

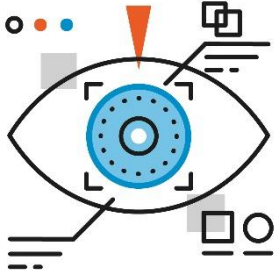
National Initiatives for Open Science in Europe

A close-up photograph of a molecular model with several metallic spheres connected by thin rods. One sphere in the foreground is bright yellow, while the others are silver. The background is a light blue surface with a subtle grid pattern.

NOSCI organizational and funding
models towards sustainability

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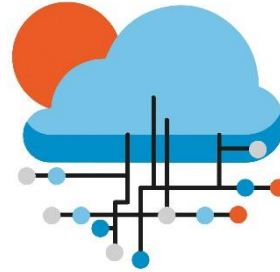
NOSCI Operational aspects



Governance &
Organization



Definition of
Strategy



Infrastructures
& Services



Sustainability

- Costs generating
- Revenues generating
- Inevitable for short- and long-term operation of NOSCIs

Main elements



Governance and Organization

- 3 distinct phases with different costs & funding needs: Planning - Establishment - Support & maintenance
- Clear definition of activity levels
 - Internal: workflows, actions & deliverables, terms & conditions
 - External: negotiations, collaborations with external parties, formal representation scheme, EOSC Association



Definition of strategic outputs & procedures

- Research Outputs: Literature (Green OA, Gold OA), Research Data (Open and FAIR, DMPs), Software (FOSS and FAIR, Software Management Plans)
- Access, preservation and RDM: Access policies (Excellence-driven, Market driven, Wide access), Preservation policies (Retention, back up), RDM policies, including FAIR



Infrastructures and Services

- National Service Catalogue
- Information Technology Service Management Framework
- Monitor and Access policies



- Cost-benefit analysis highlighting recurring and non-recurring cost
 - Infrastructures & services (development & maintenance)
 - Human resources
 - Training & upskilling
 - Data curation services and support (infrastructure support, helpdesk, data stewards, collection and sharing information about best practices)
- Sustainability plan identifying revenue streams
 - Contribution to open calls, Crowdsourcing, National fund, National projects, Membership



Stakeholder identification and engagement

EOSC-related
national
organisations

Scientific
communities

Open Science
national
stakeholders

NGIs, NRENs,
and national
HPC initiatives

OpenAIRE
NOADs

Relevant
Ministries



Designing of workflows and communication between stakeholders

Inaugural
meeting of the
initiative

Task Forces /
Working
Groups

Relevant
Ministries

National
representation
& liaison with
the EOSC
Association

National
monitoring
mechanisms /
bodies for
assessment

Progress
communication
to Ministries &
EOSC
representatives



EOSC liaison and communication



Communication to wider public

Open Science
Cloud status in
the country
and goals

Open Science
Cloud related
national
communities &
wider public



Drafting of National Roadmap

National
strategy for
Open Science

Value of the
European Open
Science Cloud

Structure,
decision
mechanisms &
internal
organisation

National &
institutional
policies



Establishment and Sustainability

National
funding
programme

NOSCI's form

Cost-benefit
analysis

NI4OS-Europe survey:

comparison of national procurement practices and funding models



- **Procurement:** • national procurement legislation, alignment with the EU green procurement • charging of services • purchase of supplies & services
 - national legislation on public procurement in all countries
 - modernisation, simplification & reform of the public procurement framework
 - >90% of public organisations organized electronic tenders and implemented central public procurement procedures
 - huge differences between EU and non-EU countries (e.g also in Green Procurement)

NI4OS-Europe survey:

comparison of national procurement practices and funding models



- **Funding:** • main funding sources • other funding streams
 - national public funding: national governmental institutions, competitive calls funded by national funds
 - significant part of funds through EU projects
 - small amount of industry funding through tailor-made projects (e.g. through contracts)
 - other funding streams account for around 2-3% of a total budget
 - regular, e.g. hosting and domain administration services
 - non-regular, e.g. on-demand requests for specific services (consultancy, certified training, etc.)

NI4OS-Europe survey:

comparison of national procurement practices and funding models



- **FAIR:** • identification of costs for FAIRifying services & data
 - good understanding of related cost categories (collection, processing, cleaning, integration, analysis...). However,
 - these costs are not monitored or calculated, they are hidden within other cost categories (labour, infrastructure, equipment, etc.)
 - only one organization reported clear identification of related costs (for supporting EOSC integration of resources and organization of FAIR events)

NI4OS-Europe survey:

comparison of national procurement practices and funding models



- **NOSCI funding/sustainability:** • potential funding mechanisms
 - Current status:
 - lightweight consortium structure governed and coordinated through a MoU, and funded through in-kind contributions by its partners
 - all resources (computing, storage, software, connectivity and access to data) remain the property of parties who own them and make them available at their usual terms
 - resource management and operation, as well as the establishment of usage policies are the responsibility of each party
 - In the medium term:
 - acquisition of dedicated national funding, as part of the countries OS orientation
 - dedicated national project with fixed duration
 - membership fees

Acknowledging OS and FAIR



Provision of Incentives as an indirect funding mechanism –
Quantitative and qualitative benefits

- Award a priority in equipment/ service provision
- Award extra points according to the official research assessment system (e.g., project proposal evaluation, career advancements, allocation of funds)
- Award a conference fee
- Award a membership fee
- Award funds for APCs

Thanks!



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