areas.
- Define processes and guidelines to enable EOSC-Core delivery and to ensure the openness of EOSC such that it can adapt with the evolving requirements of the EOSC stakeholders.

Structure

There are four tasks in WP3:

- Task 3.1 - EOSC Architecture Design Governance and Interoperability Framework
- Task 3.2 - Developing Guidelines for Operational Services of the EOSC-Core
- Task 3.3 - EOSC Interoperability Framework Task Force
- Task 3.4 - EOSC Portal Technical Roadmap

Liaisons with other Work Packages and Relevant initiatives

WP3 will interact with WP4 and WP5 regarding design implementation, and with WP7 on the operational aspects. It will also liaise with projects funded under the INFRAEOSC-07 call and other relevant initiatives to define a widely accepted EOSC Interoperability Framework and seek requirements from many internal (WP6, WP9) and external stakeholders (AEGIS, RDA, FIM4R, CODATA, etc.) and the regional and cluster community EOSC initiatives.

Lastly, it will build on the outputs from the EOSC Working Groups (Architecture, FAIR, etc.) and Task Forces under these Working Groups (AAI, PID, etc.), previous and existing projects (AARC, EOSC-hub, EOSC Enhance, OpenAIRE-Advance, CatRIS, etc.) as well as on the mature architectures that some of the RIs have developed.

WP3 works closely with the EOSC Technical Coordination Board (TCB) to ensure alignment with other technical work packages.