EOSC-SB

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Outline

- The EOSC Steering Board
- Mandate and Structure
- Working Groups
- Recent documents

The EOSC Steering Board

- An expert group of the European Commission Proposed in 2020 by the EOSC Governance Board
 - Stated that MS/AC and EEA EFTA and the Commission should maintain a high-level strategic steering role for the EOSC implementation.
 - <u>https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupID=3756</u>
 - Supporting the CNECT DG Communications Networks, Content and Technology.
- Created to represent the governmental institutions involved in the building of the EOSC.
- Renewed for two years in 2021.
- Highly active board
 - 50 meetings since its foundation in 11/03/2021.

Members

- Chaired by the European Commission (Thomas Neidenmark) and one member state representative (Volker Beckmann, FR)
- One/Two Representatives per Member Country.
- With the EOSC-A as an Observer.



Inmaculada Figueroa Rojas (ES)



João Nuno Ferreira (PT)

Mandate and Structure

- Provide strategic advice, align national policies and cooperate with the rest of the partners to coordinate and federate efforts and investments.
- Advise strategically the Commission on the EU policy for research data infrastructure and services, especially in view of the Commission's role in the EOSC governance, and on how to better align EU and national policy developments and investments with the EOSC objectives.
- Complementary to the oversight of progress by the European Partnership towards its strategic and operational objectives provided through the EOSC Partnership Board.

Mandate and Structure

- Tasks of the Expert Group
 - 1) Support the strategic coordination and foster convergence between the Commission, MS and AC on questions relating to the implementation of Union legislation, programmes and policies related to Open Science and EOSC.
 - 2) Exchange experience and best practice, and consult on national strategies, plans and investments relating to digital research outputs and associated infrastructures.
 - 3) Elaborate and propose joint positions on issues of EU and national interest pertaining to research data.
 - 4) Review and form positions on main strategic documents developed in the context of the EOSC Partnership and communicate positions in the EOSC Partnership Board.

Working Groups & Policy Papers

- The EOSC-SB has structured into three subgroups
 - Subgroup A: National Contributions to EOSC
 - The aim is to monitor national contributions to EOSC outside EOSC-A members as well as related policy development and financial or in-kind contributions.
 - Subgroup B: EOSC-SB beyond 2021
 - The objective is to propose a format and structure of the EOSC-SB for the following annuities.
 - Subgroup C: Initiatives with commercial orientation.
 - Focusing on analysing the impact of for profit institutions in the EOSC ecosystem.
- The EOSC-SB has in its meeting on 6 April identified three policy issues of priority to be addressed:
 - EOSC-SB Opinion Paper: 1 EOSC and data literacy.
 - EOSC-SB Opinion Paper 2: EOSC and the commercial partners.
 - EOSC-SB Opinion Paper 3: FAIR data sovereignty in EOSC.

Policy Papers: EOSC and data literacy

- Data literacy, based on sets of specific skills and competences, is a key factor for realising the cultural change that is necessary for the implementation of open science and EOSC.
- A proper alignment and coordination of policies and practices in the area of data literacy development is needed.
- Open Science practices and the creation of a critical volume of _ shareable FAIR data and data services, require training and continuous development at the researcher's level and at the organisational level, and they should be properly recognised in assessment processes.
- The document will address recommendations at the three levels: _ European, National, and Institutional.
 - Creation of European framework and a network of Data Competence Centres for FAIR-data skills and competences, seeking coherence and strengthen collaboration.
 - Strengthen the national EOSC-related policies building research support staff _ capacity centres to provide training and frameworks for the recognition of such activities.
 - Incorporate FAIR data-related advanced training in the curricula of early-stage _ researchers and build and liase with data and digital competence centres.

EOSC-SB Opinion Paper: 1 EOSC and data literacy

Opinion paper by the EOSC Steering Board on EOSC FAIR data literacy [Version 0.8 (updated 2022-09-11) for second discussion with the EOSC-SB on 21 September 2022]

The EOSC Steering Board expert group¹ (EOSC-SB) has initiated an overarching analysis of the main disruptive concepts and practices connected to the construction and future operation of the EOSC. The foreseen benefits of EOSC for European research and innovation require transformative practices in several domains from FAIR data collection technologies to FAIR data exploitation skills. Each of the themes, chosen according to priority, are addressed in an Opinion Paper that will be elaborated and adopted at tripartite level and will build a living reference for the related issues.

Background

Data literacy, based on sets of specific skills and competences, is a key factor for realising the cultural change that is necessary for the implementation of open science and EOSC. A proper alignment and coordination of policies and practices in the area of data literacy development is needed to ensure that the principles of research - highest quality, integrity, transparency, verifiability and trust - are safeguarded and that research objects are shared with respect to the highest legal and ethical

To create a critical volume of FAIR data and data services, to share them, and to ensure proficient (re-)use of data, requires an array of specific knowledge, skills, and competences. These can be taught in formal, informal, and non-formal contexts, and encouraged through appropriate incentives. Open Science practices require training and continuous development at the researcher's level and at the organisational level, and they should be properly recognised in assessment processes.

To achieve progress, it is essential to develop a holistic, coherent, and visible education and training paradigm, which is based on principles of subsidiarity and complementarity of the three levels (European, national, and institutional). This paradigm should be based on well-defined skills and competences, address new professional profiles as well as practitioner's capabilities, and reach out to three main categories of stakeholders; researchers, data science professionals, who support researchers in their activities, such as data stewards, research software engineers, data curators etc. as well as policy- and decision makers.

This policy opinion paper is based on an analysis of the needs, existing policies, and good practices. It

 basic EOSC documents, such as the EOSC MoU, the EOSC SRIA, the Report from the EOSC Executive Board Skills and Training Working Group;

* https://ec.europa.eu/transparency/expart-groups-register/icreen/expertgroups/consult?do-groupDetail.groupDetail&groupID=3756&NewSearch=1&NewSearch=1

Policy Papers: EOSC and the commercial partners

- EOSC is an overarching system that supports research _ and innovation through serviced access to FAIR data.
- Key contributions towards construction and future _ operation of EOSC are expected from public research organizations and services as well as from the private sector.
 - The participation of commercial partners in the EOSC is an opportunity that requires careful evaluation of proper rules of engagement and of the related risks
- It is important to ensure _
 - The focus of the EOSC is to become a public good.
 - The Rules of Participation for Commercial Partners should be carefully _ reviewed and discussed.
 - Discussion should be facilitated at national level.

EOSC-SB Opinion Paper 2: EOSC and the commercial partners

Opinion paper by the EOSC Steering Board expert group (E03756)

on EOSC and commercial partners

[Version 0.8 (updated 2022-09-11) for second discussion with the EOSC-SB on 21 September 2022] The EOSC Steering Board expert group¹ (EOSC-SB) has initiated an overarching analysis of the main

disruptive concepts and practices connected to the construction and future operation of the EOSC. The foreseen benefits of EOSC for European research and innovation require transformative practices In several domains from FAIR data collection technologies to FAIR data exploitation skills. Each of the themes, chosen based on the perceived urgency/priority, are addressed in an Opinion Paper that will be elaborated and adopted at tripartite level and will build a living reference for the related issues.

EOSC is an overarching system that supports research and innovation through serviced access to FAIR data. Service providers and partners contributing to the construction and future operation of EOSC, e.g., through related projects, can be from the public as well as from the private sector. The focus of the EOSC is to become a public good. Key contributions towards construction and future operation of EOSC are expected from public research organizations and services as well as from the private sector. A concrete example is the possibility for private sector partners to respond to the EOSC procurement that is foreseen to be open for application later in 2022. Also, private sector operators expressed

The participation of commercial partners in the EOSC is an opportunity that requires careful evaluation of proper rules of engagement and of the related risks. The commercial partners could potentially contribute to the co-creation and performance of open services or be mostly attracted by pre-procurement and procurement processes. On these grounds, it is mandatory that the EuroHPC JU and EOSC-A coordinate their rules of participation and that a cooperation basis is defined between EOSC, EU-funded Data Spaces and commercially oriented initiatives like GAIA-X.

One elementary question for engaging the private sector is: how can for-profit operators become partners in the construction and future operation of EOSC and under which conditions can they

* https://ec.europa.eu/transparency/expert-groups-register/screen/expertgroups/consult?do-groupDetail.groupDetail&groupD=3756&NewSearch=1&NewSearch=1

Policy Papers: FAIR data sovereignty in EOSC

- Implementing the EOSC principle on access to data "as unrestricted as possible" has implications on legal, IPR, and institutional levels as it implies rights and responsibilities by providers and users.
 - The concept of "Data Sovereignty" derives its meaning from these responsibilities.
- EOSC has the responsibility to protect the value of the -FAIR datasets
 - FAIR Data are common goods governed by rules that must be known and understood; and
 - responsibilities to protect FD value of use and reuse do exist, and these need to be clearly defined.
- FAIR Data sovereignty addresses -
 - Rules of Participation and onboarding processes
 - Data quality and persistent integrity as a key asset in the EOSC ecosystem;
 - Meta-geo-localization in the EU and ACs of FD services and FD _ repositories:
 - Promotion of appropriate licensing, preservation of IPR and recognition of authorship of research FD in the EOSC ecosystem and clear statement of the ownership of data and services by EOSC partners.

EOSC-SB Opinion Paper 3: FAIR data sovereignty in EOSC

Opinion paper by the EOSC Steering Board on FAIR data sovereignty in EOSC

[Version 0.7 (updated 2022-09-11) for second discussion in EOSC-SB on 21 September 2022] The EOSC Steering Board expert group: (EOSC-SB) has initiated an overarching analysis of the main disruptive concepts and practices connected to the construction and future operation of the EOSC.

The foreseen benefits of EOSC for European research and innovation require transformative practices in several domains covering from FAIR-by-design data collection technologies to FAIR data and service exploitation skills. The Specific issues were chosen by S8 based on the perceived urgency/priority. Those are addressed individually in Opinion Papers that will be drafted by the Policy Subgroup, elaborated by SB level, and then adopted at tripartite level to become a living reference for the definition of EOSC policies.

About the implementation of Open Science concerning research Data and related

Implementing the EOSC principle on access to data "as unrestricted as possible" has implications on legal, IPR, and institutional levels as it implies rights and responsibilities by those who will provide research FAIR data (FD), and those who will use them. The pragmatic concept of "Data Sovereignty"

Here we elaborate an opinion on the specific EOSC sovereignty on research FD (EOSC-SFD) by attributing to EOSC the responsibility to protect the value of the FAIR datasets and related data services throughout the whole lifecycle of their open exploitation.

EOSC-SFD implies governance and practices oriented at monitoring the usage and the conditions of usage of FD, by protecting the persistence of the FD quality upon reuse, and by applying effectively the restrictions when needed, including the rights to withdraw FDsets recognised as faulty or

As of today, only a fraction of the data generated by public research undergoes curation and integration with metadata to become compliant with the definition of FD. A specific investment of human and financial resources is required to implement a raw-data set into a FD-set. This effort is typically supported by the data producer being a research infrastructure, and RPO or, seldom, a single user group (see further the EOSC-SB opinion paper on FAIR data literacy).

The basic ideas are defining EOSC-SFD are:

Monitoring Activities (Subgroup A)

- The purpose of monitoring policies and investments of relevance to Open Science is to support and accelerate the deployment of Open Science practices in Europe
 - It complements the "Additional Activities Plan" (AAP) of the EOSC-A which collects the in-kind and monetary contributions of the members of the EOSC-A.

Scope A) Benchmarking of activities on international, national, regional, and institutional level

<u>Tasks</u>:

- Gather and analyse existing and potential EOSC-enabling policies in the MS/AC
- Analyse results from regional (5B) activities in terms of building up EOSC
- Identify effective use cases of EOSC-relevant national policies to fulfil the tasks of the EOSC-SB

Scope B) Monitor the benefits of MS/AC policies to the whole EOSC and the benefits of EOSC to the national research communities.

Tasks:

- Examine the process of implementing EOSC-relevant policies. Where and when (e.g. how long after adoption) do these policies have an impact on investment?
- Analyse the progress of **investment of MS/AC into EOSC** and its impact (for example in terms of NRENs, upgrading networks and other EOSC relevant infrastructures).
- In this context, develop clear criteria and guidance for how these should be estimated, to promote comparable methods and to avoid different interpretations of how this information should be produced.

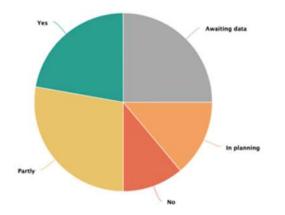
Goals

- Understand MS/AC **contributions to develop EOSC**, and reach a collective understanding on how to assess these contributions;
- Evaluate MS/AC support to org;
 policies and financing mechanisms;
 advancing FAIR and EOSC;
- Evaluate national funding complementing the contributions provided by the EOSC-A members;
- Coordinate with the EOSC-A, EC, so that the benchmarking and **monitoring is strategic**.

First survey – results (Financial contribution)

Financial contributions to the EOSC at national level linked to the policies and actions

Does the country have dedicated financial \equiv contributions to the EOSC linked to the policies?

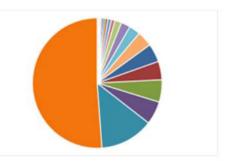


	Frequency	Percent
	2	5,9
In planning	6	17,6
No	6	17,6
Partly	12	35,3
Yes	8	23,5
Total	34	100,0

Total amount of national EOSC contribution [in million €] spent in 2020

	Frequency	Percent
.00	4	11,8
,10	1	2,9
,20	1	2,9
,25	1	2,9
,26	1	2,9
,28	1	2,9
.35	1	2,9
,48	1	2,9
,74	1	2,9
1,10	1	2,9
1,51	1	2,9
1,70	1	2,9
2,24	1	2,9
3,12	2	5,9
5,85	1	2,9
8,00	1	2.9
9,70	1	2,9
13,34	1	2,9
15,90	1	2.9
15,94	1	2,9
19,30	1	2,9
20,00	1	2,9
46,49	1	2,9
178,00	1	2,9
Total	28	82,4
System	6	17,6
	34	100,0

Total volume of financial contributions for 2020 to the EOSC: 205 M EUR.





Conclusions

- The EOSC-SB is an strategic group with national representation focused on aligning and supporting the implementation of EOSC at national basis.
- It complements the activities of the EOSC Partnership (signed between the EOSC-A and the European Commission) in defining policies and in the monitoring activities.
- The EOSC-SB represents the funding and policy stakeholders so a close dialogue with the community is fundamental.