10-11 November 2020

PaNOSC & ExPaNDS Annual Meeting

WP 7 - Sustainability

11th November, 2020

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CERIC-ERIC, ELI, ESRF, ESS, ILL, XFEL.EU, EGI

Tasks

7.1 - Stakeholders for the Photon and Neutron community EOSC – closed

7.2 - Metrics and cost for the Photon and Neutron community EOSC – Nov 2021

7.3 - Business models for Photon and Neutron EOSC – May 2022

7.4 - Sustainability plan for the Photon and Neutron EOSC – November 2022

Task 7.1
Stakeholders for the Photon and Neutron community EOSC

PaNOSC

Photon and Neutron Open Science Cloud

H2020-INFRAEOSC-04-2018
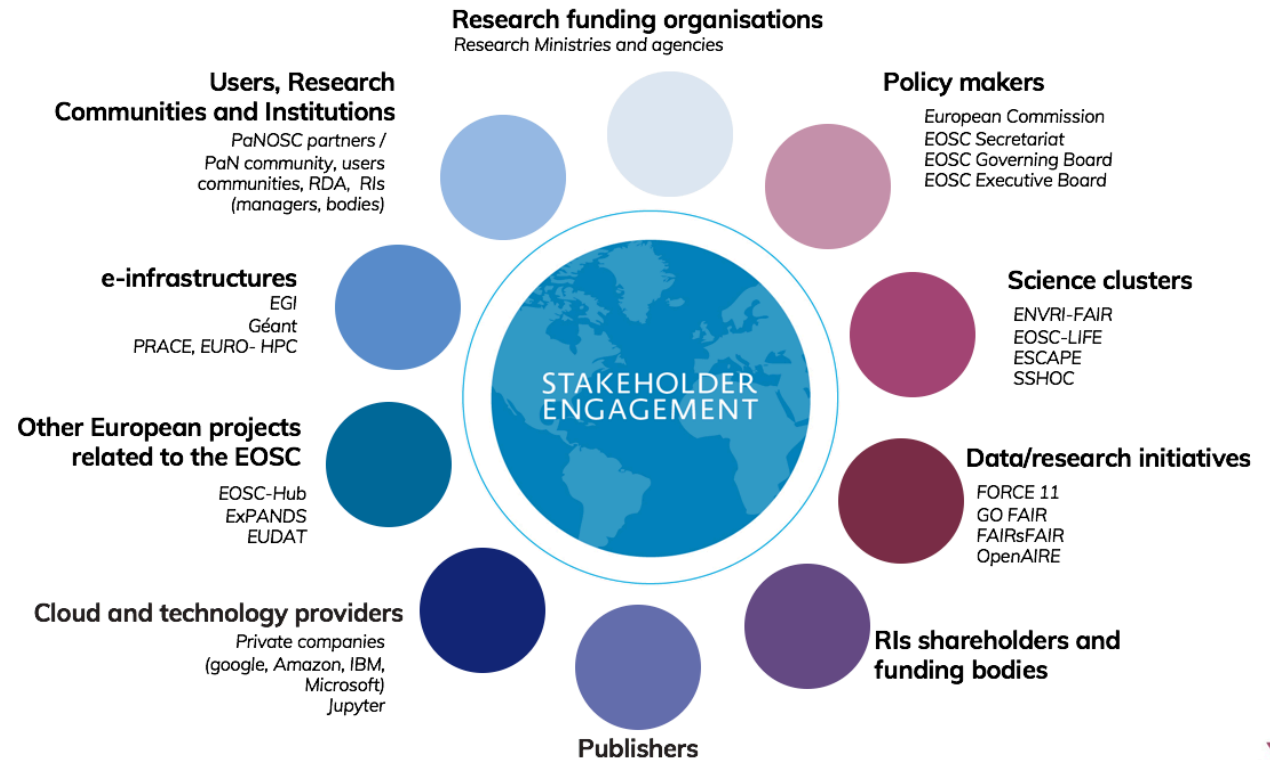
Grant Agreement Number: 823852

Deliverable: 7.1 Photon and Neutron EOSC Stakeholder Feedback

Research funding organisations
Research Ministries and agencies

Users, Research Communities and Institutions
PaNOSC partners / PaN community, users communities, RDA, RIs (managers, bodies)

Policy makers
European Commission
EOSC Secretariat
EOSC Governing Board
EOSC Executive Board

e-infrastructures
EGI
Géant
PRACE, EURO- HPC

Science clusters
ENVRI-FAIR
EOSC-LIFE
ESCAPE
SSHOC

Other European projects related to the EOSC
EOSC-Hub
ExPANDS
EUDAT

STAKEHOLDER ENGAGEMENT

Data/research initiatives
FORCE 11
GO FAIR
FAIRsFAIR
OpenAIRE

Cloud and technology providers
Private companies (google, Amazon, IBM, Microsoft)
Jupyter

RIs shareholders and funding bodies

Publishers

Liaison with the EOSC (ongoing)

EOSC consultation events, sessions related to sustainability, e.g.

- The International Research Data Community contributing to EOSC, Helsinki 22/10/2019

- EOSC Coordination Day, Budapest 28-29/11/2019;

- EOSC Validation workshop, 27/04/2020

- EOSC Consultation Day, online, 18/05/2020

- Webinar introducing the EOSC SRIA, 28/07/2020

- 2nd ESFRI RIs-EOSC Workshop "Research Infrastructures shaping EOSC" 06/10/2020

- EOSC Governance symposium, 19-22/11/2020

Meetings of other data initiatives and projects such as RDA, FAIRsFAIR, EOSC-hub, Inter-clusters interest group; etc., where PaNOSC participated in discussions on topics of joint interest and established collaborations that contribute to the sustainability of the services developed in PaNOSC

Task 7.2
Metrics and cost for the Photon and Neutron community EOSC
Ongoing – Completion by Nov 2021

Goal: Estimate and understand the costs and values involved in providing FAIR data and making it, as well as all related services, available in the EOSC

Objectives:

- Estimate the costs for the whole data workflow from acquisition to remote access and use and identify additional costs involved in the integration in the EOSC

- Feed these costs into the business models and analyse conditions for the sustainability of the services

- Reference for RIs aiming at providing FAIR data, with a description of the services and resources adopted by our facilities, as well as with an estimation of the costs of our RIs' data management infrastructure

M1: Cost collection complete by 31/12/2020
M2: First draft of D 7.2 by 31/05/2021

Task 7.2
Metrics and cost for the Photon and Neutron community EOSC

CERIC-ERIC

ELI

ESRF

ESS

ILL

XFEL

- Collect already incurred investment costs for the existing infrastructure and services

- Estimate necessary expenditure until the end of the project

- Analyse the main cost drivers for the different facilities

- Define the minimum level of services to be offered by RIs and costs related to the integration into EOSC

- Identify metrics for added value and draft business plan

panosc
photon and neutron
open science cloud

ExPaNDS
European Open Science Cloud Photon
and Neutron Data Services

Metrics and cost for the Photon and Neutron community EOSC

Data processing inherent to Facility Operation

Facility	Adding rich metadata to the data
Facility	Conversion to standard data format (HDF)
Facility	Minting DOIs
Facility	Data portal
Facility	Cyber Security - AAI, Firewall, Intrusion detection, Long term (CyberSecurity affiliation to a SOC offered by NREN)
Facility	Data protection - ACLs, account management
Facility	Storage
Facility	Archival storage (backup + archival, hardware, consumables, software)
Facility	Offline computing (Processing/Co-processing cluster)
Facility	On-line computing (processing/co-processing clusters)
Facility	External computing (e.g. processing in external resources such as PRACE, EGI, etc)
Facility	Network - LAN
Facility	Network - Internet, hardware and NREN subscription
Facility	Remote access infrastructure, hard + software
Facility	User support (Staff and Visiting Scientists)
Facility	Licenses
Facility	Computer room: building+infrastructure equipment
Facility	Computer room: electricity, cooling, cleaning

Data processing linked to EOSC Service Catalogue - data re-use

EOSC	AAI
EOSC	Interoperability of catalogues
EOSC	Data portal
EOSC	Software catalogue
EOSC	Curation of data archive (data deletion)
EOSC	User support and training
EOSC	Outreach
EOSC	Network bandwidth for EOSC, data transfer software
EOSC	Disk storage for EOSC
EOSC	Compute cluster for EOSC - CPU
EOSC	Compute cluster for EOSC - GPU
EOSC	Data archive beyond facility data policy

Initial cost for setup, recurrent costs (yearly); hard+software - personnel

7.3 - Business models for Photon and Neutron EOSC

May 2022, M3: Draft D 7.3 by 31/12/2021

Key Partners:	Key Activities:	Value Proposition:	Customer Relationships:	Customer Segments:
What are the key partners we need to run the PaNOSC? EOSC? ...	What are the key activities needed to maintain and develop the PaNOSC?	What is the value proposition of PaNOSC? What the services offered?	How will we manage the relationship with PaNOSC users?	Who are the users of the PaNOSC?
	Key Resources: What are the key resources needed to run the key activities?		**Channels**: What are the channels we will use to promote the PaNOSC? Web? Conferences?	

Cost Structure:

What are the cost of maintaining and evolving the PaNOSC? Infrastructures, People, ...

Revenue Streams:

What are if any the revenue streams? More publications? What is the economic value of one more publication?

Steps ahead

7.4 - Sustainability plan for the Photon and Neutron EOSC – November 2022

Development of a formal long-term mission and vision for the sustainability of the PaNOSC infrastructure and software developed taking into account the viewpoints of the different stakeholders

M4: Draft sustainability plan by 30/06/2022

…and… joint activities with ExPaNDS and possibly with other clusters…

EOSC liaison
ExPaNDS and 5bs - PaNOSC and cluster projects
Contributions to EOSC governance outputs:

	ExPaNDS	PaNOSC
Landscape report	Feedback with 5b projects	Feedback during the presentation of the doc
Reports on sustainability	ExPaNDS Tinman: no feedback, PaNOSC: feedback on Strawman and Tinman, no feedback on Iron Lady, interview with Fair forever (input to Iron Lady doc)	
FAIR metrics + Draft PID policy	Feedback from WP2 on draft PID policy	Feedback from the WP2
EOSC rules of participation	No feedback on v2020-03 - common feedback on v1.0?	
EOSC Interoperability framework	Looked at for WP3 status and roadmap, common feedback on update?	
EOSC glossary	Feedback from WP2	No feedback
EOSC Implementation Assessment Survey + EOSC SRIA	Shared feedback but different + common position paper on EOSC SRIA	

EOSC liaison

ExPaNDS and PaNOSC - Future joint activities

- Revision of the Iron Lady document (Final output of the Sustainability working group)
- Joint liaison with the EOSC initiatives such as the Association (future of EOSC EB working groups?); keeping track
- Inter-cluster collaboration through the EOSC interest group

Other joint activities

- Joint development of sustainability policies (for ExPaNDS, update of the Sustainability Policy Report)

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PaNOSC & ExPaNDS
Annual Meeting

Thank you

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