

EOSC Nordic

EOSC-Nordic in the context of the European Open Science Cloud

D. Lecarpentier, EOSC-Nordic Open Symposium 25 September 2020



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The Case for a Coordinated Nordic Effort on EOSC



- I) Open Science Programmes are strong in the Nordics and many actors are already involved in EOSC related initiatives
- 2) There is a good history of Research, Policy& Infrastructure collaboration across the Nordics upon which we can build
- 3) We can achieve more by working together rather than separately (Nordic Added Value)



24 Participants – 10 countries – now more than 200 participants



UNIVERSITY
 OF ICELAND

Norway

- NORDFORSK
- UNINETT SIGMA2 AS
- NORWEGIAN CENTER FOR RESEARCH DATA

Denmark

- DENMARK TECHNICAL UNIVERSITY
- UNIVERSITY OF SOUTHERN
 DENMARK
- DANISH NATIONAL ARCHIVES
- UNIVERSITY OF COPENHAGEN
- CAPITAL REGION OF DENMARK
- NORDUNET / AS

Sweden

- UNIVERSITY OF UPPSALA
 SWEDISH RESEARCH COUNCIL
- UNIVERSITY OF GOTHENBORG

Finland

- CSC IT CENTER OF
 SCIENCE
- UNIVERSITY OF HELSINKI
- UNIVERSITY OF TAMPERE
- UNIVERSITY OF EASTERN
 FINLAND
- FINNISH METEOROLOGICAL
 INSTITUTE

Estonia

- UNIVERSITY OF TARTU
- NATIONAL INSTITUTE OF CHEMICAL PHYSICS AND BIOPHYSICS

Latvia

RIGA TECHNICAL UNIVERSITY

Lithuania

UNIVERSITY OF VILNIUS

Netherlands GoFair

Germany DKRZ

POLICIES, LEGAL ISSUES AND SUSTAINABILITY

IN A CROSS-BORDER ENVIRONMENT



POLICIES AND PRINCIPLES

Identify & map the open science policies & resource provisioning principles applied in the Nordic and Baltic countries.

Investigate models, roles and responsibilities for the coordinated provisioning and delivery of EOSC services and resources at national level

Findability

Identify current and potential legal hurdles associated with the sharing of data and resources across national borders. Suggest solutions.

Accessibility

Reusability

Discuss and coordinate policy

initiatives should take to align

Interoper

Mainstreame Standards

standards for data management &

Enable the mainstreaming of

certification schemas for data

repositories

with relevant EOSC policies.

activities, and advise on

directions the national

DEVELOPING FAIR DATA PRACTICES

ACROSS THE NORDIC AND BALTIC COUNTRIES

Investigate Practices

Investigate and inform about the state of FAIR practices in the Nordics and the Baltics, looking at national policies and practices.

Develop Incentives

Develop and promote incentives for the uptake of FAIR data practices across national scientific communities

INTEGRATION AND INTEROPERABILITY OF PROSPECTIVE EOSC SERVICE PROVIDERS IN NORDIC AND BALTIC COUNTRIES



DEMONSTRATING THE POTENTIAL OF EOSC

USING THE NORDIC AND BALTIC COUNTRIES AS A TESTBED ENVIRONMENT.

DISCOVER AND RE-USE **RESEARCH DATA** Foster the discoverability and re-use of research data. Harvesting metadata in the future EOSC metadata catalogue.

SENSITIVE DATA AND ORCHESTRATION

Piloting an orchestration mechanism that brings national secure servers together, allowing the analysis of sensitive data without moving data away from the custodian.

Interoperability

Foster organizational, semantic and technical interoperability of service providers.

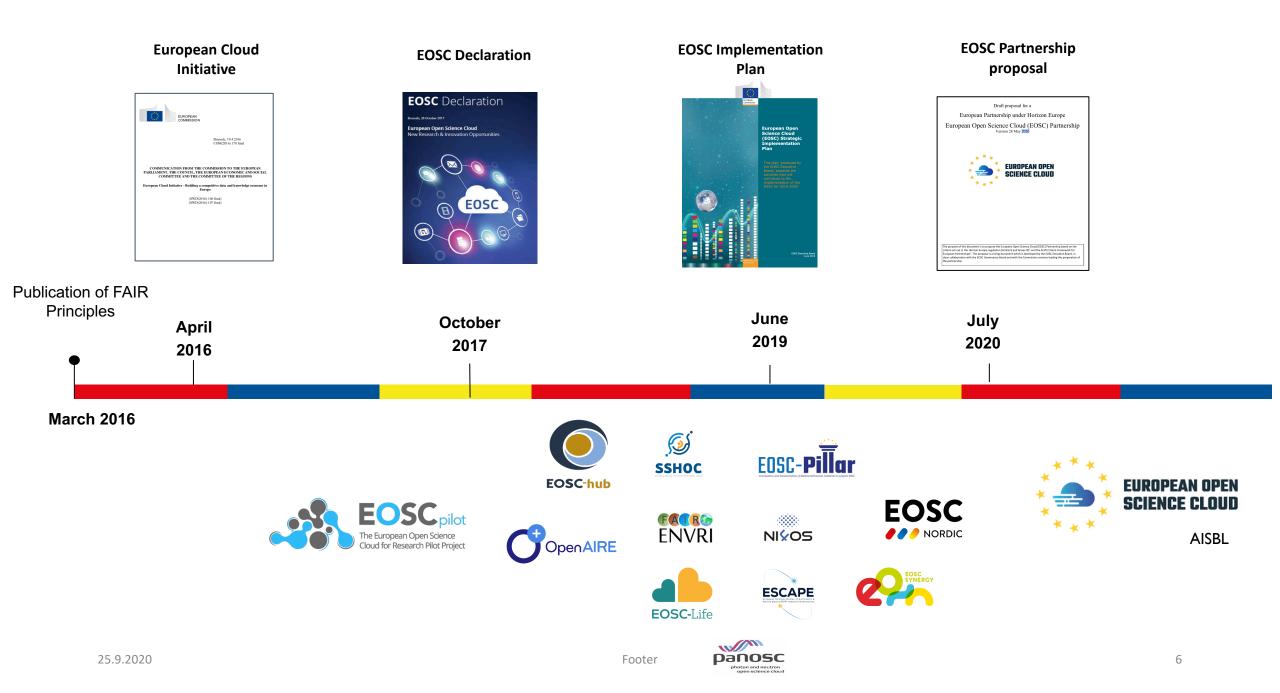
Propose improvements of the interoperability approach within EOSC.

Local/national services

ANALYSIS AND POST-PROCESSING

Integration of community specific portals with large scale computing facilities and pilot usage of computing resources across borders

DATA MANAGEMENT SHARING AND ARCHIVING Facilitating cross-borders data sharing by enabling data management on a distributed environment.



EOSC Partnership

Enabling the EOSC vision with a multi-stakeholder European partnership

Enable interdisciplinary research to address societal challenges Vehicle for Open

Science & the

Digital Single

Market

Reduce fragmentation by federating existing Research Infrastructures

> Develop an internet of FAIR digital objects (including publications and SW

Offer researchers anywhere in the EU the resources they need

> Simulate the emergence of a competitive EU cloud sector

Give Europe a global lead in research data management

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EOSC Partnership timeframe

The set of activities to be performed in the period 2021-2027 will result into the definition of a Strategic Research and Innovation Agenda (SRIA)

Stage 1: period 2021-2023

Creating the **European Open Science Cloud operations (EOSC-Core)** to provide authentication & authorization infrastructure (AAI) and other necessary core functions of the Minimum Viable EOSC.

Stage 2: period 2024-2025

Expanding the Minimal Viable EOSC with access to added value services, applications and tools (EOSC-Exchange) supporting the full cycle of scientific workflows.

First pilots / demonstrators on linking EOSC beyond the research communities with the wider public sector and the private sector from 2024 onwards, for addressing societal challenges

Stage 3: period 2026-2027 and beyond

Deployment of the **Web of FAIR Data and related Services,** including the EOSC-core, EOSC-Exchange and other framework conditions for interoperability and machine-actionability of data. This Web of FAIR Data and Services is part of a developing global Open Science Commons.

Continuous support to enhancing the ecosystem of the Web of FAIR data and related services for the research community.

EOSC Association

- The Partnership will operate through a new Association (Belgian **AISBL**)
- Established on 29 July 2020
- 4 founding members: <u>CESAER</u>, <u>CSIC</u>, <u>GÉANT</u> and <u>GARR</u>
- Over 80 organisations from 30 countries have expressed their interest in joining the EOSC Association, and about half of them are research performing organisations such as universities or research infrastructures.

- Interested organisations can still apply until 30th of September (www.eoscsecretariat.eu/applicationjoining-eosc-association)
- A General Assembly will ratify the admission of additional members and will proceed to the formal voting of Board and President





Programme highlights:

- ➤ Towards EOSC 2.0
- EOSC supporting the COVID-19 crisis management & beyond
- The implementation challenges of EOSC
- Boundary conditions for EOSC