



EPOS and EOSC

**Keith G Jeffery
and
the EOSC WG
the EOSC Focus Group**



October 2020 EOSC WG Presentation to SCC



Recommendations to SCC for discussion/approval July 2020

- (1) **Tracking System:** EPOS-ECO should set up a system for tracking EC funding calls of relevance to EPOS, for deciding whether to participate, for setting up/joining consortia all based on cost/benefit analysis (Daniela Mercurio runs a basic system but we should improve it);
- (2) **Notification of Participation:** EPOS-ECO should gain agreement from all stakeholders that if they are invited to join a project proposal or project related to EOSC (or any external project with any relevance to EPOS including National funding) they should notify ECO (specifically Keith Jeffery in the role with external projects) so that the cost/benefit to EPOS as a whole can be assessed and negotiations with the stakeholder initiated to ensure maximum benefit to EPOS;
- (3) **Reserved Branding:** The use of EPOS branding should be reserved for projects and outputs where approval from ECO has been obtained.



April 2022 EOSC FG Report to SCC

Objectives and Team

Objectives

- Foster an EPOS common approach and harmonized interaction with EOSC initiatives
- Building an EPOS “EOSC vision”
- Interact with and give supports to the EPOS team involved in the EOSC Future (and others) projects
- Ensure exploitation of ENVRI-FAIR results by the EPOS Research Infrastructures
- Map and harmonize the participation of EPOS teams to National initiatives dealing with EOSC

Members

- **Christos Evangelidis** TCS Seismology TCS Near Fault Observatories
- **Mariusz Sterzel** TCS Anthropogenic Hazards
- **Philippe Labazuy** TCS Volcano Observations
- **Keith Jeffery** EPOS ERIC collaborator
- **Daniele Bailo** Executive Coordination Office

Meeting 17 February 2022

1. **Nomination of the Chair:** Daniele Bailo (Keith Jeffery proxy)
 2. **Planning 2022 activities and meetings (discussion)**
 1. Mapping persons involved from EPOS in EOSC initiatives
 2. The above required a joint questionnaire across all three focus groups (under preparation)
 3. Need vision and strategy of EPOS with respect to EOSC
 1. so not to be left behind and have EOSC fit our requirements;
 2. because much funding available tied with EOSC
 4. **Three pillars to an EOSC vision**
 1. access to computing cycles
 2. encourages use of EPOS assets by other communities (justification for funding)
 3. encourages EPOS community to do cross-disciplinary research with other clusters (e.g. with SSHOC for hazards)
 5. Interaction with EOSC. Several options available: independently, through ICS-C, through ENVRI-HUB.
Does it matter?
- **Interaction with the SCC** Plan first report April on meeting 1 and second report June with results of survey



June 2022 EOSC FG Report to SCC

EOSC Governance

EOSC Governance 2021-2027

EU countries and countries associated with Horizon 2020, represented in the EOSC Governance Board, agreed unanimously to run the EOSC as a co-programmed European Partnership under Horizon Europe from 2021.

The new governance model agreed with EU countries for the current EOSC implementation phase after 2020 is tripartite including:



**European
Commission**

Representing the European
Union



**EOSC
Association**

Representing the
European research
community

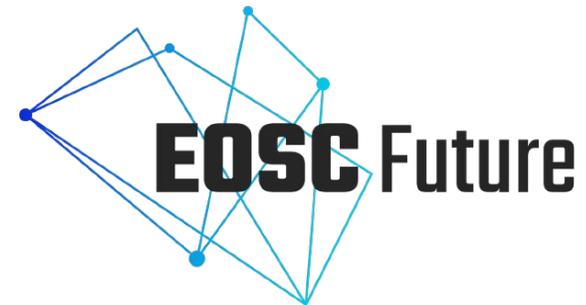


**EOSC
Steering
Board**

Representing EU countries and
countries associated with
Horizon Europe

Levels of participation to EOSC galaxy

1. Governance : EOSC tripartite collaboration:
 - strategic coordination between the EU represented by the **European Commission**,
 - the participating countries represented in the **EOSC Steering Board**,
 - and the research community represented by the **EOSC Association**
2. EOSC association, to which many institutions have already joined (check yours at <https://eosc.eu/members>)
“responsible for delivering the objectives agreed in the Memorandum of Understanding”
3. Projects, the tool used to make EOSC real
(e.g., EOSC-FUTURE)



Three Pillars of participation

- *EPOS access to supercomputing*
- *EPOS visibility in a wider context*
- *EPOS users to access new data and assets (multidisciplinarity)*



Advantages

- **Funding**

- Horizon Europe programme has little for geoscience
- Horizon Europe programme has much funding for EOSC
 - Opportunity for geoscience

- Have **access** to external (supercomputing, services, datasets) resources

- Visibility of available resources
- EOSC may facilitate the procurement of computational resources
- Access to tools and software (not to reinvent the wheel)

- Increased **visibility** of EPOS communities (TCS) and assets across all communities

- TCS may get more exposed and have:
 - more valorization
 - more citations
 - more collaborations with other scientists
 - more contributions to the specific science domain (e.g, achieving more general models)

- Increased possibility of **multidisciplinary research** (e.g. geohazards linked with economics and social science)

- Creating bridges across different communities (biology, seismology, geology, marine, health, human science) for:
 - cross-validation of results
 - merging of datasets
 - others...

Risks and Mitigation

- losing EPOS identity, scattering of the EPOS community we took years to build*
 - **Act as a structured community.**
 - Individual organizations within EPOS should not negotiate individually with EOSC, but **approach EOSC as the EPOS community.**
 - Be compliant with EPOS standards and strategies first.
 - Label EPOS assets.
 - Provide licenses that include citation / acknowledgement.
- misuse of data (amount of, sensitive data)*
 - Comply to EPOS data policy; licensing and policies both for data and services.
 - Authentication and Authorization Infrastructure in place (managed by EPOS)
 - Recording of usage (Accounting). Collaboration with OpenAire (linking data and publications)
- misuse of EPOS asset supplier providing computing resources (providing data means also “consuming” CPU cycles)*
 - Authentication and Authorization Infrastructure in place (managed by EPOS)
 - Recording of usage (Accounting).

Risks and Mitigation

4. *the fact that we are operational and sustainable is not fully recognized*

- EOSC should contribute to the sustainability of the EPOS services (funding, CPU cycles, in-kind development, provision of services) **recognising quality and maturity**.
- EPOS people should convey this message in all EOSC fora
- EPOS has to be aware that it is our business to secure the operation of our services
- EOSC developments should respect the EPOS architecture and governance. Ensure it happens in all fora where EPOS can intervene.

5. *provide much and have small in return (resource draining)*

- interactive but cautious approach wrt the EOSC initiatives
- ensure all interactions between EPOS organisations and EOSC are EPOS-compliant (to avoid waste of resources)



June 2022 Next Steps

Analysis of Questionnaire Results

- 5 respondents concerning EOSC
- Key points:
 - EPOS should be an observer unless rules of participation are more clear
 - EPOS should be a partner of EOSC and cooperate with the EOSC galaxy so to have more influence.
 - Remark importance of RIs providing data.
 - Technical and political. Requires EPOS-EOSC policy specification first
- **More inputs needed: at least one representative per TCS**

Suggested Actions & Guidelines

Keep a «light involvement» with EOSC initiatives:

- Participate to (many) EOSC meetings
- Provide a portion of our metadata, for generalistic services (those that work best, and are already widely available)
- Take small commitments unless EOSC strategies are clear
- ERICs like EPOS are different from Research Institutions in terms of governance, maturity, geographic distribution of stakeholders.

Protect and promote EPOS assets:

- Legal people with knowledge in IPR to protect EPOS assets, brand etc. (it is happening in the policy group)
- EPOS community to inform SCC about EOSC news and cooperation (initiatives, policies etc.), and ensure TCS are harmonized
- Fill in the questionnaire

Engage as a community

- TCS to inform the entire EPOS SCC whenever they wish to join an EOSC initiative
- Provide an agreed set of EPOS messages in all EOSC fora

Focusing EPOS effort in EOSC

Message to provide to EOSC

*Research Infrastructures are the place where the sustainability of data and services provision is guaranteed.
How is the EOSC sustaining the RIs?
How much are RIs involved in EOSC decisions?*

- Focus onto the pillars/level of engagement
 - Keeping in mind advantages, disadvantages/risks and mitigations
- To ensure a consistent EPOS interaction framework
 - With EOSC but also wider – link with other communities than EOSC
- To maximise benefits for EPOS community
 - Improved access to computing resources
 - Shared experience and co-development of RI platforms
 - Improved access to other RIs for multidisciplinary research
 - Increased utilization of EPOS assets justifying sustainability