



EOSC in the NORDICs

DeiC Conference, November 3,2021

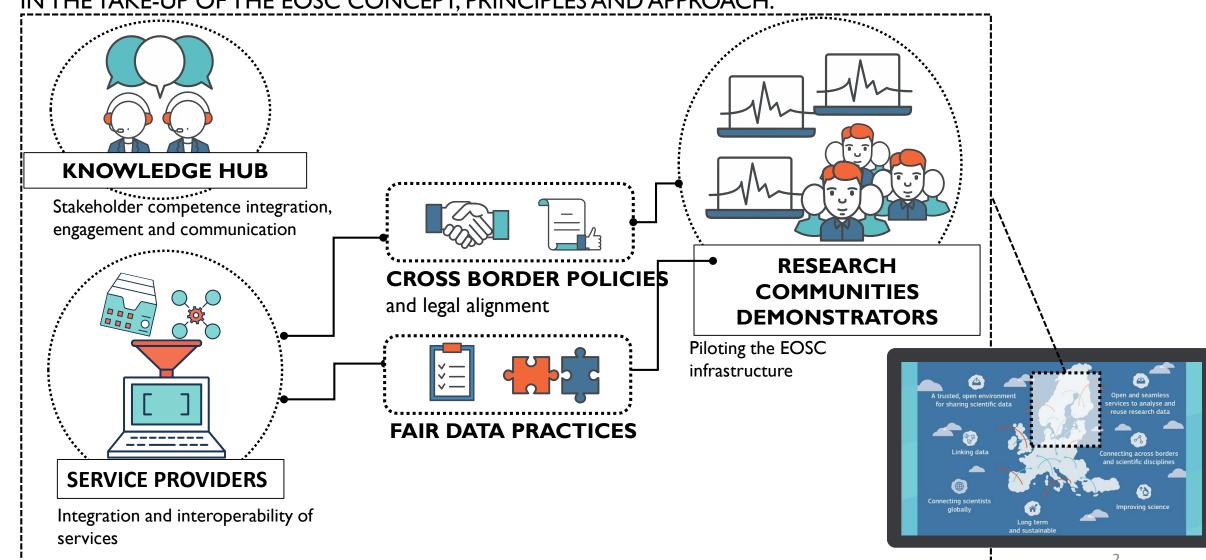
Lene Krøl Andersen

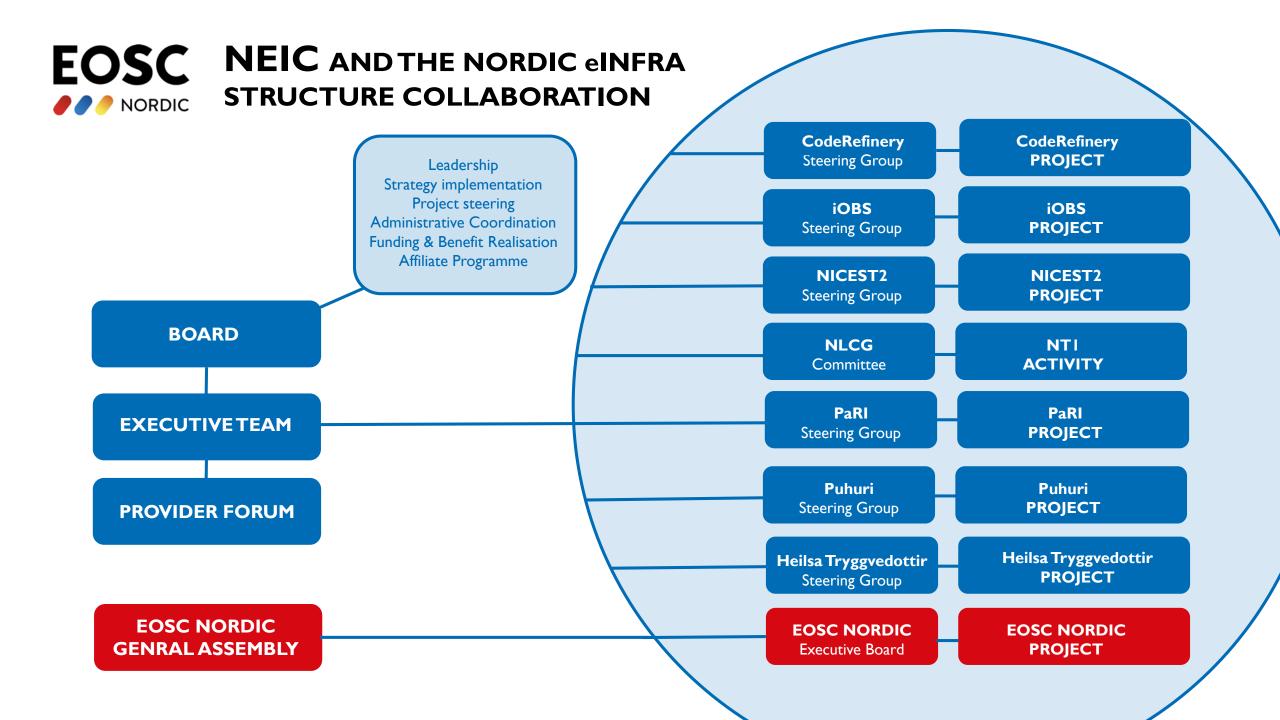
Nordic Liaison, DeiC Project Manager, EOSC-Nordic

EOSC & THE NORDIC MISSION:

EOSC P / NORDIC

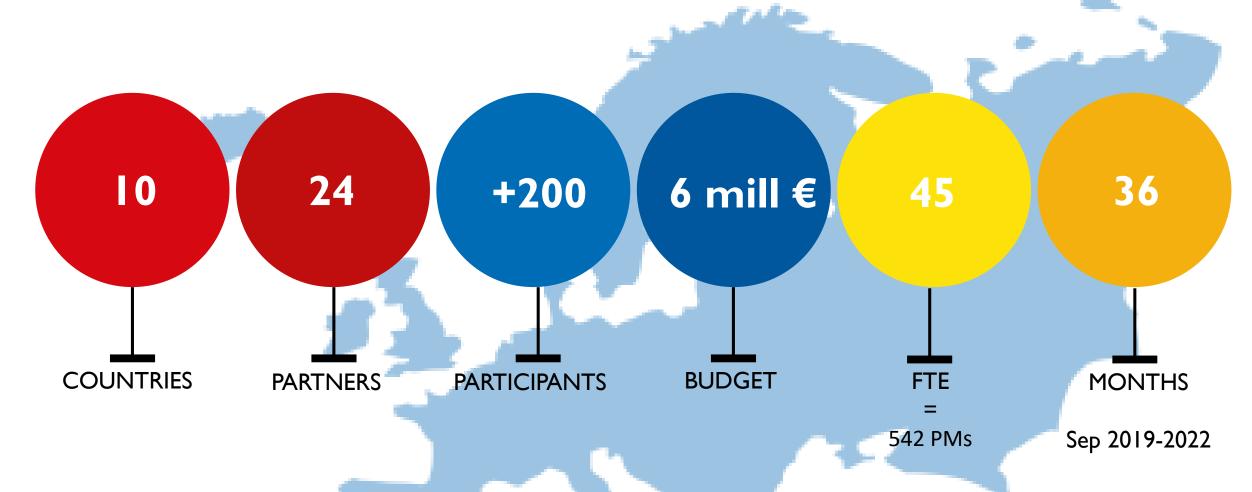
TO ESTABLISH THE NORDIC AND BALTIC COUNTRIES AS FRONTRUNNERS IN THE TAKE-UP OF THE EOSC CONCEPT, PRINCIPLES AND APPROACH.







EOSC-NORDIC IN NUMBERS





OBJECTIVE 2





OBJECTIVE I

POLICIES: Support coordination and alignment on national policies for service provision

MAIN **OBJECTIVES**

SERVICES: Increase discoverability of services and make them accessible through EOSC portal

OBJECTIVE 3



FAIR: Promote FAIR data practises

OBJECTIVE 5

KNOWLEDGE HUB: Offer training and technical support to service providers and users

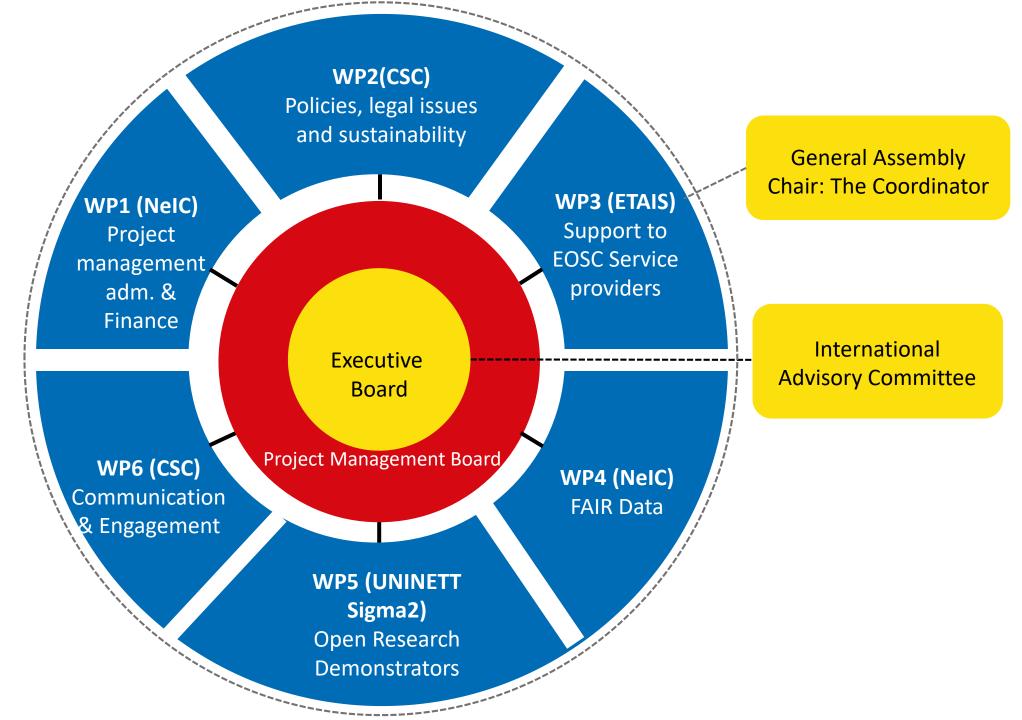
OBJECTIVE I



DEMONSTRATORS: Innovative solutions that work cross-border, developed in our 8-country testbed



PROJECT ORGANISATION





MIDTERM PROJECT HIGHLIGHTS

Policy

- Nordic Open Science Charter Landscape
- Bridging policy and infrastructure stakeholders
- Nordic cross-border
 EOSC service
 delivery chains

Services

- Nordic EOSC service compliance & maturity checklist
- Nordic EOSC service interoperability framework

FAIR

- Machine readable FAIR maturity model
- Certification & FAIR support to research communities
- FAIR assessment of datasets
- Increasing trends in the Nordic FAIR scores are observed

Demonstrators

- Successful integration of community portals with cross border computing
- Research interdisciplinary e-Infrastructure training
- Nordic Health Cloud architecture(s) ready for PoC





Community engagement

EOSC-Nordic stakeholder mapping

EOSC-Nordic Knowledge Hub launched



EOSC NORDIC INTERLINKING COLABORATORS

NEIC PROJECTS:

- NeIC Puhuri: User access to the Nordic EuroHPC facility (LUMI)
- NeIC NICEST: Climate research infrastrucutre
- NelC Pandemic
 Research Infrastructure
- NelC Heilsa
 Tryggvedottir: Nordic

 Health Cloud
- NeIC Nordic Language Processing Laboratory: Digital Humanities

INFRA EOSC 5 PROJECTS:

- NI4OS Europe
- EOSC Pillar
- EOSC Synergy



INTERNATIONAL COLLABORATORS:

- RDA
- The EOSC-Nordic International Advisory Committee

PAN-EUROPEAN COLLABORATORS:

- FAIRsFAIR
- ExPaNDs (Cluster)
- EOSC Secretariat
- INFRA EOSC: Cross
 Project Collaboration Board
- INFRA EOSC TASKFORCES:

Landscaping
FAIR data & Infrastructures
Service on-boarding
National policies &
governance
Training & Skills
Dissemination & Events

- EOSC-LIFE (13 ESFRIs)
- **CESSDA** (ESFRI)
- **SSHOC** (ESFRI)
- ARIADNE (ESFRI)
- OpenAire
- EOSC Hub
- EUDAT
- EOSC Enhance
- EOSC Future
- EOSC Executive Board Working Groups
- EOSC Association
- EOSC NRENs
- e-IRG
- EOSC co-creation projects on FAIR topics



+100

RESEARCH DATA REPOSITORIES

has had a FAIR maturity assessment

+300

PEOPLE TRAINED

within the EOSC-Nordic frame

10

EARLY EOSC ADOPTERS

in place

+200.000

NORDIC RECORDS HARVESTED

via the B2Find service and into the EOSC meta data catalogue +60

EOSC NORDIC REPRESEN-TATIONS +26.000

PAGE VIEWS

EOSC-Nordic website:

www.eosc-nordic.eu

+150

SUBSCRIBERS

to the EOSC-Nordic monthly newsletter

EOSC Nordic Key Exploitable Results (KER)



- impact at EU level

Contributing to the EOSC developments



KER 1 - Nordic Interoperability framework: Analysis and development of interoperability guidelines for service providers.

KER 2 - Service compliance checklist & maturity model to quickly validate if a service is fit for EOSC

KER 3 - FAIR assessment model: Semi-automated assessment of FAIR uptake for repositories and datasets

KER 4: Best practices/ Recommendations on policies, legal issues, cross-border collaborations and business models

Enriching the EOSC offering



KER 5: "X" services onboarded on the EOSC Portal

Sara Garavelli, WP2 Lead, CSC 10

EOSC Nordic KERs (impact at regional level)



Improving EOSC alignment and coordination



KER 6: EOSC alignment activities: mapping the open science policies; identifying legal issues; advising on EOSC impact at national level; exchanging best practices

Enabling EOSC uptake & increasing FAIR skills



KER 7: Regional EOSC onboarding platform: integration and on-boarding of regional providers

KER 8: Support for FAIR practices adoption in the region: FAIR data repository support on CoreTrustSeal certification and FAIR implementation.

KER 9: X FAIR data stewards trained in the region:FAIR data repository support on CoreTrustSeal certification and FAIR implementation.

Increasing EOSC awareness



KER 10: eosc-nordic.eu (incl. Knowledge Hub)

KER 11: EOSC Nordic community

Sara Garavelli, WP2 Lead, CSC 11

EOSC Nordic KERs





Increasing discoverability of services in EOSC



KER 5: "X" services onboarded on the EOSC Portal

Enabling cross-border service provision



KER 13: Nordic/Baltic X-Road prototype a solution deployed in EE and FI for secure data exchange across organisations, mainly used for exposing government registries to their users from public and private sector

KER 14: PoC for the sensitive data architecture for the eHealth Cloud

Improving organisational workflows



KER 12: Machine actionable DMPs:

Alignment of the DMPs that are being used by unis with the machine actionable DMP schema to make them machine actionable

Enabling cross-disciplinary research



KER 15: Lifescience technologies and standards adopted by earth science community: Climate scientists and ecologists from all over the world can collaborate together

Key Exploitabe Results Overview





Guidelines & models contributing to the EOSC developments
 → IF, service compliance checklist & maturity model, FAIR
 assessment model



New services & tools (mainly results of the demonstrators)

 machine actionable DMPs, X Road prototype, PoC for the sensitive data architecture for health cloud, lifescience toolkit for earth science



EOSC alignment & coordination in the region



 Support activities incl. training → FAIR adoption/data stewards, regional onboarding platform



EOSC awareness





How do we approach sustainability after the end of the project?



Different sustainability pathways

Extra funding required	Adoption by specific organisation	Legacy / Hand over
New funds to support the activity after the project: • NeIC support • New HE or national/regional opportunities	Exploitation of the results is up to individual organisations/partners/communities	Hand over of the asset to other initiatives/projects/ EOSC ecosystem



KERs & sustainability pathways

Extra funding required

Adoption by specific organisation

Legacy / Hand over



 Discussion started with NeIC



- Research communities involved in the demonstrators
- Service Providers
- Other regional funding





- EOSC Association
- EOSC Steering Board
- EOSC A Task Forces
- **EOSC Future**







 New HE projects (fx EOSC Future, 01-01, 01-03, 01-05...etc

Nordic Members of EOSC Association

- Denmark: NORDUnet, DeiC/DTU
- Norway: Uninett, CESSDA
- Finland: CSC, EUDAT, European Mathematical Society
- Sweden: Chalmers, Karolinska, Gothenburg University, Uppsala University, Stockholm University, Umeå University, Formas, Swedish Research Council
- Estonia: ETAIS/UT

Nordic EOSC-A Task Force Engagement (current status)

- 1.1 PID policy 23 members
- 1.2 Engagement 38 members
- **1.3 RoP 23 members**
- 2.1 FAIR metrics 25 members
- 2.2 Semantic interop 44 members
- 3.1 Stewardship 25 members
- 3.2 Recognition 27 members
- 3.3 Upskilling 26 members
- 4.1 Funding 30 members
- 4.2 Preservation 37 members
- **5.1 AAI – 35** members
- 5.2 Software 41 members
- 5.3 Technical interop 67 members

- Denmark: 7
- Finland: 14
- Norway: 4
- Sweden: 19
- Estonia: 1
- Members associated with EOSC-Nordic: 8



Conclusions

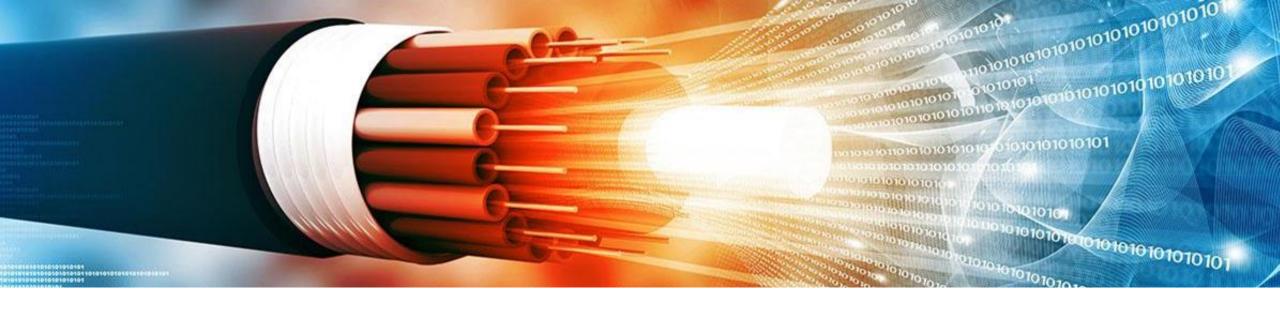
- We are to few members in the EOSC Association from Nordic countries to really influence in the building of EOSC (16/196)
- We have some influence by the Nordic members in the taskforces (45/545)
- The Nordic countries should work together to get a stronger voice
 - EOSC-Nordic is a good network to start from
- EOSC- Nordic is connecting to EOSC Association to discuss the project result that could be useful for the future work with EOSC



Conclusions

- Different paths for sustainability depending on the result and its role in the EOSC implementation
- The sustainability of some KERs requires extra funding. Adoption does not always come "for free"
- Hand over of activities/tools will require dialogue and agreements with ongoing and upcoming initiatives and the EOSC Partnership beyond the Nordic region

We have 10 months to make the best of it!





Save the dates for the final EOSC-Nordic Policy Workshop:

@NelC2022 conf: May 30 – June 2nd, 2022
Oslo, Norway

www.eosc-nordic.eu

