Update on the European Open Science Cloud (EOSC) towards Horizon Europe

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EOSC From H2020 to Horizon Europe

- Horizon 2020: EOSC development has been supported through projects and an interim EOSC governance structure
  - pan-European access mechanism;
  - coordination of national activities for EOSC on-boarding;
  - connection of European Research Infrastructures and existing e-infrastructures;
  - initial development and operationalisation of the FAIR principles and a FAIR-compliant certification scheme for research data;
  - the EOSC portal, guidelines and training;
  - development and provision of a number of research-enabling value-added services, including distributed data processing and management (both public and commercial).

- Proposal of establishing a European Co-Programmed Partnership
  - Drafting of the **Strategic Research and Innovation Agenda** (SRIA) and accompanying **Multi-annual Roadmap** (MAR) → MANDATORY ANNEXES TO THE MEMORANDIM OF UNDERSTANDING WITH THE EC

- Launch of the **EOSC Association** → signatory of the MoU with the EC

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The EOSC Association

- Founded on **29 July 2020** by 4 founding members (CSIC, GÉANT, CESAER, GARR), as an **AISBL** under Belgian law.

- The association was granted legal personality, through **royal decree** on 11 September.

- EOSC Association intends to bring together **a large number of stakeholders**: **139 members** and **48** observers. Of the 139 members, there are **15 mandated organisations**

- First General Assembly on 17 December 2020

- After adoption of HE, signature of the MoU with the EC in April 2021

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SRIA & MAR documents

- These documents provide the **overall framework for future activities**, to be **undertaken at EU level** and **at national/institutional level**

  - Implementation supported by EC (Tier 1), Member states / National Funders (Tier 2) and institutions (Tier 3)

- The drafting of the **Strategic Research and Innovation Agenda** is led by the Chairs of the EB, and builds on the input from the six WGs, and on input from the community through an **open consultation** (20 July—31 August) that received **217 responses**.

- WGs are busy **integrating community feedback** into the next version of the SRIA, but in general, there was an overall agreement on the action areas set forth in the document.

- The **Multiannual Roadmap** is a more **granular translation** of the priorities identified in the SRIA focusing on the two tiers during the years 2021 and 2022.

- Notably, MAR and SRIA are essential to feed in to the drafting of the EC RI WP

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SRIA timeline

- First outline was available around Feb 2020. Substantial evolution since then. EB has formed a SRIA editorial board, and both EB chairs (KL, CS), as well as representatives from all the WG are fully involved.

- SRIA **0.6** underwent a public consultation 20 Jul.-31 Aug.

- SRIA **0.7** (without inclusion of consultation outcomes) reviewed by EB 24 Sept and GB 01 Oct.

- SRIA **0.8** (including cons. outcomes + draft MAR) presented at the EOSC Symposium.

- SRIA **0.9** to be reviewed by the EB on 26 Nov. and by the GB on 16 Dec.

- SRIA **1.0**. Final SRIA to be made publicly available in Jan. 2021.

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From the SRIA/MAR to the WP 2021-2022

continue to develop EOSC in a more cohesive and structured manner to a full operationalization

- FAIR research data commons (a.o. data, services, tools), based on key horizontal core functions, with corresponding e-infrastructures and service layers accessible to researchers across disciplines throughout Europe, leading to a "Web of FAIR Data and Services" for Science.

- SRIA objectives
  - Open Science practices and skills are rewarded and taught, becoming the 'new normal'
  - Standards, tools and services allow researchers to find, access, reuse and combine results
  - Sustainable and federated infrastructures enable open sharing of scientific results

- SRIA stages
  - Stage 1 (2021–2022): Development towards added value from a functional federation of infrastructures
  - Stage 2 (2023–2024): Expansion to production that generates added value
  - Stage 3 (2025–2027 and beyond): Expansion to develop impact from Open Science

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From the SRIA/MAR to the WP 2021-2022

- General support to EOSC coordination
  - consolidating and engaging community across the European Research Area
  - continuous development of effective business models to guarantee future sustainability and development…
- Supporting an EOSC-ready digitally skilled workforce
  - skills for Open Science to deliver, manage, re-use, share and analyse FAIR data and other research objects
- Services and tools to underpin a research assessment system that incentivises open science practices
- Enabling discovery and interoperability of federated research objects across scientific communities
  - coordinating the implementation of frameworks and the alignment of FAIR data practices on <u>persistent identifiers, metadata and ontologies, interoperability</u>
  - wide uptake of and compliance with FAIR data principles and practices by national and European research data providers and repositories.
- Support global standards, specifications and recommendations for open sharing of FAIR research data, publications and software

SUPPORT

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From the SRIA/MAR to the WP 2021-2022

- Deploying EOSC-Core components for FAIR
  - interoperable ecosystem of PID infras., 'meta resolver' and standardised interfaces and protocols
  - open schemas and APIs and metadata framework and various services built on metadata registries
  - services and tools to archive, reference, describe and cite research software
- Innovative and customisable services for EOSC
  - development(cooperation/co-design),improvement of existing pre-operational software, tools and open source services, improving the TRL of the components and adding new features based on requirements from research communities, use of open source software and tools for wide availability and uptake
- Public procurement: Delivering the EOSC-core infrastructure and services
  - building on INFRAEOSC-03 → deploying a robust infrastructure, modular services (PaaS, SaaS)
- Use Cases linked to the Missions
  - demonstrate EOSC value (as happened with COVID-19 data platform)

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Thanks for your attention

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