

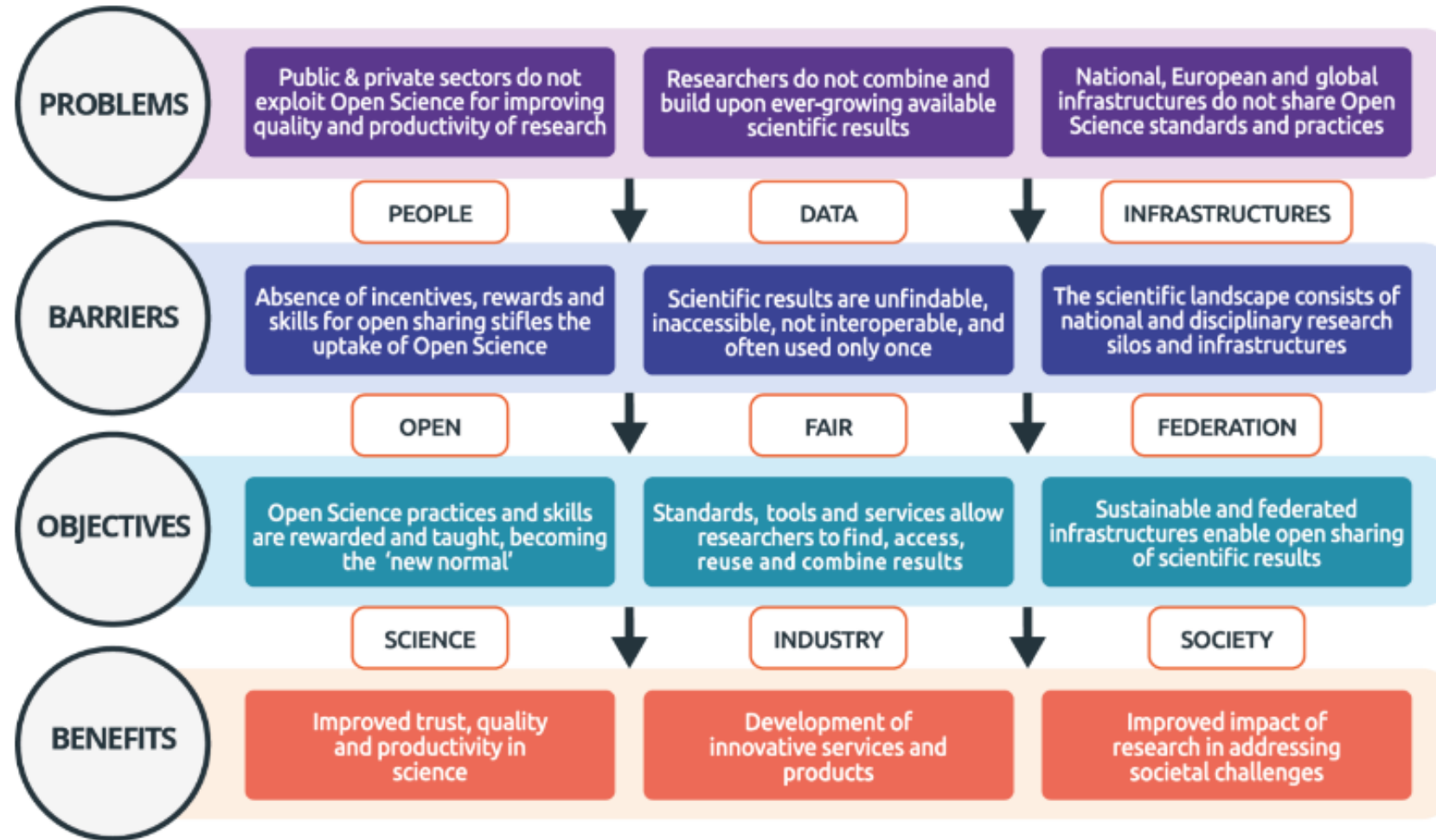
# National Initiatives for Open Science in Europe



## National Open Science Cloud Initiatives and their role in EOSC inclusiveness and Open Science capacity building

Eleni Toli  
ATHENA RC  
NI4OS-Europe Project Director

# European Open Science Cloud: why?



# EOSC Guiding Principles

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- **Research-community centred:** EOSC will place research at the centre of the initiative and will thus prioritise engagement with research communities to understand their requirements, helping them and ensuring academic sovereignty of research data.
- **Multi-stakeholderism:** EOSC will succeed if and only if it follows a multi-stakeholder approach;
- **Openness:** EOSC will ensure that research artefacts are ‘as open as possible, as closed as necessary’;
- **FAIR principles:** EOSC will assemble research artefacts that are findable, accessible, interoperable and reusable;
- **Federation of infrastructures:** EOSC will federate existing and upcoming research infrastructures;
- **Machine-actionable:** EOSC will strike the right balance between machines and people in delivering the services that will serve the needs of European scientists.

# EOSC implementation: Regional projects

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# 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*

- **NOSCI**  
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

# NOSCI: a network of OS and EOSC actors

## 15 NOSCI in Southeast Europe


•2022  
•**National Open Science Cloud Initiative in Albania**  
•Workflow: Hybrid

Albania 


•2022  
•**Armenian National Open Science Cloud Initiative**  
•Workflow: Bottom-up

Armenia 

•2022  
•**Bosnia & Herzegovina NOSCI**  
•Workflow: Hybrid

Bosnia-Herzegovina 


•2021  
•**National Initiative for Open Data and Cloud Computing (Bgl-ODCC)**  
•Workflow: Hybrid

Bulgaria 


•2021  
•**Croatian Open Science Cloud Initiative (locally HR-OOZ initiative)**  
•Workflow: Hybrid

Croatia 


•2022  
•**Cyprus Open Science Initiative**  
•Workflow: Top-down

Cyprus 


•2021  
•**Georgian Open Science Cloud Initiative (GOSCI)**  
•Workflow: Bottom-up

Georgia 


•2022  
•**Hellenic Open Science Initiative (EPAE-HOSI)**  
•Workflow: Hybrid

Greece 

•2021  
•**Nyílt Tudományos Fórum (Open Science Forum)**  
•Workflow: Hybrid

Hungary 

•2020  
•**National Open Science Cloud Initiative in Montenegro (NIOON)**  
•Workflow: Bottom up

Montenegro 

•2021  
•**National Open Science Cloud Initiative in North Macedonia (NOSCI.MK)**  
•Workflow: Hybrid

North Macedonia 

•2021  
•**Romanian Open Science Cloud Initiative (RO-NOSCI)**  
•Workflow: Hybrid

Romania 

•2020  
•**Team for Open Science in Serbia (TONus)**  
•Workflow: Hybrid

Serbia 

•2021  
•**Slovenian Open Science Community**  
•Workflow: Top-down

Slovenia 

•2023  
•**MD-NOSCI**  
•Workflow: Top-down

Moldova 

# NOSCI: the process

Landscaping

Modelling

Setting up

Training, liaison, collaboration

Monitoring and assessment



# NOSCI establishment Toolbox

## Modular methodologies and workflows

- [Blueprint \(NI4OS-Europe D2.2\)](#)
- [Checklist - Workflows for setting up NOSCI](#)
- [Checklist - Indicators for the NOSCI's establishment](#)
- [Operational aspects and sustainability \(NI4OS-Europe D2.5\)](#)
- [Workflow examples](#)
- [Training material & events](#)



[D2.2 National OSC initiatives model](#)



[Incentives & Rewards for supporting Open Research Data Management and FAIR](#)



[Workflows for setting up NOSCI](#)



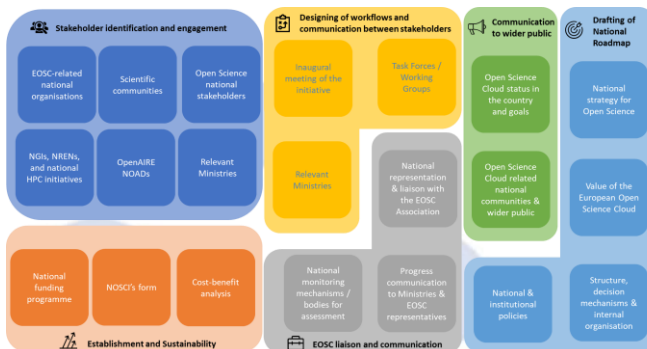
[Indicators for the NOSCI's establishment](#)



[How to support EOSC – Incentives List](#)



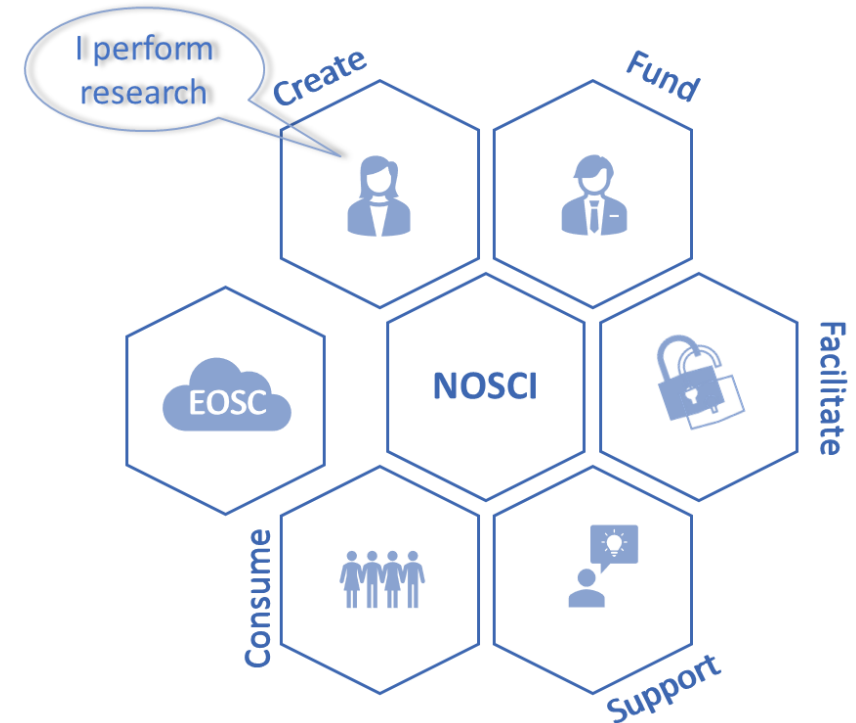
[ORDM & FAIR: Guidelines and Incentives](#)





# National Open Science Cloud Initiatives (NOSCI)

- Living national OS ecosystems that support the EOSC Governance
- Embrace diversity and OS maturity of countries and are inclusive in terms of participation of OS stakeholders
- Keep national stakeholders up to date with EOSC developments and spread awareness
- Coordinating national activities that enable interconnection with EOSC Ecosystem



Country	OS Policy/Plan	EOSC-A	NOSCI
<b>Albania</b>	<u>In progress</u> Open Access Policy Regulation document Database for Archiving and Publication of Research Funds and Programs in Albania	Mandated Member <b>RASH</b>	✓
<b>Armenia</b>	<u>In progress</u> Strengthening Research Management and Open Science Capacities of HEIs in Moldova and Armenia	Observer <b>IIAP NAS RA</b>	✓
<b>Bosnia-Herzegovina</b>	<u>In progress</u> Action plan of the council of ministers of Bosnia and Herzegovina for the implementation of the initiative “Open Government Partnership”	Observer <b>UNIBL</b>	✓
<b>Bulgaria</b>	✓ National Open Science Plan for Bulgaria (2021)	Mandated Member <b>NACID</b>	✓
<b>Croatia</b>	✓ Croatian Open Access Declaration (2012) Croatian Act on Scientific Activity (to be adopted)	Mandated Member <b>SRCE</b>	✓
<b>Cyprus</b>	✓ OA/OS policy (2016) National Policy of the Republic of Cyprus for Open Science Practices (May 2022)	Member <b>European University Cyprus</b>	✓
<b>Georgia</b>	<u>In progress</u> Policy to define clear steps for the dissemination of and open access to scientific publications	No	✓
<b>Greece</b>	✓ National Open Science Plan – 2020 Digital Transformation Strategy - 2021	Member <b>GRNET-ATHENA-OpenAIRE</b> Observer <b>NCSR-D-JNP-FORTH</b>	✓

Country	OS Policy/Plan	EOSC-A	NOSCI
Hungary	<p style="text-align: center;">✓</p> <p style="text-align: center;">Open Science /FAIR data policy</p>	Mandated Member <b>KIFU</b>	✓
Moldova	<p style="text-align: center;">✓</p> <p style="text-align: center;">Code on Science and Innovation (2004 and amendments in 2018) Declaration on Open Science (2018) National Strategy for the Development of the Digital Moldova Information Society (2020)</p>	Mandated Member <b>IDSI</b> Member <b>NARD</b>	✓
Montenegro	<p style="text-align: center;">✓</p> <p style="text-align: center;">Programme of Implementation of Open Science Principles in Montenegro with the Action Plan (2020–2022) - 2020</p>	No	✓
North Macedonia	<p style="text-align: center;"><u>In progress</u></p> <p style="text-align: center;">OS/OA policies upcoming to the ESFRI and other related roadmaps</p>	Member <b>FCSE, UKIM</b>	✓
Romania	<p style="text-align: center;">✓</p> <p style="text-align: center;">National Action Plan 2018-2020 for Open Government Partnership (NAP 2018-2020)</p>	Mandated Member <b>ICI Bucharest</b> Member <b>UEFISCDI</b>	✓
Serbia	<p style="text-align: center;">✓</p> <p style="text-align: center;">OA/OS policy in place, adopted in 2018 Open Science Platform and the inclusion of Open Science in the Law on Science and Research (2019)</p>	Member <b>IPB</b>	✓
Slovenia	<p style="text-align: center;">✓</p> <p style="text-align: center;">OA/OS policy in place adopted in 2015 The new Resolution on Research and Innovation Strategy of Slovenia 2021–2030 and its related Action Plan – in progress (in progress)</p> <p style="text-align: center;">NI4OS-EUROPE   NOSCI Inaugural event, Moldova, 30 March 2023</p>	Mandated Member <b>ARNES</b> Member <b>NIB University of Maribor</b>	✓

# Impact of NOSCI

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- Strong collaboration at regional level
- Exchange of best practices related to OS
- Training of a respectable number of individuals on OS / FAIR / EOSC
- Development or update of official OS Policies in majority of SEE countries
- National OS plans in several countries
- Alignment of national policies at EU level
- Support to be at the same pace across the region, while respecting national frames
- Harmonisation and consolidation within the national OS ecosystems
- Encourage broader use of EOSC available resources

# The way forward

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- Effort still need needed to persuade stakeholders to embrace OS – significant contribution thus far by regional projects
- Regional initiatives (NI4OS-Europe) and national engagement are important for alignment with EU efforts and EOSC capacity building
- Inclusiveness at national and regional level: paradigm change and driver of change

# Thanks!

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**Eleni Toli, [elto@athenarc.gr](mailto:elto@athenarc.gr)**



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