

2023 Coordination meeting of EOSC-related projects funded under Horizon Europe

15-16 June 2023 Meeting report



2023 Coordination meeting of EOSC-related projects funded under Horizon Europe 15-16 June 2023 - Meeting report

European Commission
Directorate-General for Research and Innovation
Directorate A — ERA & Innovation
Unit A.4 – Open Science and Research Infrastructures

Contact Javier Lopez Albacete Email rtd-eosc@ec.europa.eu

Javier.lopez-albacete1@ec.europa.eu RTD-PUBLICATIONS@ec.europa.eu

European Commission B-1049 Brussels

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15-16 June 2023

Meeting report

Table of contents

2023 PROJI BRUS	COORDINATION MEETING OF EOSC-RELATED ECTS FUNDED UNDER HORIZON EUROPE SELS, 15-16 JUNE 2023 - MEETING REPORT		
	oduction		
2. Obje	ectives	5	
2.1.	Meeting attendance	5	
2.2.	Workshop program structure	5	
3. Sum	nmary highlights	6	
4. Sum	nmary from each session	8	
4.1.	Session 1: Opening and Welcome	8	
4.2.	Session 2: EOSC implementation through the EOSC European Partnership		
4.2.1.	Part 1	9	
4.2.2.	Part 2 and 3	10	
4.3.	Session 3	12	
4.3.1.	BoS: Sharing of FAIR research results at the disciplinary and interdisciplinary levels, including EOSC contributions to EU Missions		
4.3.2.	BoS: Federation of services and core components of EOSC	12	
4.3.3.	BoS: End-user perspective: Engagement, skills, rewards, and incentives		
4.4.	Session 4: Towards an operational EOSC federation	13	
4.4.1.	Part 1	13	
4.4.2.	Part 2	14	
5. Ann	exes	15	
5.1.	Annex 1: Projects and projects representatives	15	
5.2.	Annex 2: Participant list	19	

2023 COORDINATION MEETING OF EOSC-RELATED PROJECTS FUNDED UNDER HORIZON EUROPE BRUSSELS, 15-16 JUNE 2023 - MEETING REPORT

Executive Summary

A total of 59 participants attended the second edition of the coordination meeting of EOSC-related projects funded under Horizon Europe. The meeting was held in Brussels on June 15-16 as a fully in person meeting. The main objective was achieved to promote cooperation in the context of the European EOSC Partnership for a synergetic implementation of EOSC. Representatives of the European Commission, the EOSC Association and 19 project consortia updated each other on their respective contributions towards achieving the EOSC Strategic Research and Innovation Agenda (SRIA). They also identified new opportunities for collaboration and tackling issues related to the operational consolidation of EOSC in the medium to long term.

The European Commission provided an update of the EU policies for Open Science, outlining the importance of EOSC in the ERA policy agenda and in the EU Strategy for Data. It was highlighted that EOSC shall be a joint venture, requiring the constructive engagement of all involved stakeholders at all implementation levels. The EOSC Association plays a fundamental role in enabling the cooperation within the broad EOSC community, including between EU-funded projects' consortia. In turn, representatives from the projects presented the main lines of activities of their projects and how they are contributing to fulfil the specific and operational objectives of the SRIA. The discussion allowed to identify ongoing collaborations and dependencies among projects and with other stakeholders in the broader EOSC ecosystem. The Macro-Roadmap of the EOSC Partnership, under development by the EOSC Focus project, shall provide a clear mapping of current and future contributions by EUfunded projects and by EOSC-A members, thereby facilitating the identification of gaps and of new opportunities for collaboration.

The upcoming deployment of the EOSC EU node will accelerate the transition to a fully operational EOSC. Key topics for the discussion included how to increase FAIR data productivity in Europe and stimulate the connection of data and service providers to the EOSC federation while increasing engagement and upskilling of the end-user community. The project representatives were updated on, and invited to participate in, the reflection process on the possible evolution of governance and operational model for EOSC post 2027, currently taking place within the EOSC tripartite collaboration.

The participants agreed to the importance of this type of coordination events and agreed to explore additional avenues for a more in-depth collaboration among the projects, possibly through dedicated, targeted meetings.

All meeting presentations are available at this link.

1. Introduction

The European Open Science Cloud (EOSC) is a key initiative to enable and mainstream Open Science in Europe. The realisation of the EOSC vision as a Web of FAIR¹ data and services for science across borders and scientific disciplines is a community-driven process involving a large variety of stakeholders at different levels: EU, national and institutional. Thus, efficient cooperation is essential to a coherent advancement of EOSC.

With the launch of the Horizon Europe EOSC European Partnership (the Partnership) in 2021 the EOSC initiative entered its second phase of development (2021-2030). The Partnership brings together the European Commission (EC), the EOSC Association (EOSC-A) representing the European research community, as well as Member States (MS) and Countries Associated to the Horizon Europe programme (AC) with the main goal to ensure a coordinated approach to policy initiatives, investments, monitoring, development and operation of the EOSC federated infrastructure.

A key contribution to the Partnership is the EU funding of Horizon Europe (HE) grants (managed by the EC and its executive agencies) supporting the advancement of EOSC. These grants result mainly from INFRAEOSC Calls under the Horizon Europe Work programmes on Research Infrastructures. In turn, the EOSC-A and its members provide another key contribution to the Partnership in the form of additional in kind activities advancing the EOSC SRIA. Adequate coordination and complementarity to these contributions is crucial to increase the efficiency of the Partnership.

Horizon Europe Calls in 2021 and 2022 have resulted in nineteen EU-funded project consortia grants of direct relevance to the EOSC Partnership (fifteen funded under the INFRAEOSC destination and others under the WIDERA, INFRA-DEV and EMERGENCY calls respectively), all of which participated in the meeting. The overarching goal of this meeting was to provide the projects consortia with a clear overview of the Partnership context, to update them on relevant policy developments and to foster a spirit of cooperation between the various consortia. The meeting allowed to showcase the breadth of project's contributions, to identify common interests and new opportunities for collaboration in the context of the Partnership and to jointly discuss the main challenges for the transition of EOSC from a piloting to a fully operational phase.

The meeting was organised by the Unit on Open Science and Research Infrastructures (RTD.A4) in the Directorate General for Research and Innovation (DG R&I) of the European Commission. The concept and agenda of the meeting were defined in close cooperation with DG CNECT (CNECT.C1 Unit - Open Science and Digital Modelling), the European Research and Executive Agency REA (REA.C4 Unit - Reforming European R&I and Research Infrastructures) and the EOSC-A. The meeting took place as a one-day, in-person meeting and was held in EC premises (SPA-2 building) in Brussels.

¹ FAIR stands for Findable, Accessible, Interoperable, and Reusable.

2. Objectives

The main objectives of the meeting have been achieved:

- To deepen the collaboration between the consortia involved in EOSC-related projects funded under Horizon Europe, the EOSC Association and the EC in the context of implementing the EOSC European Partnership and its Strategic Research and Innovation Agenda (SRIA).
- To provide an update of the contributions made by projects consortia, the EOSC-A and the EC towards achieving the strategic and operational objectives of the SRIA.
- To discuss the challenges and next steps for the implementation of EOSC as fully operational, federated infrastructure that enables the sharing of FAIR data and services across borders and disciplines.

2.1. Meeting attendance

The meeting was attended by a total of <u>59 participants</u> (see Annex 2 for full attendance list). These included representatives from:

- Nineteen EU-funded projects of direct relevance to the objectives of the EOSC Partnership (see Annex 1 for details).
- EOSC Association.
- DG RTD; A4 Unit Open Science and Research Infrastructures.
- DG CNECT; C1 Unit Open Science and Digital Modelling.
- REA; C4 Unit Reforming European R&I and Research Infrastructures.

2.2. Workshop program structure

The workshop program was structured in 4 sessions:

- Session 1 Opening and scene-setter
- Session 2 EOSC implementation through the EOSC European Partnership EOSC
- Session 3 Parallel discussion sessions by key topic
- Session 4 Towards an operational EOSC federation

3. Summary highlights

The meeting allowed to update the participants on their respective contributions to the development of EOSC along the strategic and operational objectives and action areas set in the EOSC SRIA, as well as to discuss the next steps and challenges for the EOSC in the short, medium and long terms. EOSC plays a key role in the EU policy for Open Science. It is also recognised by the EU Strategy for Data as the EU data space for science, research and innovation. The realisation of the EOSC vision is community-driven and inclusive.

These principles underpin the current EOSC tripartite governance and the EOSC European Partnership. EOSC has also a visible place in the in the context of the ERA Forum and its work on the implementation of the ERA policy agenda 2022-2024. Project representatives were encouraged to participate in the synergetic development of the EOSC not only through their project's contributions, but also by engaging in the open discussion for shaping the future of EOSC and to act as ambassadors of EOSC vision in their respective communities.

A main EC commitment to the EOSC Partnership is the EU investment in collaborative projects funded under Horizon in the period 2021-2027 for an indicative maximum amount of 490 million. The nineteen projects attending the meeting, funded under 2021 and 2022 calls, represent a total EU investment of approximately EUR 100 million. They are advancing the implementation of the EOSC SRIA along complementary directions, like developing users and providers environments for FAIR data sharing, including within thematic communities and in support of the EU missions of Horizon Europe, developing standards and technical solutions, engagement, and skills and also in supporting the global vision of EOSC through international cooperation and alignment.

The Macro-Roadmap of contributions to the SRIA, under development by the EOSC Focus project, provides a tool for detailed mapping and visualisation of all contributions to the SRIA. The contributions by EU funded projects are being analysed and shall be presented in a first stage, while in-kind additional contributions by EOSC-A members will be incorporated to the Roadmap at a later stage. While many project consortia are already collaborating on related areas of activity, the meeting allowed to identify new opportunities for collaboration and shared interests. The EOSC-A, via the EOSC Focus project, is committed to facilitate and support further cooperation among project consortia, including through the established Vademecum of coordination actions (presented a year ago) and by developing the concept of an INFRAEOSC Winter School for more in-depth, hands-on, technical cooperation, as proposed during the meeting.

The Multi Annual Roadmap (MAR) 2025-2027, under development by the EOSC Partnership, including through an intensive consultation process by the EOSC Association with its members, aims at identifying the key priorities for the upcoming years. The MAR is a central ingredient of the SRIA and provides key input for the definition of the INFRAEOSC calls of HE in that period. On similar timescales, the upcoming deployment of the EOSC EU node will enable the operationalisation of the EOSC federation through the provision of central, "core" services, currently under procurement by the EC for an initial period 2024-2026. Key topics for the discussion included how to stimulate the connection of large research infrastructures and other data and services providers to the EOSC federation and how to improve FAIR data productivity and the volume of high-quality FAIR data and other research digital objects available through the federation. It was also noted that the success of the EOSC federation will require sustained efforts to engage, train, upskill and reward end-users and data managers.

To this end, the development of competence centres and of data stewards' professional profiles, as well as the EOSC support to the reform of research assessment are instrumental.

On longer timescales, 2027 marks an important milestone in the reflection process for EOSC, as the current Horizon Europe framework will come to an end. Project representatives were updated on and invited to participate in the strategic discussion being held within the EOSC tripartite collaboration on the governance and sustainability options for EOSC beyond 2027. The evolution of the current EOSC European co-programmed Partnership after Horizon Europe and the role of the EOSC Association in the future EOSC ecosystem were among the main questions addressed.

The future integration of EOSC with the other EU data spaces foreseen in the EU Strategy for Data was discussed. A harmonised development of data spaces and the definition of adequate interoperability standards and protocols will be essential for EOSC as an enabler of secondary use of research data in all sectorial domains and as a provider of related services.

Overall, the meeting was found very successful by the participants who suggested to continue the organisation of coordination events on an annual basis. All parties agreed that deeper cooperation among all actors involved is indeed essential for a coherent implementation of the EOSC Partnership objectives. The meeting was also extremely useful in terms of networking.



Figure 1. Group photo taken during the meeting. Courtesy of the EOSC Association

4. Summary from each session

4.1. Session 1: Opening and Welcome

The meeting was opened by Anna Panagopoulou (AP), Director for the European Research Area and Innovation at DG R&I, who highlighted the transformation towards Open Science as a key political priority for the Union. AP outlined that the development of the EOSC is a gradual, community-driven process based on mutual alignment at European, national and institutional levels and explained the EOSC Tripartite governance for the current implementation phase (2021-2030), which is steered by the EC, the Member States and Associated Countries and the EOSC Association representing the voice of the community. Inclussiveness and cooperation are also at the core of the ERA Forum and the ERA policy agenda 2022-2024, of which Open Science is a key ingredient.

AP made a call for project consortia to engage actively in the ongoing discussions for the advancement of the EOSC, to go beyond the very valuable contributions delivered in the remit of their projects, and to express their views, insights and criticisms to ensure that EOSC is a truly joint deliverable by and for the research and innovation community in Europe.

Michael Arentoft (MA), Head of the Open Science and Research Infrastructures Unit at DG R&I recalled that Open Science practices are not yet fully mainstreamed in the research and innovation community, as shown by several indicators and key figures. To improve on the current situation and make OS the new norm, coordinated action on several fronts is required. MA outlined how the main EC policies and initiatives on the reform of research assessment, Open Access and legislative environment, the EOSC as the EU data space for science, research and innovation, the relationship between science and society, and their articulation into the Horizon Europe programme coherently contribute to push the uptake of OS practices. The EC support to EOSC includes dedicated policy support via the ERA policy agenda and the European Strategy for Data, direct EU investment in EOSC developments of up to €490 million through calls in the Research Infrastructures work programme of Horizon Europe, as well as continuous involvement in the EOSC governance (EOSC Steering Board, EOSC Partnership Board) and coordination with ERA-Forum, ESFRI and various MS-driven think tanks as well as with the monitoring of the uptake of Open Science and 'EOSC readiness'.

Finally, MA reminded that the main objective of the meeting is to foster collaboration between the consortia of HE funded projects, the EC and the EOSC-A in order to advance the development of the EOSC in a coordinated way, and to jointly tackle related, emerging issues like the operational consolidation of the EOSC federation and the definition of adequate sustainability models.

The President of the EOSC-A, Karel Luyben (KL) presented EOSC as the European contribution to a world wide web of FAIR data. KL outlined the key role of the EOSC-A in steering the coordination and in representing the broad community of stakeholders engaged with EOSC. In particular, the close cooperation between EU-funded projects contributing to the EOSC implementation and the EOSC-A is critical for adequate monitoring and reporting activities by the EOSC-A, for the drafting of future EOSC Multi-Annual Roadmaps (MAR) and to assess progress along the EOSC SRIA. It is therefore critical to establish a culture of trust and cooperation between the EOSC Association and the EOSC projects.

KL explained that, at present, 13 task forces engaging over 500 volunteers explore end provide guidance on critical issues for the advancement of the EOSC along 4 broad categories: i) Technical challenges on EOSC, ii) Metadata and data quality, iii) research careers and curricula and iv) EOSC sustainability. The 6th General Assembly of the EOSC-A, which took place on 22-23 May, allowed for further, in vivo debate on these topics via dedicated interactive table discussions. Additionally, the ESFRI RI Working Group of the EOSC-A (gathering the 21 ESFRI and ERIC research infrastructures (RIs) members of the EOSC-A) aims at defining a common position for the governance and technical aspects needed for an optimal integration of large RIs in the EOSC federation.

4.2. Session 2: EOSC implementation through the EOSC European Partnership

4.2.1. Part 1

Session 2 started with a presentation by Pantelis Tziveloglou (PT), Open Science and Research Infrastructures Unit at DG R&I, who explained the process leading to the definition of the INFRAEOSC Destination of the Research Infrastructures work programme of Horizon Europe, for which the EOSC-A is tasked to provide essential input based on the consultation of the wider research community in Europe. PT recalled the provisions for cooperation between the EC and EOSC-A foreseen in the Memorandum of Understanding (MoU) of the EOSC Partnership. He stressed the importance of the Strategic Research and Innovation Agenda (SRIA) as the key document setting the priorities for the EOSC Partnership, as it provides the overall framework for future activities, in the context of the EOSC Partnership, to be undertaken at EU level and at national/institutional level.

The current SRIA provides a granular translation of priority areas and expected outcomes for the years 2021 and 2022 and has been instrumental to shape the topics under the 2021-2022 Work Programme for Research Infrastructures. The 15 INFRAEOSC projects funded under INFRAEOSC 2021-22 calls, all represented in this meeting, shall receive an EU funding for a total of 87 M€, and they count with 221 unique participants. PT summarized the main elements and topics of the INFRAEOSC 2023 (currently under evaluation) and 2024 calls, which foresee an EU contribution of 69 and 61 million euros respectively, outlining how the different call topics map onto the priority action areas of the SRIA.

Finally, PT announced the introduction of policy briefs as new, mandatory deliverables for INFRAEOSC projects at all reporting periods foreseen in their grant agreements. Policy briefs are meant to provide feedback on progress by projects on the implementation of the SRIA as well as policy recommendations to the EC.

Laura Elena Apostol (LEA), Head of Sector of REA Unit C4, explained the distribution of roles between the EC DG R&I and DG CNECT, responsible for the definition of policies and drafting the Work programme, and REA, in charge of the implementation of calls for proposals and grant management. LEA provided a detailed overview of contractual provisions and reporting guidelines for projects funded under Horizon Europe Calls within the INFRAEOSC destination, including the new features under the "Continuous reporting" like and the Impact Questionnaire, of relevance for the monitoring and evaluation of HE Programme performance. Financial aspects of grant management, like eligibility of costs, pre-financing and payment schedule as well as the possibility of audits and amendments were covered in her presentation. Communication, dissemination, and exploitation tools made available by REA to project consortia were also presented.

Ute Gunsenheimer (UG), EOSC-A Secretary General and Coordinator of the EOSC Focus project, Sara Garavelli (SG), CSC, and Ilire Hasani-Mavriqi (IHM), TU Graz, presented the activities of the EOSC Focus project in support of the EOSC Partnership. UG reminded that in-kind, additional activities by EOSC-A members (AAPs) are a key contribution to the Partnership and to the implementation of the SRIA. A first estimate (which may vary depending on the definition of eligible costs) indicates that AAPs for the 2021-year amount to over 309 million euro, with similar amounts foreseen for 2022 and 2023 years. Demonstrating the added value of EOSC and monitoring the progress of the Partnership, for which the EOSC Partnership Monitoring Framework and its Key Performance Indicators (KPIs) are instrumental, are also main contributions of the EOSC-A to the Partnership.

The project EOSC Focus is also supporting the Tripartite governance of EOSC, and has facilitated the organisation and dissemination of EOSC National Tripartite Events to date. These events contribute to reinforce the involvement of national research communities in the EOSC, and to build up national EOSC communities, new collaborations, and strategies and roadmaps that align with and reinforce the EOSC vision.

SG and IHM presented the EOSC Implementation Macro-Roadmap, as a new tool for tracking, visualizing and understanding how the different HE INFRAEOSC projects and the EOSC-A members contribute to the EOSC Implementation over time. The Macro-Roadmap will allow to identify potential gaps in terms of EOSC implementation priorities, facilitate the collaboration among the EOSC stakeholders on topical areas and reduce overlaps. The collection of information from projects is based on interviews, standardised questionnaires and on desk research. SG and IHM acknowledged the very positive feedback and engagement by projects so far and announced that the survey on EOSC-A AAPs by members is about to start. AAPs shall be incorporated to the Macro-Roadmap hand-in-hand with projects' contributions, thereby making of the Macro-Roadmap a truly joint Partnership deliverable. A first version of the Macro-Roadmap will be presented at the 2023 EOSC Symposium in Madrid, and a revised, full version including also AAPs is expected to be published around Q1 2024.

4.2.2. Part 2 and 3

The second and third parts of session 2 were dedicated to presentations by project's representatives, of a duration of approximately 10 minutes each. Projects were requested to follow a template for their presentations with a structure similar to that of the questionnaire for the Macro-Roadmap. This round of presentations allowed projects to share the basic info about the project consortia and to highlight what are the main (planned or delivered) contributions to the priority action areas identified in the SRIA, as well as the main expected impact from each project to the development of EOSC. Projects also indicated ongoing collaborations with other EU-funded projects or other stakeholders within the EOSC ecosystem, but also beyond, and the relevant contribution of EOSC projects to EU missions in Horizon Europe, as Cancer or Oceans and Coastal waters. Many new opportunities for collaboration, shared interests and common tools and challenges for the projects' development were identified during the meeting.

Project presentations were made in the following order:

- BY COVID, presented by Marieke Williams (ELIXIR).
- EOSC4Cancer, presented by Salvador Capella (BSC).
- AguaINFRA, presented by Henning Sten Hansen (AAU)
- Blue-Cloud2026, presented by Sara Pittonet (Trust-IT)
- FAIR-EASE, presented by Alessandro Rizzo (CNRS)
- Al4EOSC, presented by Alvaro Lopez Garcia (CSIC)
- RAISE, presented by Evdomikos Konstantinidis (AUT)
- EuroScience Gateway, presented by Bjoer Gruenning (University of Freiburg)
- FAIRCORE4EOSC, presented by Tommmi Suominem (CSC)
- FAIR IMPACT, presented by Vasso Kalaitzi (DANS)
- CRAFT-OA, presented by Margo Bargheer (University of Göttingen)
- SciLake, presented by Thanasis Vergoulis (Athena RC)
- Skills4EOSC, presented by Emma Lazzeri (GARR)
- GraspOS, presented by Thanasis Vergoulis (Athena RC)
- e-IRGSP7, presented by Jan Wiebelitz (CHI, Leibniz Universität Hannover)
- StRESFRI, presented by Fotis Karayannis (Athena RC)
- RDA Tiger, presented by Ari Asmi (RDA Europe)
- WorldFAIR, presented by Simon Hodson (CODATA)

4.3. Session 3

Session 3 was structured in 3 parallel breakout sessions dedicated to in-depth discussion on selected topics of special relevance for the implementation of EOSC. The summary of these discussions is presented under session 4 below.

- 4.3.1. BoS: Sharing of FAIR research results at the disciplinary and interdisciplinary levels, including EOSC contributions to EU Missions
- Ice-breaker presentation 1: Paolo Manghi, OpenAIRE.
- Ice-breaker presentation2: Salvador Capella, EOSC4Cancer.
- Moderator & Rapporteur: Ingrid Dillo, FAIR-IMPACT.
- 4.3.2. BoS: Federation of services and core components of EOSC
- Ice-breaker presentation 1: Niklas Blomberg, BY-COVID.
- Ice-breaker presentation 2: Michel Schouppe, EC
- Moderator & Rapporteur: Pasquale Pagano, BlueCloud2026.
- 4.3.3. BoS: End-user perspective: Engagement, skills, rewards, and incentives
- Ice-breaker presentation 1: Emma Lazzeri, Skills4EOSC
- Ice-breaker presentation 2: Javier Lopez Albacete, EC
- Moderator & Rapporteur: Sara Garavelli, EOSC-A

4.4. Session 4: Towards an operational EOSC federation

4 4 1 Part 1

The session started with a brief reporting from rapporteurs on the main topics discussed during breakout sessions the day before, followed by open discussion on those topics in plenary mode.

Bos 1

Rapporteur: Ingrid Dillo. The discussion highlighted the importance of developing, communicating and enforcing (minimal and evolutive) standards for FAIR data sharing, including through adequate gatekeeping mechanisms in the publishing data workflow, like e.g. peer-review or metadata curation. Making research digital objects (F)indable and (A)ccessible is far more developed than making them (I)nteropearble and (R)eusable. However, sensitive data require specific data and technical solutions. Costs associated to data FAIRification and its maintenance and the lack of appropriate incentives for researchers and research units were identified as two major block roads to mainstream FAIR data management, which is still very limited to date.

Bos 2

Rapporteur Pasquale Pagano. The question of the EOSC value proposition to research infrastructures and other data centres is crucial for stimulating their connection to the EOSC federation. Identifying commonalities that can be efficiently addressed across disciplines and countries and clarifying the prospects for economies of scale by bringing services to EU level are important steps in the process. Defining targets of integration levels for 2027 will facilitate gauging the success of the EOSC uptake by the research community. However, minimal quality requirements for both FAIR data and services should also be clearly established, including through the Rules of Procedures and its possible evolution.

Bos 3

Rapporteur: Sara Garavelli. The ongoing process to reform of research assessment is a key movement that EOSC should support to ensure that open science practices are rewarded and recognised. EOSC could become the infrastructure supporting the development of new, open quantitative indicators of science supporting for improved assessment methods, in collaboration with CoARA². Further, mainstreaming FAIR data management and sharing practices in the next EC FP10 framework programme in the form of obligations or recommendations could help to improve awareness and to foster its uptake. The top-down approach used with GDPR was considered a case of success that could inspire solutions for EOSC. The establishment of national competence centres as pool of experts covering all the different skills needed for OS FAIR and EOSC and promoting data stewards' curricula and professional profiles are crucial for the EOSC. Bold and imaginative approaches stemming from communities of practice, like badges or prizes, should also be promoted for increased visibility of OS practitioners.

² Coalition for Advancing Research Assessment

Part 1 was closed with a presentation by Karel Luyben on the EOSC Multi-Annual Roadmap (MAR) 2025-2027. KL recalled that the MAR is an essential part of the EOSC SRIA, setting priorities for activities at the institutional, national and EU levels and informing the INFRAEOSC Work Programme defined by the European Commission. KL summarised the open consultation with stakeholders on the Multi-Annual Roadmap (MAR) for the years 2025-2027, with focus on the year 2025. The survey shared with EOSC-A members has resulted in 653 comments by a total of 57 organisations. After analysis and categorisation of this input by the EOSC-A Board, a first draft was shared with the EC in March and, after final update, the MAR 2025-27 will be integrated into the SRIA, leading to SRIA version 1.2.

4.4.2. Part 2

Michel Schouppe (MS), EOSC Team Leader in the Unit on Open Science and Research Infrastructures at DG R&I, presented the main elements of the ongoing reflection process by the EOSC Steering Board, the EOSC Association and the European Commission on the possible governance and financing models of EOSC after 2027. Key questions guiding the debate relate to possible joint governance of the operation of the EU node and the policies applicable to the EOSC federation, and to the levels of integration (management, financial, scientific) to be ambitioned for the implementation of the EOSC after 2027. The 'helicopter view', identifies 5 main tasks for the future EOSC, in terms of which 3 high-level scenarios have been singled out.

Options under consideration include the possibility of a bridging solution between 2026, when the first contract for operations of the EOSC EU node will expire, and the starting of the next EC framework program FP10 in 2028. Dejan Dvorsek (DD), Deputy Head of the Open Science and Research Infrastructures Unit at DG R&I presented an overview of the EU Strategy for Data, that recognises EOSC as the science, research and innovation data space that will be connected and fully articulated with the other 9 planned sectorial data spaces.

EU data spaces are built on similar design principles; namely as federated data ecosystems with shared rules, policies, and data governance structures. However, the present degree of maturity and progress in implementation of such elements vary largely among different data spaces. Guidelines and tools are being made available for their development. The European Innovation Data Board (EDIB) will be established in September 2023 and its aim will be developing consistent practice in processing requests for data reuse, and for competent authorities in enforcing requirements applicable to data brokerage and providers. The Data Space Support Centre (DSSC) provides support, toolkits and guidance for networks of stakeholders to establish the data spaces in a coherent way. It would be advisable that EOSC stakeholders interact in a unified way with the DSSC. Finally, open source, smart middleware solutions like SIMPL, procured by the EC, are expected to contribute to facilitate technical alignment and interoperability among the different spaces.

Karel Luyben made the last presentation of the meeting, with a reflection on the future of EOSC, and the possible evolution of the EOSC Partnership and of the EOSC Association itself. In KL's view, the future of EOSC-A is largely dependent on decisions made in relation to the distribution of tasks in the future EOSC governance, along the lines of the "helicopter view" presented by MS and expressed the willingness of the EOSC-A to continue to be a key player supporting the vision of EOSC as a web of FAIR data.

Closing: During the final exchanges of the meeting many participants outlined the usefulness of this kind of coordination meetings as a unique opportunity to jointly discuss all aspects of EOSC, from governance and policy advancements to implementation progess and challenges and prospects for the future of EOSC. Coordination meetings should be organised on a yearly basis, even if some evolution in its structure will be required due to the increasing number of projects joining the INFRAEOSC family. The proposal to also organise meetings that allow for more in-depth discussion of the technical aspects and concrete objectives of projects was put forward by several participants. EOSC Focus committed itself to develop the concept for such meetings, possible in the form of a INFRAEOSC Winter School or alike.

5. Annexes

5.1. Annex 1: Projects and projects representatives

- Al4EOSC: Artificial Intelligence for the European Open Science Cloud
 - o CORDIS. DOI 10.3030/101058593
 - o Project's representative(s): Alvaro Lopez Garcia.
 - Main project objective(s): To foster an AI exchange in the EOSC context, with added value, innovative and easily customizable services.
- AqualNFRA: Infrastructure for Marine and Inland Water Research
 - o CORDIS. DOI 10.3030/101058593
 - o <u>Project's representative(s)</u>: Alvaro Lopez Garcia.
 - Main project objective(s): To foster an AI exchange in the EOSC context, with added value, innovative and easily customizable services.
- <u>Blue-Cloud 2026:</u> A federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters
 - o CORDIS. DOI 10.3030/101094227
 - o Project's representative(s): Pasquale Pagano; Sara Pittonet Gaiarin
 - Main project objective(s): Blue-Cloud aims to create a federated ecosystem for FAIR and open data in marine research. Through a web-based platform, it offers simplified access to multidisciplinary datasets, analytical services, and computing facilities.

BY-COVID: Beyond Covid

- o CORDIS: DOI 10.3030/101046203
- o Project's representative(s): Katharina Lauer.
- Main project objective(s): to ensure that data on SARS-CoV-2 and other infectious diseases can be found and used by everyone, by linking established and emerging research infrastructures and data resources from social sciences, molecular life science, medical research and clinical trials, national public health institutes and leading infectious disease research groups across Europe into a single effort, ensuring a connected data response via the components of the COVID-19 Data Platform.

<u>CRAFT-OA</u>: Creating a Robust Accessible Federated Technology for Open Access

- CORDIS: DOI 10.3030/101094397
- Project's representative(s): Margo Bargheer, Johan Rooryck.
- Main project objective(s): the CRAFT-OA project aims to consolidate the Diamond OA publishing landscape, focusing on technical improvements for journal platforms and journal software, building communities of practice to foster overall infrastructure improvement, increase visibility, discoverability and recognition for Diamond OA publishing and to integrate Diamond OA publishing with EOSC and other large-scale data aggregators.

• e-IRGSP7: e-Infrastructure Reflection Group Support Programme 7

- o CORDIS. DOI 10.3030/101057802
- o Project's representative(s): Fotis Karayannis, Jan Wiebelitz.
- Main project objective(s): To assist the e-Infrastructure Reflection Group in achieving its goals by providing the required core operational services and assisting in its integration with relevant bodies. Vision: facilitate integration in the area of EU e-Infrastructures and connected services. Mission: to support policy-making for convergent/sustainable e-Infrastructures.

• EOSC Focus: EOSC Focus

- o CORDIS. DOI 10.3030/101058432
- <u>Project's representative(s)</u>: Ute Gunsenheimer, Ilire Hasani-Mavriqui, Sara Garivelli: Friederike Schröder-Pander
- Main project objective(s): To support the co-programmed EOSC Partnership in delivering its mission of establishing Open Science as the "new normal" and achieving the key objectives, outlined in the Memorandum of Understanding between the European Union and the EOSC Association

EOSC4Cancer: A European-wide foundation to accelerate Data-driven Cancer Research

- o CORDIS. DOI 10.3030/101058427
- o <u>Project's representative(s)</u>: Salvador Capella, Fotis Psomopoulos.
- Main project objective(s): EOSC4Cancer as provider of the infrastructure for the exploitation of cancer data for the EU Cancer Mission.

<u>EuroScienceGateway</u>: Leveraging the European compute infrastructures for dataintensive research guided by FAIR principles

- o CORDIS, DOI 10.3030/101057388
- o <u>Project's representative(s):</u> Bjoer Gruening; Anika Erxleben-Eggenhofer
- Main project objective(s): The overall objective of the EuroScienceGateway is to achieve its shared vision of an open collaborative digital space for European scientists.

FAIRCORE4EOSC: Core Components Supporting a FAIR EOSC

- o CORDIS. DOI 10.3030/101057264
- o Project's representative(s): Tommi Suominen, Anu Märkälä.
- Main project objective(s): The overall objective of the EuroScienceGateway is to achieve our shared vision of an open collaborative digital space for European scientists

• FAIR-EASE: FAIR EArth Sciences & Environment services:

- o CORDIS. DOI: 10.3030/101058785
- o Project's representative(s): Alesandro Rizzo, Christelle Pierkot.
- Main project objective(s): The overall objective of FAIR-EASE is to develop and operate distributed and integrated services for observation and modelling of the earth system, environment and biodiversity implemented in close cooperation with user-communities.

• FAIR-IMPACT: Expanding FAIR Solutions across EOSC

- o CORDIS. DOI 10.3030/101057344
- o Project's representative(s): Ingrid Dillo, Vasso Kalaitzi.
- Main project objective(s): The overall objective of FAIR-IMPACT is to realise a FAIR EOSC, that is an EOSC of FAIR data and services, by supporting the implementation of FAIR-enabling practices across scientific communities and research outputs at a European, national, and institutional level.

GraspOS: next Generation Research Assessment to Promote Open Science

- CORDIS, DOI 101095129
- o <u>Project's representative(s)</u>: Thanasis Vergoulis; Paolo Manghi.
- Main project objective(s): to investigate responsible research assessment approaches and interventions that take into consideration Open Science practices and to build a federated infrastructure that will act as an open data space offering data, indicators, tools, services and guidance to support and enable policy reform for research assessment.

- RAISE: Research Analysis Identifier SystEm
 - o DOI: 10.3030/101058479
 - o <u>Project's representative(s):</u> Evdokimos Konstantinidis, Gorka Epelde.
 - Main project objective(s): RAISE will design a distributed crowdsourced data processing system, moving from open data to data open for processing where each dataset owner will be acknowledged for her/his contribution to the research.
- RDA-Tiger: Research Data Alliance facilitation of Targeted International working Groups for EOSC-related Research solutions
 - o CORDIS. DOI: 10.3030/101094406
 - Project's representative(s): Ari Asmi, Wim Hugo.
 - Main project objective(s):
- SciLake: Democratising and making sense out of heterogeneous scholarly content
 - o CORDIS. DOI: 10.3030/101094406
 - Project's representative(s): Thanasis Vergoulis; Clifford Tatum.
 - Main project objective(s): SciLake will develop an ecosystem for creating, combining, and querying cross-domain and domain-specific Science Knowledge Graphs (SKGs).
- Skills4EOSC: Skills for the European Open Science Commons: Creating a Training Ecosystem for Open and FAIR Science
 - DOI: 10.3030/101058527
 - o Project's representative(s): Emma Lazzeri, Kevin Ashley.
 - Main project objective(s): Advance Open Science skills by unifying the current training landscape into a common and trusted pan-European ecosystem, closing the three gaps identified in the EOSC SRIA in relation to Open Science competences:
 - ✓ lack of Open Science and data expertise,
 - lack of a clear definition of data professional profiles and corresponding career paths, and
 - √ fragmentation in training resources.
- <u>StR-ESFRI3</u>: Support to Reinforce the European Strategy Forum on Research Infrastructures 3
 - o CORDIS. DOI: 10.3030/823711
 - Project's representative(s): Fotis Karayannis
 - Main project objective(s): The goal of the STR-ESFRI project is to reinforce the European Strategy Forum on Research Infrastructures (ESFRI) providing resources, tools and expertise in performing its activities and supporting its structures.

- WorldFAIR: Global cooperation on FAIR data policy and practice
 - o DOI: 10.3030/101058393
 - o Project's representative(s): Simon Hodson
 - Main project objective(s): WorldFAIR will advance implementation of the FAIR principles in a set of 11 disciplinary and cross-disciplinary case studies; particular attention will be paid to interoperability and reusability, and the development of a cross-domain interoperability framework.

5.2. Annex 2: Participant list

Name	First name	Organisation
Albacete Lopez	Javier	European Commission
Apostol	Laura Elena	Research Executive Agency
Arentoft	Michael	European Commission
Arranz	David	European Commission
Ashley	Kevin	Skills4EOSC
Asmi	Ari	RDA-Tiger
Bargheer	Margo	CRAFT-QA
Blomberg	Niklas	BY-COVID
Caetano	Isabel	EOSC Association
Capella	Salvador	EOSC4Cancer
Chamberlain	Martyn	European Commission
Cholova	Blagovesta	Research Executive Agency
Dillo	Ingrid	FAIR-IMPACT
Dvorsek	Dejan	European Commission
Epelde	Gorka	RAISE

Name	First name	Organisation
Erxleben-eggenhofer	Anika	EuroScienceGateway
Ferreira	Maria	European Commission
Garavelli	Sara	EOSC Focus
Garbarino	Elena	Research Executive Agency
Gatto	Francesco	Research Executive Agency
Gruning	Bjorg	EuroScienceGateway
Gunsenheimer	Ute	EOSC Association
Hansen	Henning Sten	AqualNFRA
Hasan!	Lliari	EOSC Focus
Hodson	Simon	WorldFAIR
Hugo	Wim	RDA TIGER
Ivanoaica	Teodor	EOSC Association
Kalaitzi	Vasso	FAIR-IMPACT
Karayannis	Fotis	e-IRGSP7
Konstandinidis	Evdokimos	RAISE
Lazzeri	Emma	Skills4EOSC
Lopez garcia	Alvaro	Al4EOSC
Luyben	Karel	EOSC Association
Manghi	Paolo	GraspOS
Markala	Anu	FAIRCORE4EOSC

Name	First name	Organisation
Pagano	Pasquale	Blue-Cloud 2026
Pana	Flavius Alexandru	Research Executive Agency
Panagopoulou	Anna	European Commission
Papagnanou	Georgios	European Commission
Pierkot	Christelle	FAIR-EASE
Pittonet gaiarin	Sara	Blue-Cloud 2026
Psomopoulos	Fotis	EOSC4Cancer
Rankovic	Nastassja	European Commission
Rizzo	Alessandro	FAIR-EASE
Rooryck	Johan	CRAFT-QA
Sari	Vartiainen-Mathieu	Research Executive Agency
Schouppe	Michel	European Commission
Schroder-pander	Friederike	EOSC Focus
Solimini	Angelo	European Commission
Soriano palomo	Gloria	EOSC Association
Suominen	Tommi	FAIRCORE4EOSC
Tatum	Clifford	SciLake
Tziveloglou	Pantelis	European Commission
Vergoulis	Thanasis	GraspOS
Wiebeiltz	Jan	e-IRGSP7

Name	First name	Organisation
Willems	Marieke	BY-COVID

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A total of 59 participants attended the second edition of the coordination meeting of EOSC-related projects funded under Horizon Europe. The meeting was held in Brussels on June 15-16 as a fully in person meeting. The main objective was achieved to promote cooperation in the context of the European EOSC Partnership for a synergetic implementation of the EOSC. Representatives of the European Commission, the EOSC Association and 19 project consortia updated each other on their respective contributions towards achieving the EOSC Strategic Research and Innovation Agenda. They also identified new opportunities for collaboration and tackling issues related to the operational consolidation of the EOSC in the medium to long term.

Studies and reports

