

National Initiatives for Open Science in Europe



RDM Gaps in the Balkans and South Eastern Europe - Insights from the NI4OS-Europe Survey

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Landscaping activity in NI4OS-Europe

- Landscaping data collected in various rounds
 - Survey data collected in the autumn of 2019 for the NI4OS-Europe landscaping study (<https://doi.org/10.5281/zenodo.3766125>)
 - Experts interviews in summer 2020
 - Structured questionnaires summer 2021 (on the occasion of the EOSC Secretariat survey)
 - Regular (structured) reports by project partners on NOSCI development
 - Desk research
- Landscaping in numbers
 - Information about 1170 stakeholders from SEE in initial survey
 - 575 complete responses
 - More than 60 experts interviews and reports



15 Member States and Associated Countries | 22 Partners

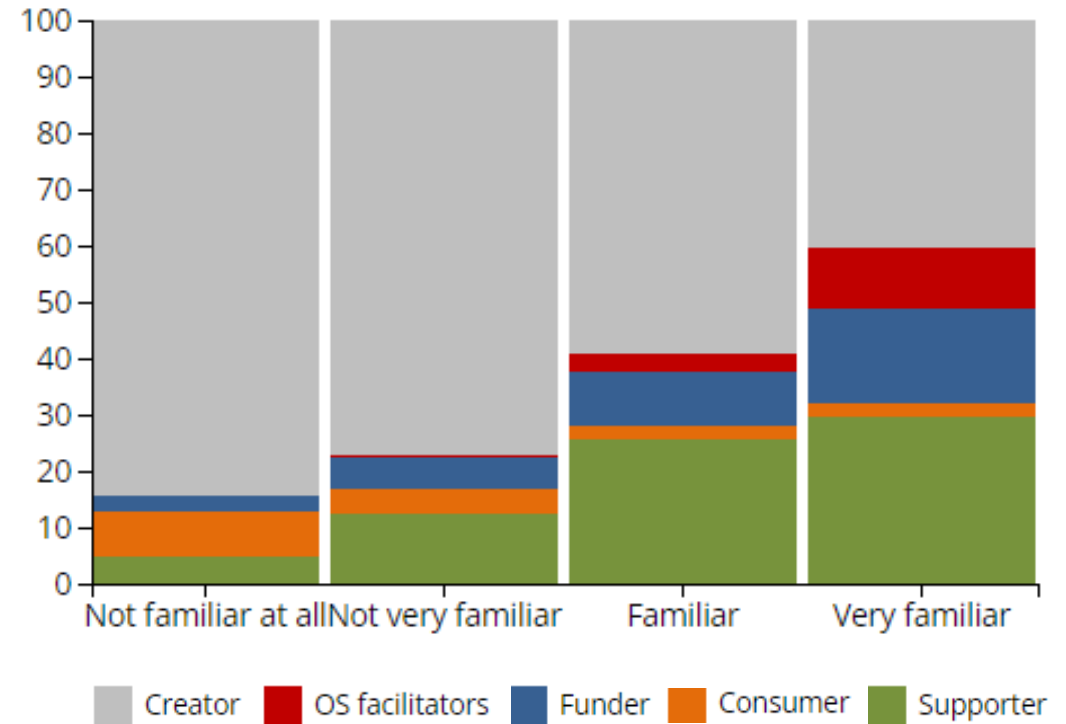
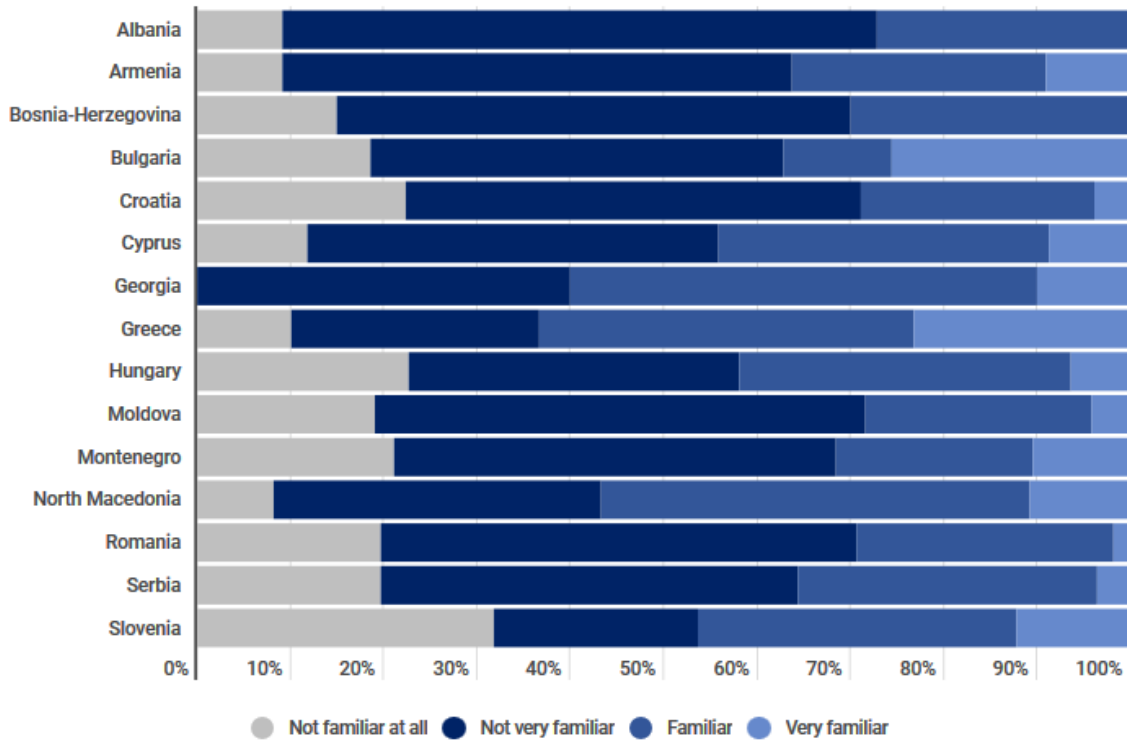
Overview of challenges

- OS maturity: incentives, OS policies (absence or presence, level of adoption)
- Technical: Infrastructure development, collaboration, sharing
- Relation to EU: integration and presence in European OS networks
- National contexts: differences in the OS policy development and organisation
- Funding: differences among countries, and region vs other parts of Europe
- Stakeholders: structure, perceptions on OS
- Skills and training: FAIR, publishing, IPR, PIDs...
- Region specific: political and historical tradition, languages, diversity and fragmentation

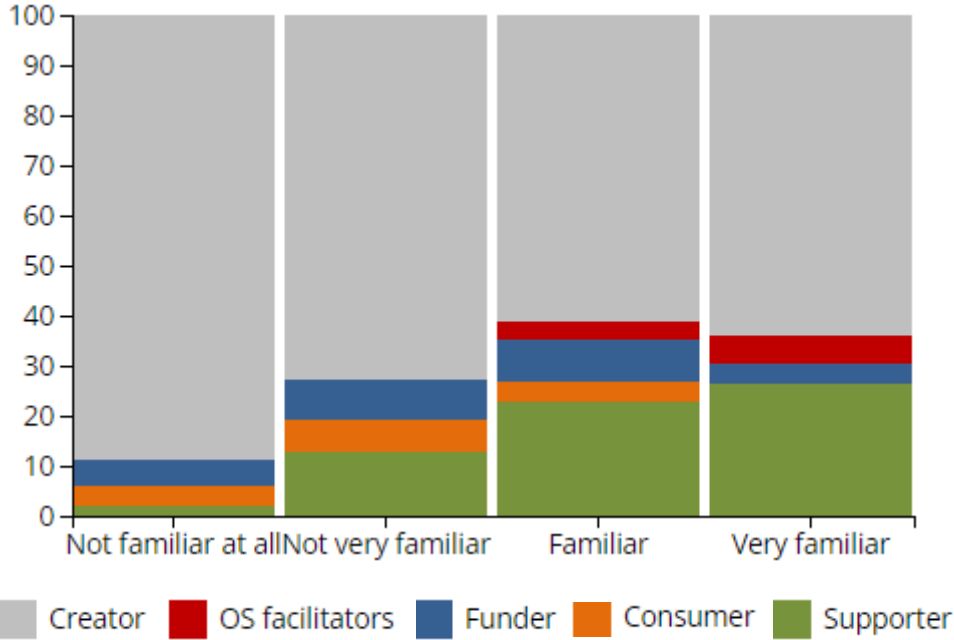
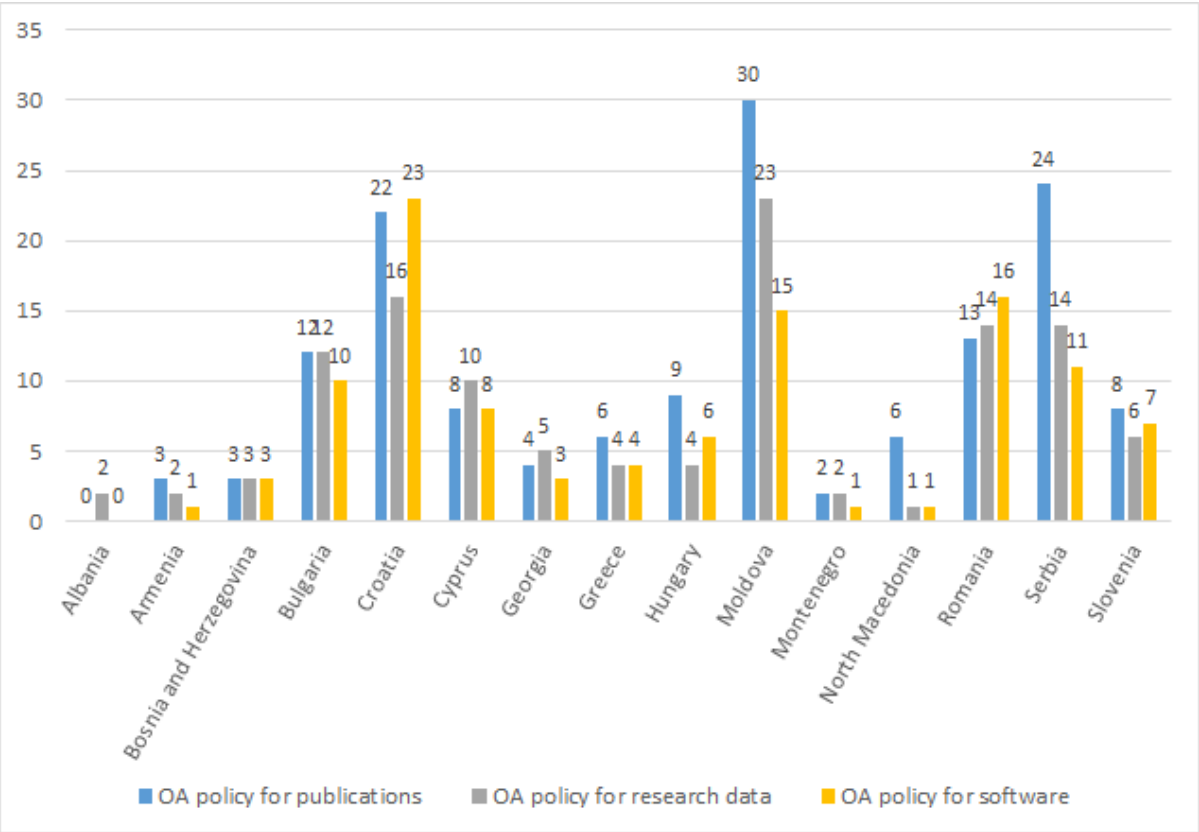
NI4OS-Europe area specific challenges

- Diversity - different levels of maturity reflected at
 - Open Science policies & initiatives
 - Research Infrastructures
 - Research & Education policies
- Political instability often affects introduction & implementation of OS policies at national level
- Science collaboration across countries
 - Affected e.g. by military conflicts in the 90's →
 - Slow recover process, lack of sustainable structures in the region
- Language diversity: 10 languages, 5 alphabets
 - Affects searching, sharing, reusing of data and information, and training on ORDM
- R&D funding:
 - Significantly lower than EU average (2.2% of GDP)
 - EU members: High income economies, Associated countries: Upper-Middle-Income Economies
- Political and historical tradition, languages, diversity and fragmentation
 - Impact on science collaboration and technical coordination

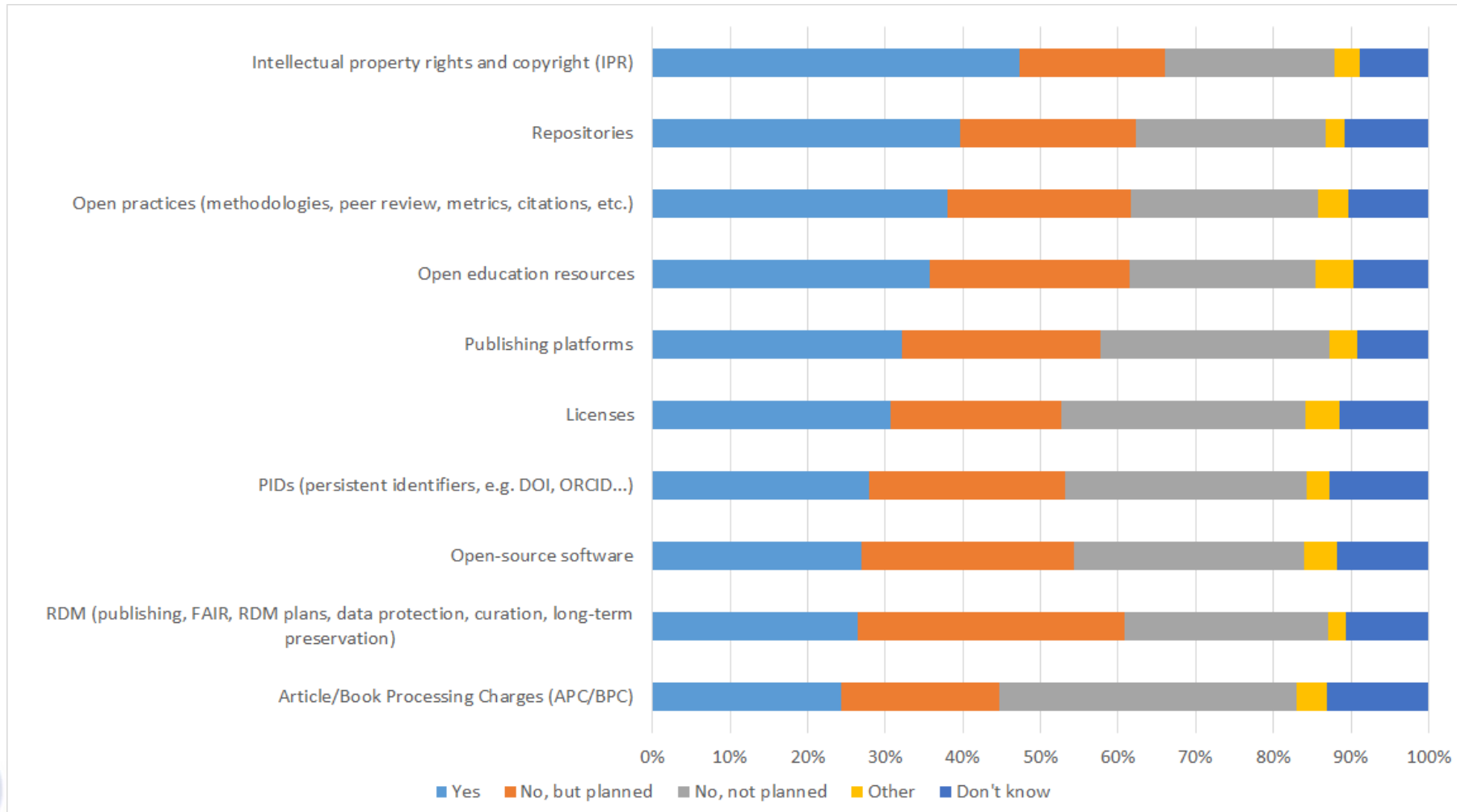
Survey: Familiarity with EOSC



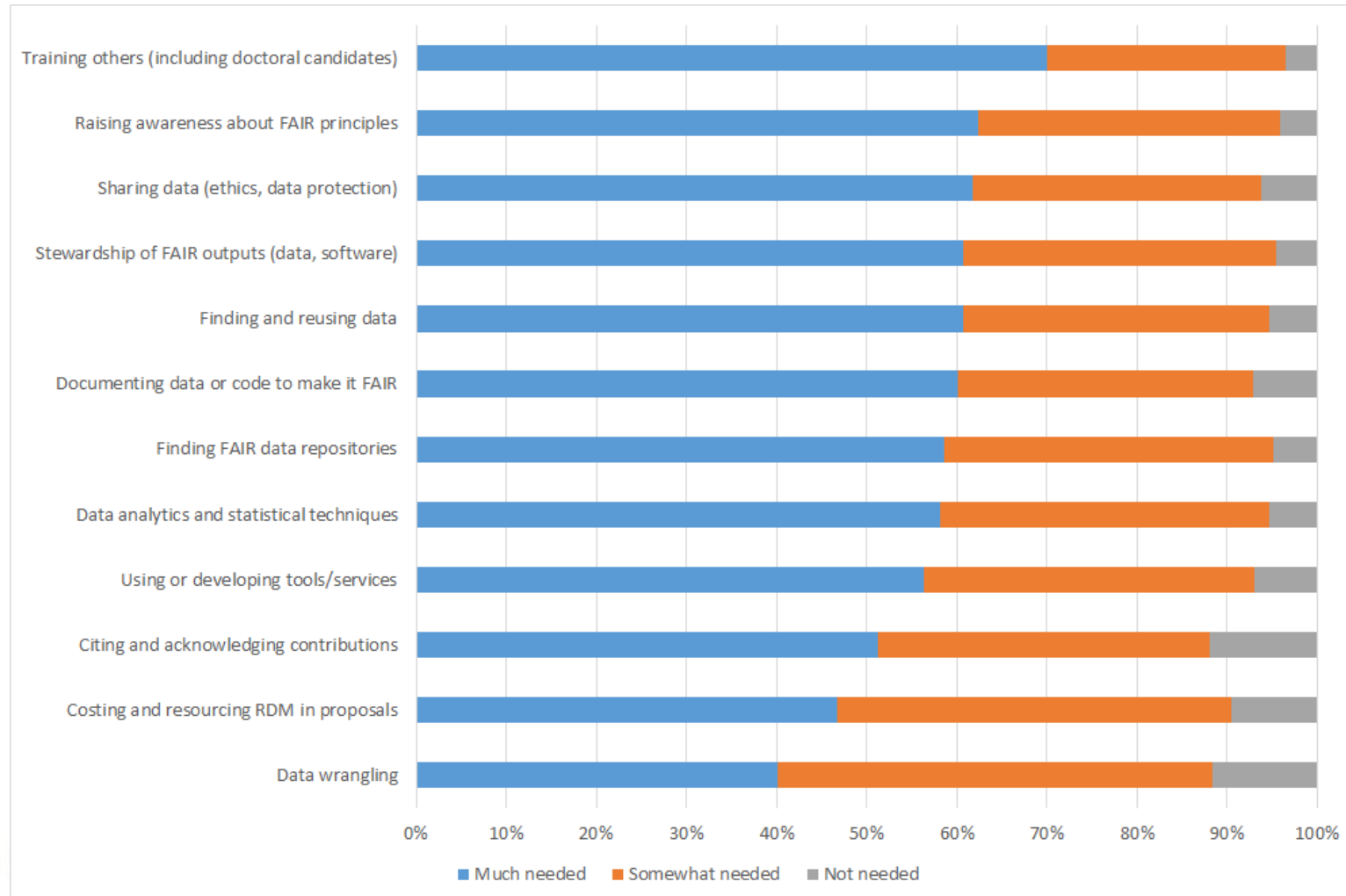
OS maturity: institutional policies and familiarity with FAIR



Institutional support and training by areas



ORDM & FAIR data: identified needs & Training gaps



Integration in European OS networks

	Country	Open AIRE	EUDAT	EGI	GEANT	National RI Roadmaps	RDA NODE	CESSDA	DARIAH	EIFL	CLARIN	OPERAS
EU	Bulgaria	■		■	■	■	■	■	■		■	
	Croatia	■		■	■	■	■	■	■		■	■
	Cyprus	■	■		■				■		■	
	Greece	■	■	■	■	■	■	■	■		■	■
	Hungary	■		■	■	■	■	■	■		■	
	Romania	■		■	■	■	■	■	■			
	Slovenia	■		■	■	■	■	■	■	■	■	■
Non - EU	Albania				■					■		
	Armenia	■			■					■		
	Bosnia & Herzegovina	■						■				
	Georgia				■							
	Montenegro	■						■				
	Moldova				■					■		
	North Macedonia	■		■	■			■		■		
	Serbia	■			■			■	■	■		■

Non-EU countries are less integrated in European Open Science networks

- Infrastructure obsolescence
- Investment in unsustainable tools and services
- Interoperability and compliance with standards

Technical challenges: uneven infrastructure development

- Differences between EU and Associated countries
 - Access to shared, international infrastructures for EU members easier than for Associated
 - Impacts the implementation of cross-countries technical solutions
 - However! → Regional collaboration in the past two decades tries to address this: establishment of pan-European infrastructures (Grid computing, shared services, OpenAIRE network & services)
- Development of registries: service, stakeholder, policy
 - No curated national or regional registries offering information about relevant institutional stakeholders
 - No standardised and curated national or regional registries of services relevant for OS
- Development of repositories
 - Small number of repositories in the region in general
 - Data repositories even fewer than publication repositories
 - Interoperability issues
 - Integration of repositories from SEE with OpenAIRE: Not all repositories meet technical requirements for integration

Supporting FAIR & OS across research communities



Tools

Addressing principles; focus on legal aspects and EOSC

- LCT- License Clearance Tool
<https://lct.ni4os.eu/>
- RoLECT - EOSC RoP Legal & Ethics Compliance
<https://rolect.ni4os.eu>
- RePol – Repository Policy Generator
<https://repol.ni4os.eu>



Training

Promoting practices and skills – uptake

- Network of trainers
- Resources on Open and FAIR RDM
FAIR Maturity Model, FAIRify, ORDM training, ...
- Supporting material
Translations, guidelines, incentives



Onboarding

Applying principles in practice – implementation

- Pre-production environment
AGORA, ARGO, AAI
- On-boarding support
generic & thematic services and repositories
- Demonstrators
4 scientific communities
- Service Catalogue
<https://catalogue.ni4os.eu>



Community

Creating awareness; building capacity

- NOSCIs
OS stakeholders in each country supporting EOSC governance
- Network of EOSC promoters
EOSC ambassadors highlighting on the ground FAIR & OS
- Network of translation officers
Speaking FAIR and OS in national languages



**EOSC Regional
Event in Budapest**

SEPTEMBER 28-29, 2022
BUDAPEST UNIVERSITY OF
TECHNOLOGY AND ECONOMICS

'Embedding EOSC in Southeast Europe'

The banner features a large circular image of the Chain Bridge in Budapest, with a cityscape in the background. The design is decorated with various blue and grey circles and patterns.

<https://ni4os.eu/eosc-regional-event-in-budapest>

Thanks!



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