EOSC Tripartite Governance

The European Commission, EOSC Association and EOSC Steering Board are heading the transition towards Open Science in Europe

#EOSC #EOSCTripartite #OpenScience #EUResearchArea





Head of Unit, Open Science

DG R&I, European Commission

European Commission: EOSC Achievements and Plans

EOSC Tripartite Event 2022

Session: "Main achievements of the tripartite collaboration and plans for 2023"

Prague, 15 November 2022

Michael Arentoft
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EOSC as part of the EC policy for Open Science



Capacity builder

Funder

- Improve the practice of research and innovation
 - Open access to scholarly publications
 - Research Data Management and FAIR digital outputs
 - Verifiable and reproducible results, transparent processes
 - Research integrity, Societal engagement etc.
- Develop proper enablers
 - Open Research Infrastructures including the EOSC and ORE
 - Rewards and incentives
 - Skills and education
 - Legal & regulatory environment
- 'Walk the Open Science talk' through Horizon Europe
- Open Science in the international context

Open Science central to 'Pact for R&I in Europe'

Open science is a central part of the 'Pact for R&I in Europe' (Nov '21)



Upholding values

- Ethics and integrity
- Freedom of scientific research
- Gender equality and equal opportunities



Working better

- Free circulation
- Pursuit of excellence
- Value creation



Working together

- Coordination, coherence and commitment
- Global outreach
- Inclusiveness
- Societal responsibility

Open Science in priority areas for joint ERA action (Nov '21)

Deepening ERA

- Open Science
- Research Infrastructures
- Gender equality, equal opportunities for all
- Careers and mobility of researchers and research assessment and reward systems
- · Knowledge valorisation
- Scientific leadership
- Global engagement

Broadening ERA and relevance

- Challenge-based ERA actions
- Synergies with education EU Skills Agenda
- Synergies with sectoral and industrial policy, to boost innovation ecosystems
- Active citizen and society engagement

Amplifying access to excellence

Advancing R&I investments and reforms



Keeping the policy momentum

- 2015 'Open, data-intensive and networked research as a driver for faster and wider innovation' [Council Conclusions]
- 2016 'The transition towards an Open Science system' [CC]
- 2018 'Access to and preservation of scientific information' [EC Recommendation] + 'Accelerating knowledge circulation in the EU' [CC] + 'European Open Science Cloud' [CC]: "A change of culture among researchers towards openness is a precondition for the successful implementation of the EOSC"
- 2021 'Pact for Research and Innovation in Europe' [Council Recommendation] + 'Future governance of the European Research Area', including ERA Policy Agenda 2022-24 [CC]: "Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the EOSC
- 2022 'Research assessment and implementation of Open Science' [CC]



OS and EOSC fully embedded in ERA Policy Agenda

ERA Action 1: "Enable the open sharing of knowledge and the re-use of research outputs, including through the development of the EOSC"

Motivations:

- Open science practices and skills becoming the 'new normal' for undertaking research
- Providing seamless access to a rich portfolio of FAIR data and services in all domains
- Assessing trends over time of the uptake of open science practices across Europe

Aligned with the outcomes of Action 1 and of the EOSC Tripartite Event 2021

- Deploy open science principles and identify best practices
- Deploy the EOSC core components and services, federate data infrastructures and improve interoperability of data;
- Establish a monitoring mechanism to support MS/AC and other EOSC stakeholders in tracking EOSC contributions and the uptake of Open Science.
- Commitments by 25 MS, 3 AC and 9 stakeholder groups to actively participate.

Synergies with other ERA actions

• Infrastructures, assessment, legislation, HEI/universities, international cooperation, ERA monitoring

EOSC part of the 'European Strategy for Data'

EOSC is defined as a basis for a 'science, research and innovation' data space articulated with other common sectoral data spaces

 EOSC contribution to Commission Staff Working Document on Common European Data Spaces (SWD(2022)45)







EC continued support to the EOSC governance

- Support to run the EOSC Steering Board and its three sub-groups
 - Including 92 national representatives from 43 countries (27 MS, 16 AC)
- Collaboration with the EOSC-A to run the EOSC Partnership Board
 - Approval of AAPs for 2021 & 2022, SRIA v1.0 and EOSC monitoring Framework
 - Expected later this year: agreement on the SRIA 1.1 and on the AAP 2023
- HE Support to the EOSC European Partnership
 - Update the SRIA and corresponding Roadmaps
 - Organise the cooperation with EOSC-relevant projects; monitor their results
 - Monitor EOSC key performance indicators;
 - Develop a framework to implement the EOSC rules of participation
 - Link to other relevant Horizon Europe Partnerships, Clusters, and sectoral data spaces
 - Develop and test models for a lasting long-term sustainability framework

EC support to monitoring Open Science and EOSC readiness

Roll-out of key layers of the EOSC Observatory

- Builds on a series of H2020 capacity-building projects for EOSC monitoring
- Launch of the Dashboard to discover and analyse EOSC Readiness
- https://eoscobservatory.eosc-portal.eu/home

Co-development of **EOSC national survey** questions and indicators

- Builds on intense collaboration between the EOSC Steering Board and the EOSC-Future consortium
- Several reports by the end of this year:
 - Report on EOSC Readiness
 - Report on EOSC-SB financial contributions analysis and recommendations
 - Report on national contributions to the EOSC
- Launch of the Survey 2022 by the EOSC Steering Board
- Launch of a first EOSC Catalogue of OS practices

Relationship with the **ERA monitoring** mechanism

Through ERA action 19



Study on the European Research Data Landscape

- Scope
 - All fields of science; geographically covering EU **Member States**, H2020 **Associated Countries**, and **UK**
 - Survey of **researchers**: 15066 responses + of **research data repositories**: 316 responses
 - FAIRness assessment of 31 data repositories (more than 7000 datasets in total)
 - Six case studies to illustrate specific FAIRification aspects of repositories
- Study outcome will be presented in detail during the Symposium (15 Nov, 14h30)
 - Only 40% of researchers occasionally **store data in research data repositories**; 1/3 never heard about **FAIR principles**; 2/3 develop **DMPs** but **other FAIR-aligned practices** much less common
 - Main barriers: Time, effort and financial costs; Data protection and legal restrictions; Lack of recognition
- Baseline for reuse in the context of the EOSC European Partnership



Support to extension of European Covid-19 Data Platform and EOSC articulation with Health Data Space

The European COVID-19 Data Platform now indexes
 COVID-relevant SSH data from the CESSDA catalogue and provides
 a global search feature that allows users to search across all different
 data types, supported by 22 different databases



- An EHDS pilot use case on colorectal cancer data will be run by ELIXIR and the Federated European Genome-phenome Archive (Federated EGA) components of the Platform, will be piloted as a solution for sharing sensitive human data.
- EOSC4Cancer project will provide the **infrastructure** for the exploitation of **cancer data for the EU Cancer Mission**.





Continued EOSC engagement with ESFRI and eIRG

ESFRI-EOSC relationship

- ESFRI-EOSC Task Force until March 2022
- 3rd ESFRI-EOSC Workshop (24-25 Jan 2022): "What does EOSC bring to RI users?"
 - How can RI communities and researchers use and benefit from the EOSC
 - How do the thematic RIs and ESFRI clusters fit into the EOSC ecosystem and the evolving European landscape for RIs as part of the ERA policy agenda
- ERAC and ESFRI discussion on future ESFRI-EOSC coordination
 - In the context of the digital transition of European Research Infrastructures

EOSC and eIRG

- Participation in the eIRG meetings in 2022
- Contribution to the upcoming eIRG White Paper 2022 on "Cooperation and coordination between European e-Infrastructures"





EC implementation of HE Calls 2021-2022 under RI-INFRAEOSC Destination

EU investment of 136 Million €

- First wave of HE INFRAEOSC projects addressing priorities of the EOSC Multi-Annual Roadmap 2021-22 of SRIA v1.0
- HE Projects coordination meeting organized by the EC on 30 September 2022
- Market consultation for the procurement of EOSC Platform: PIN published on 4 May 2022 followed by two open webinars

Acronym	Type of Action	Topic	Start date	Duration
Skills4EOSC	CSA	Supporting an EOSC-ready digitally skilled workforce	01/09/2022	36M
EOSC Focus	CSA	Supporting the development and coordination of activities of the EOSC Partnership	01/06/2022	36M
FAIRCORE4EOSC	RIA	Deploying EOSC-Core components for FAIR	01/06/2022	36M
FAIR-EASE	RIA	Innovative and customizable services for EOSC	01/09/2022	36M
EuroScienceGateway	RIA	Innovative and customizable services for EOSC	01/09/2022	36M
RAISE	RIA	Innovative and customizable services for EOSC	01/10/2022	40M
Al4EOSC	RIA	Innovative and customizable services for EOSC	01/09/2022	36M
SciLake	RIA	Innovative and customizable services for EOSC	01/01/2023	36M
FAIR-IMPACT	CSA	Enabling discovery and interoperability of federated research objects across scientific communities	01/06/2022	36M
EOSC4Cancer	RIA	FAIR and open data sharing in support of cancer research	01/09/2022	30M

HE RI-INFRAEOSC DESTINATION 2023-2024 ready for adoption

EU investment of 130 Million €

- Defined considering input by the EOSC Association as part of the EOSC European Partnership (alignment with the EOSC Multi-Annual Roadmap 2023-2024)
- Presented, discussed and finalised in consultation with the Member States
- Publication expected on 28 November; Horizon Europe RI-INFRAEOSC Call 2023 to open on 6 December 2022 and close on 9 March 2023 (tbc)



EC promoting mainstreaming and synergies

■ EOSC mainstreaming across Horizon Europe

- Mandated (including OA and RDM in line with FAIR) and recommended open science practices (including FAIRification of data)
- Evaluation of open science under 'excellence' and 'quality of implementation' award criteria
- Embedding/integrating, where relevant, open science practices like FAIR data sharing and management and interconnection to EOSC policies and infrastructures in Call topics across the programme
- Flagging of relevant Call topics: "EOSC and FAIR data"

Synergies with other EU programmes

- Synergies between Horizon Europe and ERDF programmes: guidance
 https://ec.europa.eu/info/files/synergies-between-horizon-europe-and-erdf-programmes-draft-commission-notice-en-
- EOSC in scope of the Recovery and Resilience Facility and used by several MS in the Open Science / EOSC context

Plans for 2023: policy actions

- ☐ Joint EC/MS implementation of **ERA Action** 1 on open science practices, EOSC implementation and monitoring
- Further articulation of EOSC in relation to other Data Spaces of the 'European Strategy for Data'; sharing EOSC & FAIR experience
- Options for the **EOSC Post-2027** through the EOSC Tripartite Governance
- Agreement with the EOSC Association on an **updated EOSC SRIA**; Additional Activity Plan 2024 and reporting on 2021 and 2022
- Continued engagement at **European and international levels** including with Research Data Alliance, ISC/CODATA-WDS, UNESCO, G7 OSWG



Plans for 2023: programme actions

- Launch of new projects from INFRAEOSC **Calls in 2022**; topics covered: services and tools underpinning research assessment; coordinating technical infrastructure for institutional OA publishing; FAIR and open data sharing supporting Oceans Mission; supporting initiative for global standards for open sharing of FAIR research outputs
- □ Launch of RI-INFRAEOSC Call 2023, followed by evaluation and grant preparation
- Start of the procurement action for the EOSC Platform
- Interaction with EOSC Association to identify future EOSC priorities & topics
- Preparation of the Strategic Planning for the RI WP 2025-2027
- Further mainstreaming across Horizon Europe Clusters and Missions
- Linking with deployment programmes such as the Digital Europe Programme and the Connecting Europe Facility



Thank you!



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