# Practical alignment of e-Infrastructure services in a cross-border setup

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Iceland UNIVERSITY OF ICELAND

#### Norway

24 Participants

NORDFORSK

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 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 OFVILNIUS

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Germany

DKRZ

# Preliminary work - NeIC Dellingr project

- NeIC Dellingr project (2017-2020) investigated cross-border collaboration opportunities and issues
- Dellingr project has been influential in designing EOSC-Nordic with most partners being also EOSC-Nordic partners (FI, DK, NO, SE, EE, IS)
- <u>https://wiki.neic.no/wiki/Dellingr</u>
- Accent on access for smaller scale HPC projects

# Highlights of issues discovered in Dellingr

- Technical issues were generally solvable and were handled by service provider support.
- A major effort was spent on the aligning semantics and organizational aspects of services.
  - Access policies / required levels of assurance
  - VAT
  - Motivation for granting the access
  - Required attributes of the request to reduce overhead of follow-ups
- EOSC would hopefully provide standard solutions for such issues

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

## Integration

Identify existing Nordic generic and thematic service providers.

Support integration and discovery of their services via the EOSC portal

EOSC Local/national services

## Interoperability

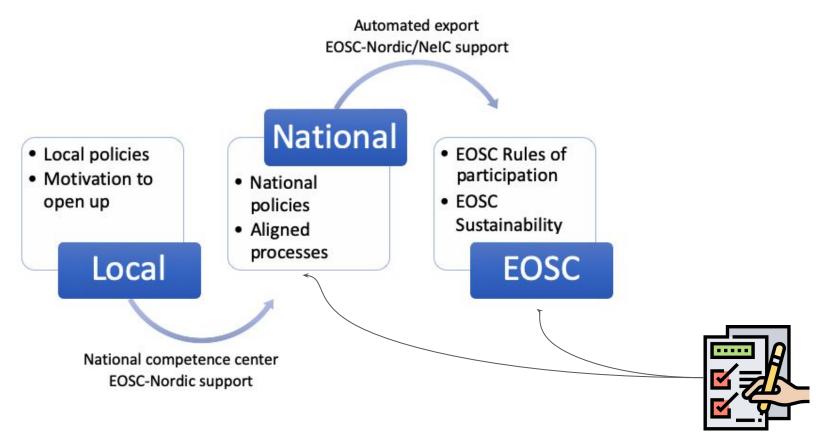
Foster organizational, semantic and technical interoperability of service providers.

Propose improvements of the interoperability approach within EOSC.

# EOSC-Nordic accent is on increasing interoperability

- We aim at aligning the services and bringing them to a common level of maturity
- Mature services should be able to efficiently address resource consumption in a cross-border setup
- A tool of choice for evaluating the situation as well as providing actionable suggestions is a Maturity model
- The model along with the concrete examples of its application will be published during this month.

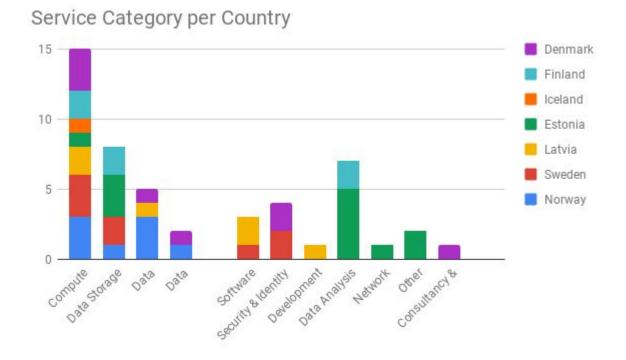
## EOSC-Nordic approach to EOSC service publishing



Maturity model

## Coverage of analysis

Over 50 services analysed from all Nordic and Baltic countries



						Minimal requirements for an EOSC s	service
1			шшиш	Intermediate	High		
2	1. Service managemen	τ					Source:
3	S-1	X	(	х	х	Web address where more information about the service can be found is publicly available	FitSM: Service Portfolio Management Process
4	S-2	>	(	Х	х	Contact address for end-users is publicly available	FitSM: Incident & Service Request Management Pro EOSC portal service requirements for providers
5	S-3	>	(	Х	Х	Contact address for security issues is publicly available	FitSM: Incident & Service Request Management Pro
6	S-4	>	(	х	х	Service documentation for end users is publicly available	FitSM: Service Portfolio Management Process, EOSC portal service requirements for providers
7	S-5	X	(	Х	Х	Disaster recovery possibilities for research data are publicly described	FitSM: Incident & Service Request Management Pro
8	S-6			Х	х	Detailed service installation documentation exist.	
9	S-7			х	Х	Automatic software upgrades have been implemented or there is an alternative policy/practice enabling rapid responses to software vulnerabilities	FitSM: Information Security Management
10	S-8			х	х	Service availability is monitored and availability information is publicly available for service users	FitSM: Service Level Management, FitSM: Service Availability & Continuity Managemen
11	S-9				Х	Service level target is defined and it is publicly available	FitSM: Service Level Management
12	S-10				х	Service capacity is monitored	FitSM: Capacity Management

Service name:	UT Ro				
Assessor:	Ahti S				
Date:	21.04				
1. Service manag	ement			Result	
	S-1	Web address where more information about the service can be found is publicly available	Yes		
	S-2	Contact address for end-users is publicly available	Yes		
	S-3	Contact address for security issues is publicly available	Yes	•	
	S-4	Service documentation for end users is publicly available	Yes	•	
	S-5	Disaster recovery possibilities for research data are publicly described	No	•	
	S-6	Detailed service installation documentation exist.	Yes	•	
	S-7	Automatic software upgrades have been implemented or there is an alternative policy/practice enabling rapid responses to software vulnerabilities	Yes	•	
	S-8	Service availability is monitored and availability information is publicly available for service users	Yes	•	
	S-9	Service level target is defined and it is publicly available	No	•	
	S-10	Service capacity is monitored	Yes	•	
	S-11	Service capacity limits are known	Yes	•	
	S-12	Service usage metric is defined and followed	Yes	•	
	S-13	Information about maintenance breaks is publicly available	Yes	•	
	S-14	There is a document, that is used to ensure that the service behaves normally after implemented changes	Yes	•	

	D-1	Service provider has analyzed "FAIRness" of the service.	Unknown	•
	D-2	Research data lifecycle is clearly publicly defined	Unknown	•
3. Accessil	oility and lega	requirements		
	L-1	The service is accessible by users outside its original community	Yes	-
	L-2	Service usage form other EU countries is possible	Yes	-
	L-3	Terms Of Use is available	Yes	-
	L-4	IPR (immaterial rights) : * Licences, non-disclosure agreements, copyrights, database rights, are clear	Unknown	
	L-5	Limitation of liability in contracts and contract chains: * Damages has to be limited	Unknown	
	L-6	GDPR * GDPR status of a service has been clarified * If the service contains or processes personal data, GDPR implications have been identified * If the service contains or processes personal data, service fullfills GDPR requirements	Yes	

4. Sustainability				
	F-1	Status in terms of service lifecycle is publicly available (e.g. pilot, in		
		production, to be debrecated soon)	Yes	
5. EOSC archited	ture com	npatibility (to be included when documents and services become available)		/
	A-1	EOSC Monitoring and reporting implemented	No	-
	A-2	EOSC AAI implemented	No	-
	A-3	EOSC monitoring implemented	No	-
	A-4	EOSC accounting implemented	No	-
	A-5	EOSC Data Transfer Services implemented	No	•
	A-6	Persistent identifier with required metadata for services	No	•
		SCORE		63.33%
		Number of N/A-s		0
Penc	Jing relea	ase of the relevant documents by EOSC WGs		
	-			

## Next steps

- We are going to publish the model along with performed estimations very soon.
- We plan to release an updated version with a larger accent on cross-border interactions following the release of EOSC WG artefacts.
- It is our vision that in the longer run such maturity model would be replaced by the evolved Service Description Template.

# Thank you! ilja@etais.ee