

Winter School 2026

27-29 January 2026
Nice, France



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Thematic Track 1
Rapporteur(s): Tibor Kálmán

Thursday, 29 Jan 2026, 09:30 -11:00



Grant agreement ID: 101188045

Thematic Track 1

Federating Capabilities and Interoperability

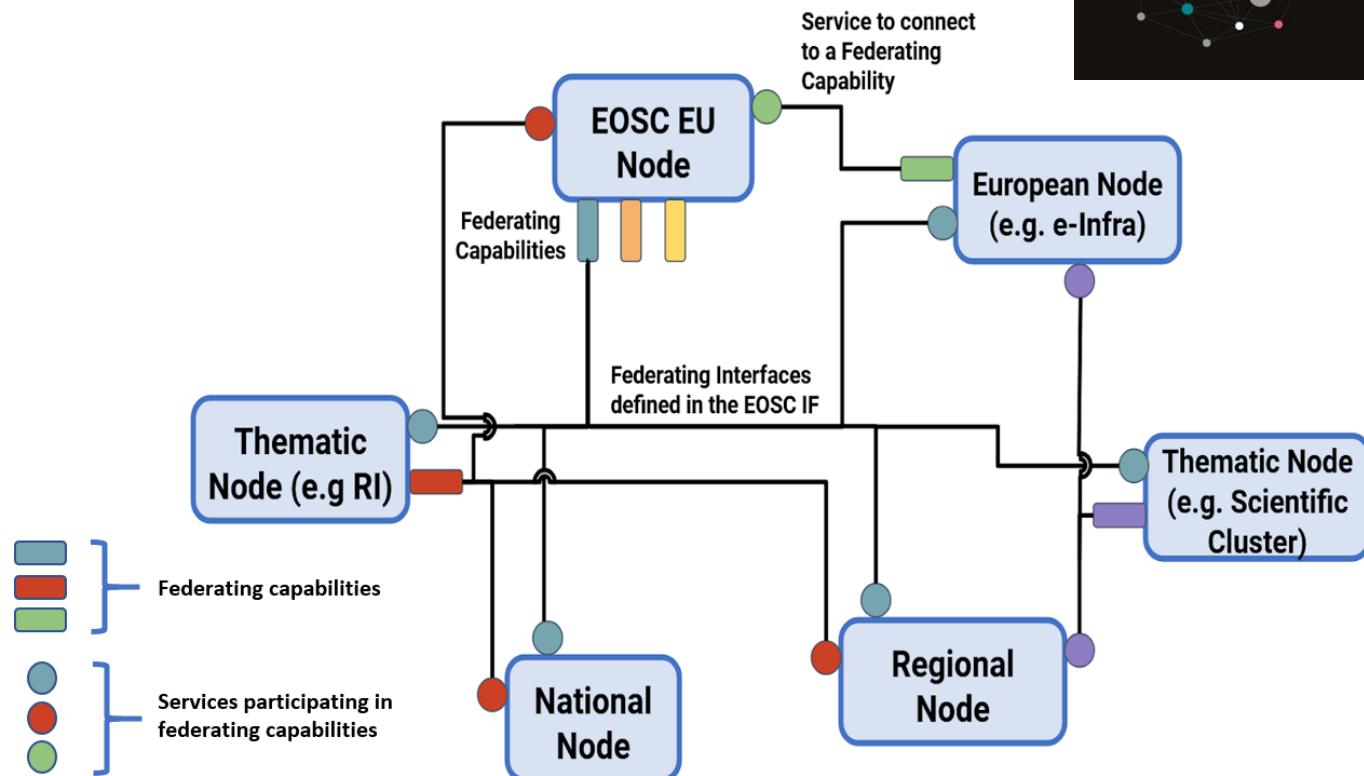
- Track Chairs: Diego Scardaci, Esteban González, Tomasz Miksa, Tibor Kálmán
- Rapporteur: Tibor Kálmán
- Participants represented:
 - FAIR2ADAPT, OSTRAILS, EVERSE, EOSC Beyond, EOSC Data Commons, EOSC United, EOSC Gravity, CA4EOSC, CDIF4XAS, EOSC-ENTRUST, FIDELIS, Blue-Cloud, RAISE Suite
 - OAEGs 1, 2, 3, 4
 - TFs 1, 2, 3
- **Core challenge/topics addressed (briefly restate the EOSC Federation Build-up Group challenges relevant for this track)**
 - Development of a metadata catalog for classifying subject areas, maturity, scope of existing data sets, and resources
 - Development of access models and cost structures (governance)
 - Onboarding of the broader scientific community beyond the existing institutions

Session A (Track #1)

Session/ Chairs	Time	Topic	Speakers/Contributors	Format
Session A / Diego Scardaci	11:00-11:25	EOSC Architecture and Interoperability	Diego Scardaci Jiří Marek	Presentation
	11:25-11:30	Introduction to the lightning talks	Stefan Reichmann	Presentation
	11:30-11:35	An introduction to FAIR Implementation Profiles	Alexandra Kokkinaki Barbara Magagna Wolmar N. Åkerström	Lightning Talks
	11:35-11:40	The maDMP Interoperability Framework	Tomasz Miksa	
	11:40-11:45	Demonstrating cross-domain Essential Climate Variable data access using harmonisation at the data level (ENVRI-HUB-Next's)	Tjerk Krijger	
	11:45-11:50	FDOs: Semantic Interoperability in the EOSC Federation - The EOSC Data Commons Approach	Enol Fernandez	
	11:50-11:55	Metadata Inconsistencies and Interoperability: Impact on Data Discovery	Nicola Fiore	
	11:55-12:00	Harmonizing and integrating (meta)data from various sources	Paolo Manghi Daniel Garijo	
	12:00-12:05	Federating Capabilities and Interoperability: How to deal with diversity of solutions	Esteban Gonzalez	
	12:05-12:10	Challenges to service discovery and interoperability	Kostas Koumantaros	
	12:10-12:15	EOSC-specific incident handling/mitigation	Urpo Kaila	



- **EOSC Nodes:** national, regional, thematic, European nodes (i.e. e-infras) and the EOSC EU Node;
- **EOSC Federating Capabilities:** functions enabled collaboratively by the EOSC Nodes offered (or required) at the Federation level (enabled by **Federating Services**).
- **EOSC Interoperability Framework:** standards (protocols, APIs, metadata schemas) and guidelines (including legal/organisational aspects) for communication between Node services



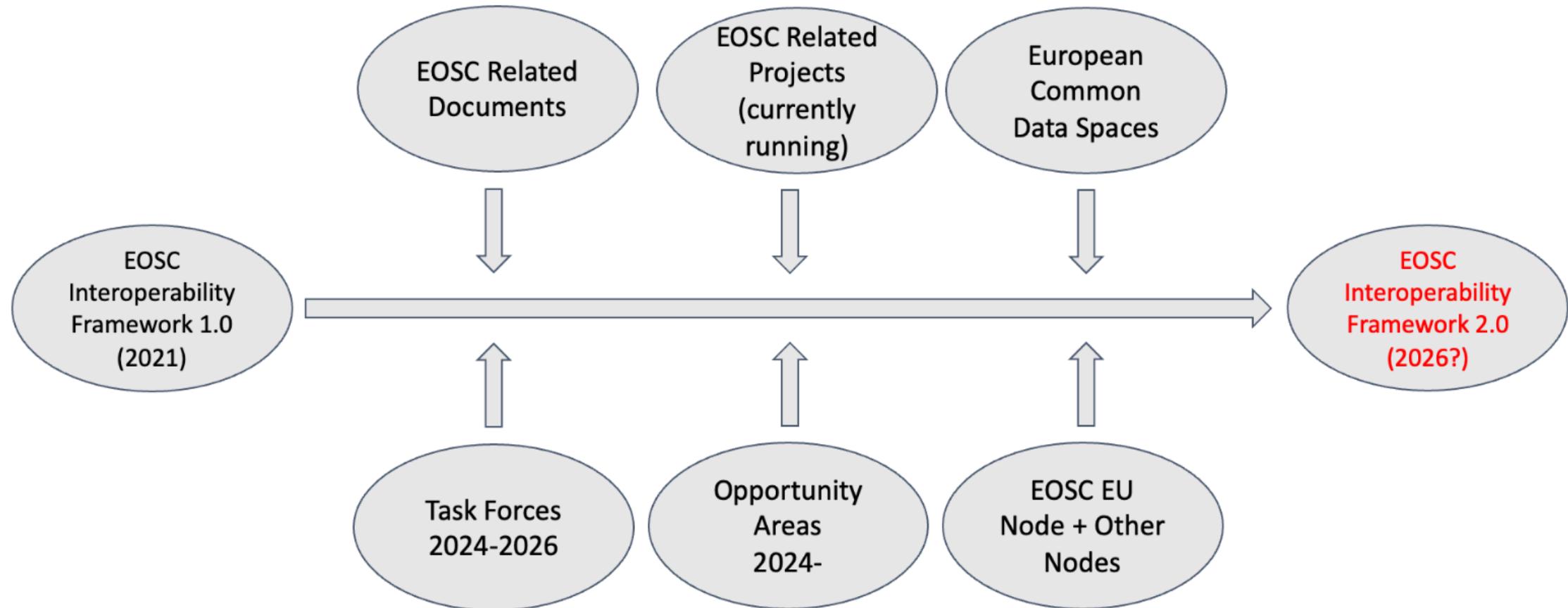
Network of autonomous nodes that interact with each other to deliver added-value capabilities to their users

Federating Capabilities in the EOSC Federation interim phase

ID	Federating Capability	Description	Classification
FC-1	AAI	Ensures the AAI interoperability across the EOSC Nodes	Mandatory²⁹
FC-2	Resource Catalogues and Registry services	Enables the discovery and access of resources (e.g. Services and Research Products) provided through EOSC Nodes within the EOSC Federation.	Mandatory^{30,31}
FC-3	Helpdesk	Integrates the helpdesks of EOSC Nodes within the EOSC Federation to provide a federated support channel between users and providers from nodes.	Recommended (Will become Mandatory in 2026)
FC-4	Service Monitoring	Provide information about the quality and availability of services and resources made available through EOSC Nodes into the EOSC Federation.	Recommended (Will become Mandatory in 2026)
FC-5	Service Management System	EOSC Federation FitSM-based Service Management System. defining the essential processes between EOSC Nodes to enable efficient IT service management within the EOSC Federation. It also includes Security Coordination between Nodes.	Recommended (Will become Mandatory in 2026)
FC-6	Service Accounting	Provide information about the usage of services offered by EOSC Nodes within the EOSC Federation.	Recommended <input checked="" type="checkbox"/>
FC-7	Research Product Accounting	Provide information about the usage of research products made available through EOSC Nodes in the EOSC Federation.	Recommended
FC-8	Order Management	Provides a framework that allows providers and users to manage the full lifecycle of service and resources requests and access granting across federated Nodes.	Recommended
FC-9	Application Deployment Management	Automated deployment and execution of services across multiple federated nodes.	Recommended



EOSC United T3.2: Towards EOSC Interoperability Framework Governance/Convergence



Lightning Talks (Session A)

Session/ Chairs	Time	Topic	Speakers/Contributors	Format
Session A / Diego Scardaci	11:00-11:25	EOSC Architecture and Interoperability	Diego Scardaci Jiří Marek	Presentation Lightning Talks
	11:25-11:30	Introduction to the lightning talks	Stefan Reichmann	
	11:30-11:35	An introduction to FAIR Implementation Profiles	Alexandra Kokkinaki Barbara Magagna Wolmar N. Åkerström	
	11:35-11:40	The maDMP Interoperability Framework	Tomasz Miksa	
	11:40-11:45	Demonstrating cross-domain Essential Climate Variable data access using harmonisation at the data level (ENVRI-HUB-Next's)	Tjerk Krijger	
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	12:10-12:15	EOSC-specific incident handling/mitigation	Urpo Kaila	



Session B (Track #1)

Session/ Chairs	Time	Topic	Speakers/Contributors	Format
Session B / Esteban González,	14:00-15:30	Adoption of FAIR Implementation Profiles in Projects, User Communities and EOSC Services	Barbara Magagna Wolmar N. Åkerström	World Café
Tomasz Miksa		Resource categorization in the EOSC Federation and resource profiles - state of the Art in the Federation	Roksana Wilk	
		(Meta)Data Quality, Harmonization and Integration	Paolo Manghi Alexandra Kokkinaki	
		Service Discovery and Interoperability (including EOSC-specific incident handling and mitigation)	Kostas Koumantaros Urpo Kaila	
		Federating Services & Technical Interoperability	Diego Scardaci	
		Realising Semantic Interoperability with FAIR Digital Objects in EOSC	Esteban González	



Adoption of FAIR Implementation Profiles (FIP) in Projects, User Communities and EOSC Services

Context:

- The FIP is a collection of FAIR **implementation choices** made by a community of practice for each of the FAIR Principles
- ~1000 FIPs to date, referencing 1300+ FAIR Supporting Resources (FSRs), registered in databases like FAIRsharing etc

Key outcomes:

- Promote registering all key (EOSC) interoperability (framework) solutions in databases (e.g. FAIRsharing) to be referenced as recommended FSRs, linking them to the specific gaps in FAIR implementation they can address
- FIPs can have a role in EOSC to **declare, share and compare implementation choices** to support landscaping, convergence and mediation (which FSRs are used where, for what, and how widely)
- **Identify relevant federating use cases** to form agreement on appropriate granularity and specificity required for FIPs to support automated composability, assessment and mediation

Realising Semantic Interoperability with FAIR Digital Objects in EOSC

Context:

- An FDO is a Digital Object designed to be FAIR. It includes a PID, rich metadata and explicit operations.
- Session's objective: to analyze the **different implementations** and how they can interact with each other, in order to prepare the EOSC Federation to adopt FDOs.

Key outcomes:

- FDO Implementations (“flavours”):
 - **PID** based
 - **RO-Crate** based
 - **Nanpublications** based
- Challenges:
 - How to implement **FDO operations** across the different implementations,
 - In the case of RO-Crates, there are RO-Crate **profiles**, which are **extensions of RO-Crates**. How can interoperability between these profiles be ensured?
 - (*The Big Challenge*) Vision: **Everything** needs to be **an FDO**. We need to transform the resources of EOSC into FDOs.

Context:

- What is **missing** in the current set of **EOSC Federating Capabilities**?

Key outcomes:

- Implementation guidelines for nodes to enable **federated search** and other core capabilities with well defined protocols and APIs that can be used for data interchange
- Define a **real semantic federation** (aligning vocabularies, resolving concepts, navigating across knowledge graphs) to enable the easy combination/query of research objects across Nodes
- Define a **federated data access / cross-node querying** that allow to find resources across Nodes (Common way to query/use data cross-node)
- **PID** Capabilities
- Support for machine-actionable resources (**FDOs**) in all (core or federating) **services**
- Security/**cybersecurity** across nodes is missing as a core federating capability
- Offer a standardised, dynamic way to identify **who offers a specific capability** (Node registry)
- Stronger **focus on scientific usage/use cases and workflows!**

Resource categorization in the EOSC Federation and resource profiles

Context:

- In the past couple of years, EOSC projects and communities has developed certain concepts currently implemented in EOSC EU Node → however, have not been established as an official standard.
- Goals:
 - Analysis whether the EOSC community would like to acknowledge existing concepts for the **EOSC Resource model** and **Resource Profiles** as the official standards in EOSC Federation
 - Are there **any adjustments/enhancements needed** in the existing standards to serve the current and future goals of the EOSC Federation and the nodes themselves
 - Propositions of the enhancements
 - **Input from the eosc nodes/communities** what models and categorisations they currently us

Key outcomes:

- collection of the resource models and service categorisations used and/or proposed by EOSC stakeholders (EOSC Nodes and others)
- general **agreement** that the **existing** models and categorisations are a **good starting point** for the EOSC Federation (to be acknowledged as the official standard for the time being)
- **propositions of enhancements** to the current models
- a need to collect this kind of input from all of the nodes



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Service Discovery and Interoperability (including EOSC- specific incident handling and mitigation)

Context:

A round table discussion on technical and semantic interoperability, service discovery, and security management

Key outcomes:

Highlighted the need

- for standardised metadata and **automated discovery mechanisms** to enable efficient **service location** and consumption - *preferably Machine Actionable*
- to **build trust** and sustainability between Providers, Nodes and Researchers
- an **EOSC CSIRT** to manage **cybersecurity incidents across** distributed **nodes**
- for **Service classification** based on maturity levels, security best practices, and operational trust and security frameworks like SIRTFI
- for guidelines for **Best practices on operations, security** and interoperability

Cybersecurity across nodes is missing a core **federating capability!**

- Many request for **penetration testing** as a service
- **Alerting** mechanism for EOSC relevant **vulnerabilities** should developed
- Clarify the future operational **role of EOSC CSIRT**
- Support on developing **incident handling capabilities** of nodes and sites
- **Clarification** requested on **how to classify services** based on **scope, availability and confidentiality**
- Support for **joint security training** and security **exercises**
- Some sites requested **coaching** on how to develop operational security
- Clarification requested on **how to classify services** based on **maturity** (POC, As is, SLA)..

(Meta)Data Quality Harmonisation, Integration

Context: Round table in (Meta)Data Quality Harmonisation, Integration

We discussed how (meta)data **quality is reported** across different domains, how (meta)data **harmonisation and integration are implemented**, and how the **evaluation and success** of related solutions are measured.

Key outcomes:

(Meta)data **quality** is reported using a **variety of approaches**, including quality flags, processing levels, trust in the providing organisation, peer review, confidence scores from AI-based validation, defined Data Quality Labels, and automated compliance checks.

For (meta)data **harmonisation**, most domains rely on mappings and crosswalks, the use of shared metadata schemas, and guidelines or standards **officially endorsed by trusted bodies**.

(Meta)data **integration implementations** include the Virtual Collection Registry, the UDAL Data Demand Registry, and broker- or discovery-based solutions such as GEODAB and IDDAS.

Across all three domains, **evaluation and success measures** for tools, standards, and guidelines include **official endorsement by trusted bodies, wide adoption, availability of documentation, scalability, expandability, and support for complex use cases**.

Concrete actions proposed (Session C outcomes)

- For each action:
 - To whom? :-(
 - Action description: discuss interoperability multilaterally to make the most of EOSC expert groups as well as the Nodes
 - Different groups with different decision making processes. Discontinuation. Fragmentation.
 - Suggested responsible actors: Nodes, OAEGs, TFs, Projects
 - Indicative timeline (2026 focus): ??? (unclear ⇐ different positions)
 - Expected outcome: further actions required
 - Actions requiring EOSC Federation level decisions: needs a more continuous process/disc

What is missing in the current set of EOSC Federating Capabilities

DRAFT

1. Implementation guidelines for nodes to enable federated search and other core capabilities with well defined protocols and APIs that can be used for data interchange
 - a. Establish the clear process to discuss with the Node Coordination Committee the workplan for guidelines in 2026 for federating capabilities
 - b. (quickly) agree on the standards needed to enable the federated search and other core capabilities (resource model, profiles, etc)
2. Define a real semantic federation (aligning vocabularies, resolving concepts, navigating across knowledge graphs) to enable the easy combination/query of research objects across Nodes
 - a. Based on the Semantic interoperability recommendations of Task Force, discuss these recommendations with Operational and Node Coordinator committee
3. Define a federated data access / cross-node querying that allow to find resources across Nodes
 - a. Common way to query/use data cross-node -> This goes to the Scientific Repositories working group, that mandate within the EOSC Node Coordination Committee will be revised in Q3/2026
4. Recommendation of new Federating capabilities:
 - a. PID Capabilities
 - b. Support for machine-actionable resources (FDOs) in all (core or federating) services
 - c. Offer a standardised, dynamic way to identify who offers a specific capability (Node registry)
 - d. Stronger focus on scientific usage/use cases and workflows
 - e. Security/cybersecurity across nodes is missing as a core federating capability

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Thanks to all!



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Thematic Track 2

Rapporteur(s): Chris Schubert (TU Wien), Marek Cebecauer (Heyrovsky Institute)

Thursday, 29 Jan 2026, 09:30-11:00



Grant agreement ID: 101188045

- Track 2 Rapporteurs: Chris Schubert (TU Wien), Marek Cebecauer (Heyrovsky Institute)
- Participants represented: Finnish EOSC Node and INFRAEOSC projects, TFs, OAEGs
- Core challenge/topics addressed:
 - Data quality and trust*
 - Needs of service and resource provides (incl. those to be onboarded)*
 - Data retention and preservation*

Priorities

1. Consolidate Data Quality knowledge across EOSC initiatives

Collect and align existing Data Quality expertise from INFRAEOSC projects (e.g. EDEN, FIDELIS), EOSC TFs

- Develop a shared **knowledge platform** covering Data Quality definitions, levels, and maturity models for EOSC
- Build on existing outputs, particularly the work of **first-generation EOSC Task Forces**, avoid redundancy

2. Address Data Quality issues early in the data lifecycle

Shift the focus from “last-mile” quality checks to **early identification of issues**, with a strong emphasis on **capacity building for Data Stewards**.

- simple Proofs of Concept should clearly demonstrate **added value** in addressing Data Quality challenges (e.g. within OAE5 use cases)

Impact

1. Trust as the impact of Data Quality

we emphasised that trust has an effect from Data Quality. Improve quality processes, include validation against low-quality data and address quality challenges in federated environments through standardised protocols.

2. Fitness for Use

Initiatives like **GBIF** and **DiSSCo** operationalise pragmatic “fitness for use” by defining both **minimum** and **optimal** requirements. It comes to “Re-Use Fitness” which needs explicit explanations to the levels of data management we are talking about e.g. on prescriptive metadata and provenance information, metadata profiles, raw data, data set, etc.

Priorities:

- 1. Well-defined protocols and standards (ideally those supporting modern technologies such as RDF, SPARQL/GraphQL, RO-Crate profiles, ...).**

Feasibility: Short Term

To define not only minimal requirements but also preferred and long-term supported protocols and standards.

Towards globally interoperable system

- 2. Awareness of European standards: e.g. DCAT-AP obligation, SIMPL protocols.**

Feasibility: Medium term

Implement Datacite compatible DCAT-AP

EOSC Academy can facilitate (amongst others)

- 3. Enhance awareness and use of existing services and resources**

Feasibility: continuous progress

Impact

- Facilitation of onboarding services and resources in the EOSC Federation
- Enabling smooth connections between diverse systems, including those which are needed to populate the federation with data and other digital objects, e.g. DMPs, ELNs, Workflows, HPC, repository/database.
- Stabilization and alignment the federation with Europe and Data Space landscape

Open Questions/ Risks

- Need to propagate activities at the EU or thematic nodes level to the national level (e.g., for reporting)
- The need and use of meta-repositories
- Evaluation of onboarded services and resources
- Need of repositories for ML models and container images (AI4EOSC is finished), large models currently cannot be accommodated

Session B: Data Retention

Priorities:

Repositories onboarded in the EOSC Federation must be transparent about the retention and preservation services they offer.

- a. **Feasibility: Short Term**
- b. **Dependencies: Nodes agree to ask onboarding services with repository capabilities to fill out an integrated preservation planning.**

Impact:

This allows users of data in the Federation to trust how and for how long data will be preserved, and enhances transparency.

Sustainability of repositories depends on Digital Objects having retention periods clearly defined to enable eventual deletion if necessary.

Open Questions / Risks:

Who enables this? EOSC nodes?

If values within (about?) [a] preservation planning don't exist this is in itself added information.

Thematic Track 2

Miscellaneous Gaps and Challenges

- **Minimal requirement for GUI of services onboarded in EOSC Nodes, and of EOSC Nodes themselves**
- **Classification of protection levels for onboarding services**
 - **cannot describe risks due to lack of mapping/alignment of semantic characteristics**
- **Data sovereignty vs Digital Object Sovereignty vs System Sovereignty**
 - **Digital repatriation**
 - **Other regulations beyond those within the EU that affect access or (lack thereof) of data/ digital objects.**
 - **CARE**
 - **Awareness of the dependencies within the system**
- **Lack of business models for Nodes.**

Experience shared:

- Sensitive data processing environment, distributed National Node / catalogue, centralised national repository (2x, Dataverse-based), maDMP, Galaxy workflow manager,
- Granularity of records is in general high, but reality teaches us that people often want to record/publish complex collections as ZIP file.
- Information anonymisation versus pseudoanonymisation.
- Knowledge sharing, siloes, depreciation ... deliverables and outputs of projects and other activities are often hidden from a majority of potential EOSC users
- Gaps in communities, especially a long tail has no idea about resources and services



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Thematic Track 3: Competences and Training
Rapporteur: Helen Clare

Thursday, 29 Jan 2026, 09:30-11:00



Grant agreement ID: 101188045

Track 3: Competencies and Training - Objectives

Session A: To discuss the role and the contribution of the EOSC Academy within the EOSC Federation

- Co-shape the design and delivery of the EOSC Academy
- Share lessons learned from EOSC Nodes

Session B: Embedding Training and Engagement into the EOSC Federation

- Clarify synergies between competence centres, other training providers and EOSC Nodes
- Exploring options to improve training material discovery and catalogues

Session C: Towards an EOSC skills and training roadmap

- Consolidate previous recommendations and those from Sessions A and B
- Identify and prioritise next steps for different stakeholder groups
- Create a draft mandate for a new Working Group on Competences and Training

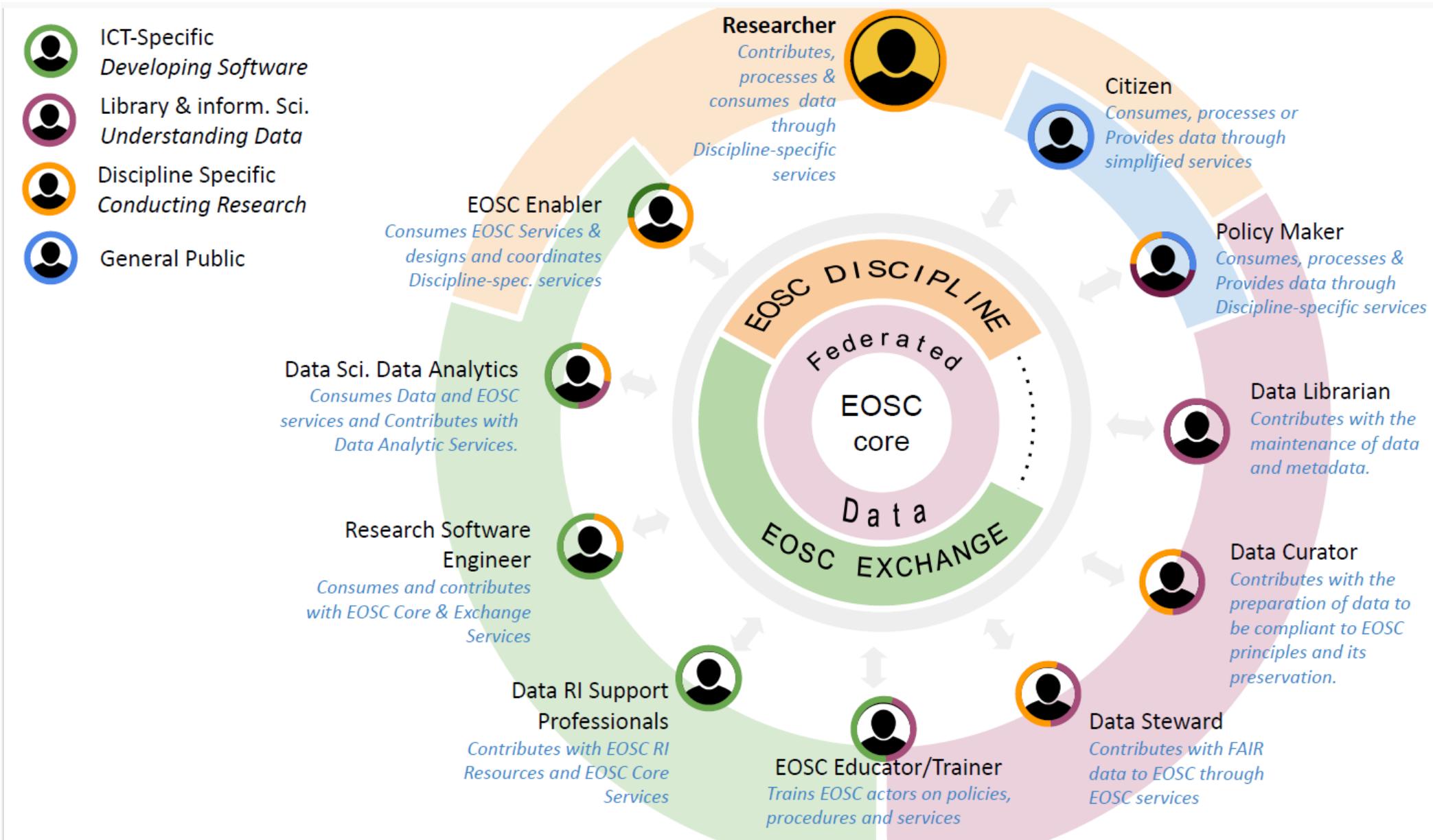
OA5EG members:

- Isabel Caetano (EOSC-A, EOSC Gravity)
- Helen Clare (Jisc, OAEG5 co-chair)
- Natalia Galica (National Science Centre Poland, EOSC Gravity)
- Celia van Gelder (Health-RI, ELIXIR-NL, OA5EG co-chair)
- Sara di Giorgio (GARR, Skills4EOSC)
- Emma Lazzeri (CNR, Skills4EOSC)
- Hanna Lindroos (SLU)
- Friederike Schmidt-Tremmel (Trust-IT, OSCARS)
- Eleni Toli (Athena Research and Innovation Centre, EOSC Gravity)

In consultation with Kamran Naim and Bob Jones
Facilitator: Zoltán Pompor (Pro-M, EOSC Gravity)

- Institutes (some are EOSC-A members, many are not)
- Competence Centres (in all their different shapes and sizes)
- Research Infrastructures (domain specific)
- Training Providers (in the broadest sense of the term)
- (EOSC) projects with training component
- National bodies/projects involved in OS policies implementation
- EOSC Academy
- EOSC Nodes (the people in the Nodes responsible for training)
- Funders
- ...

EOSC actors in the EOSC ecosystem



Track 3 - yesterday c. 40 participants

Which role(s) do you have in EOSC?



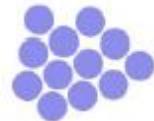
12 Institutes



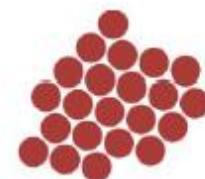
11 Competence Centers



14 Research Infrastructures



12 Training Providers



22 (EOSC) projects



5 OS policy development and implementation



3 EOSC Academy



12 EOSC Nodes

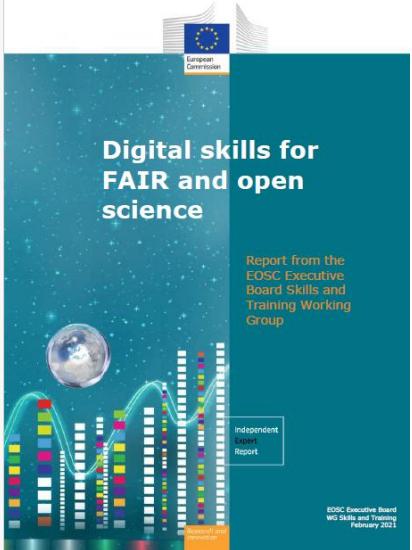


3 Funders



3 Other

Main recommendations of the report (2021)



Report "[Digital skills for FAIR and open science](#)" published February 2021

1. Utilise the Framework of Actors in the EOSC Ecosystem in the development and mainstreaming of FAIR and open science skills and training
2. Coordinate and align relevant skills curricula and training frameworks
3. Encourage and support the competence centres approach for FAIR and open science training
4. Facilitate increased integration of FAIR and open science courses with university qualifications.
5. Build a learning and training catalogue to maximise interoperability.
6. Include learning and training resources in the EOSC Interoperability Framework (EIF)
7. Develop an EOSC Skills and Training Leadership Programme

In addition the report gives specific recommendations for the different stakeholders:

Policy makers & funders, Universities & research organisations, Competence centres , EOSC Association, EOSC projects

Report section	Policy makers & funders	Universities & research organisations	Competence centres	EOSC Association	EOSC projects



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We are not starting from scratch!

2024

- Harmonise learning paths and curricula including data stewards
- Metadata - obtain a commitment to endorse RDA minimal metadata standards
- Work towards embedding a harmonised and certified curriculum for data stewards
- Become involved in handover of EOSC Future training catalogue to EU Node
- Explore Training as a Service in EOSC using Galaxy Training Network
- Contribute to Skills4EOSC Competence Centre Launch event
- Explore feasibility of a workshop on CCs more broadly at EOSC Symposium 2024
- Increase awareness of CCs at National Tripartite events
- Work with EOSC Focus to support engagement activities
- Support the EOSC Association and projects to reach CoARA objectives
- Further discussion on aligning training certification / accreditation
- Develop a mechanism to provide strategic oversight, coordination and governance of EOSC training elements
- Ensure long-term sustainability of EOSC training resources

2025

- Close the communication gap between EOSC Association / Board and OAEG5
- Further clarify definitions and implementations of CCs including their relation to EOSC Nodes
- Continue to work with EOSC-A and EOSC Focus / Gravity to support ongoing engagement activities
- Analyse and contribute to EOSC Federation Handbook
- Analyse, align and adopt reward and recognition mechanisms in EOSC
- Define the vision for the EOSC Training Catalogue(s): what is needed, for whom, and how to get there
- Map and align existing methods to create learning paths
- Leverage existing national competence centres and strengthen their participation in coordination networks at EU level
- Promote participation in Data Spaces, EU Mission and European Partnerships



Towards a common understanding & a way forward for EOSC competences & training

- **What are the key themes we want and need to move forward with now?**
 - The role of the EOSC Academy
 - The role of Competence Centres
 - Training material discovery and catalogues
 - A mandate for a new working group
- **What are the priorities and next steps for each of the key themes**
- **What is the role each EOSC actor can (commit to) play;**
 - EOSC Nodes, OA5EG, EOSC Academy, institutes/RPOs, competence centers, projects, Training Working Group, etc

The Role of the EOSC Academy

Led by:

Eleni Toli

Isabel Caetano

Natalia Galica



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A collaborative initiative built as a convergence space for mutual learning and knowledge sharing by bringing together knowledge created within EOSC Federation ecosystem

- Build a shared understanding of the EOSC Federation: a system of people and technical infrastructures
- Assist existing and candidate Nodes and resource providers in participating in the EOSC Federation
- Accelerate the development of the EOSC Federation

3 different types of Nodes presenting views and needs on training

Panel Discussion

Moderator: Kamran Naim



Kamran Naim



Roksana Wilk



Magdalena
Szuflita-Żurawska



Sara
Pittonet Gaiarin



Maja Dolinar

- National Node: Poland
- Thematic Node: Digital Twin of the Ocean
- EU Node



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Challenges identified in the discussion

- Limited IT and operational capacity
- Complex service and data onboarding
- Fragmented training resources
- Need for sustained user engagement
- Lack of shared operational templates
- Critical skills
- IT operations and service management
- Product and service lifecycle management
- User engagement and onboarding

What skills and competences do you consider as important for the establishment of a Node?

people skills

legal aspects

management

federated operations

understanding that uners

legal it skills

it

federated operations

team player

networking

legal support

interdisciplinary merge

legal knowledge

service management

catalogue expertise

convincing c-level

understand user needs

project management

sales business developme

aai

ux

kegal

ip

fair

user engagement

community appriach

grant

eosc strategy knowledge

cros-org collaboration

user need

strategic thinking

management skills

team player

networking

legal support

interdisciplinary merge

legal knowledge

service management

catalogue expertise

convincing c-level

understand user needs

project management

sales business developme

aai

ux

kegal

ip

fair

user engagement

community appriach

grant

What are the content and types of activities you would like to see as part of the EOSC Academy offer?

Best practices, Success stories

Use cases, Lessons learned, Case studies

Tailored materials for Nodes/Candidate Nodes and service providers

Workflow to become service provider

Legal templates, licensing models, guidelines

Material explaining EOSC and EOSC Federation (also for sharing)

Mentoring, Peer-to-peer learning

Webinars

On-site workshops

What is needed to train the (emerging) Nodes to enrol and onboard in the Federation?

- To understand the different EOSC Federation stakeholders, including all Nodes and service providers
- Make a needs assessment with relevant stakeholders (e.g. a survey)
- To take into account the various stages and roles and cluster material accordingly:
 - Entry level information: Getting started, Who is who, glossary
 - Existing Node, candidate Node, looking for support on technical / legal / policy aspects
 - Candidate/Service providers (onboarding resources)
- There is a need for a **roadmap on how an existing service could be onboarded in an existing Node (general information and Node-customised information)**
- Matchmaking mechanism (to be discussed if this should be done via the Federation or via the Academy)

EOSC Academy - next steps

- Establish a liaison and maintain regular interaction with the **EOSC Federation Training Working Group**
- Make a needs assessment with relevant stakeholders (e.g. a survey)
- Create, collect, aggregate and curate relevant training resources
- Design and launch of a series of webinars and targeted training actions
- Support **cascading grant selected organisations/consortia** by facilitating tailored learning opportunities
- Develop a dedicated microsite, as a space for sharing and providing access to all relevant information

The Role of Competence Centres

Led by:
Emma Lazzeri
Friederike Schmidt-Tremmel
Sara di Giorgio

Competence Centres

Session B outline

Presentations from relevant projects and competence centres

- **Oliver Knodel** (PaNOSC, mTeSS-X),
- **Gilles Mathieu** (French CC),
- **Emma Lazzeri** (Italian Node)

World café discussion

Issues and ideas

- EOSC-Academy is serving the nodes, the CCs are serving the end users!
- EOSC-01-04: Results of call will affect the CCs (results expected mid-February)
- Need for communicators: science communication officers can build the bridges between communities and roles (researchers, support, governance)
- Data stewards can speak the language of researchers and also have technical skills that researchers do not and cannot obtain
- CCs act as a hub to direct questions to the right people to answer them
- Importance of domain specific CCs that can support domain specific work
- Missing competencies: ability to facilitate, coordinate, inform the local community (institutional, national, ...)
- CC can help to identify the needs of researchers and users
- Need to recognise the role of a skills&competence manager in the list of EOSC node roles in the handbook

Issues and ideas

- Potential roles in CC
 - Trainers
 - Skilled personnel/experts (Data stewards, data curators...)
 - Training resource providers
 - Authority / link to governance
 - Event organisers / community managers
 - Operational coordinator
 - Quality manager: Common methodology & quality assurance for training resources

Competence Centres - next steps

Summary/conclusions

- **Each node could be built on 3 pillars (functions):**
 - IT infrastructure (provides the foundation of the node)
 - Services (involve/serve communities)
 - CC (makes sure users can use the node's resources)
- **Every node should have a CC function that offers**
 - skills for Open Science
 - skills for using the Node's tools & services
 - include AI in our vision
 - but CCs are not the same as helpdesks!
- **Make sure that CCs without a clear link to a node are not forgotten but linked to the federation!**

Our message to the EOSC world:

**The human factor
(support, training, skills, competencies)
should be the heart
of all service offers**

Open Science is a cultural change. If you just focus on technology, you're missing the point.

Training Material Discovery and Catalogues

Led by:
Emma Lazzeri
Friederike Schmidt-Tremmel
Sara di Giorgio
Oliver Knodel

Issues and ideas

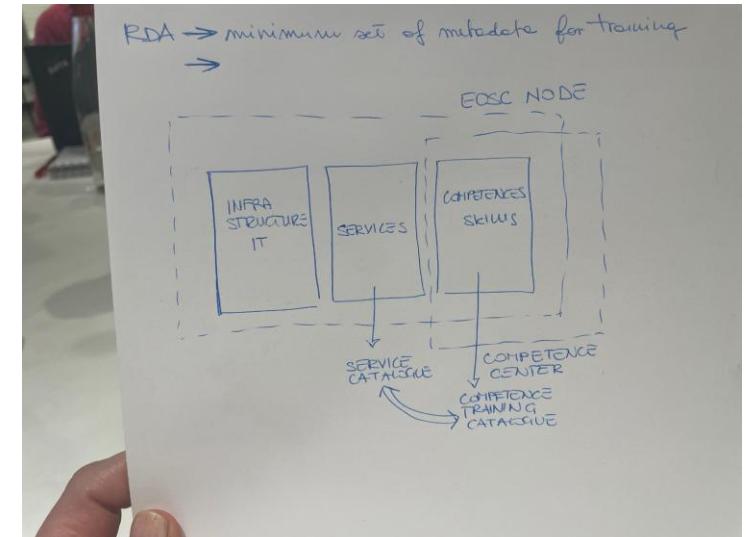
- Sustainability
- Importance of curation
- Need to differentiate the catalogues (node catalogue is not the training catalogue)
- Flexibility of the system depending on your target community
- Content needs to match needs of different communities
- Needs to be where the people are - local/in the organisation
- Global methodologies (Train the trainers, FAIRbyDesign...)
- The Handbook needs to provide guidance on sharing training resources

Training findability

- We need many platforms and a central point to access resources but not necessarily one catalogue
- A minimal set of metadata
- Deal with training material the same way we deal with data
- FAIRbyDesign!!
- Versioning
- Linking 'packages' of materials
- Rating system in catalogues
- Learning pathways (by community, by task eg RDM Kit)
- Use of AI

Create a model, gather feedback from nodes and then integrate into handbook

- Functions of Nodes - IT, services, skills
- Handbook - needs to define competencies and skills requirements of nodes (metadata curation, material updates.)
- In consultation with OAEG5



Developing a Draft Mandate for a Working Group

Led by:
Celia van Gelder
Helen Clare

Towards a mandate for a Competences and Training Working Group

- Aim: Make first ***draft*** for the mandate for the new working group for Competencies and Training under the new structure as defined in the EOSC Federation MoU.
- Mandate should mention
 - how it will contribute to the federation in 2026 as it transitions from prototype to production (i.e. formulate 2026 deliverables)
 - indicate supportive Nodes

EOSC Nodes

National Nodes
Finland
Germany
Italy
Poland
Slovakia
SURF (Netherlands)
Thematic Nodes
BBMRI-ERIC
CERN
Data Terra
Digital Twin of the Ocean
Life Sciences Connect
PaNOSC
e-Infrastructure EOSC Nodes
EUDAT
EOSC Infrastructure Node
EOSC EU Node

Emerging EOSC Nodes

Node
Ireland
Sweden

- Majority of Nodes expressed interest to support and actively contribute to the formulation of the Working Group and its mandate.
- Note: No formal commitment was requested at this point in time



First draft for Mandate Training and Competencies Working Group

Objective

- Improving integration of skills and training in the EOSC Federation
 - Both Nodes and end user training
- Define and promote the ecosystem of training for the EOSC Federation
- Provide contributions to the EOSC Academy, CCs and the Users Forum

Expected outputs

- Deliverables 2026
 - Minimal metadata schema for training (events/materials/methodology)
 - Pilot for metadata transfer from sources like catalogue/registry/website into the EOSC EU node catalogue
 - Defined competencies and training requirements for nodes and services in the EOSC Handbook
 - A model of the structure and integration of competences and skills in EOSC Nodes and Federation

Composition of WG

- Training specialists from the Nodes
- Liaisons/invited guests: OA5EG, Competence Centers, relevant EOSC projects (EOSC Academy, EOSC-01-04 project, ...)

Steps after the Winter School

- Finalise mandate with all Nodes that are contributing
- The mandate should be approved by the Node Coordinators Committee and at least 5 nodes must be willing to participate in the Working Group.

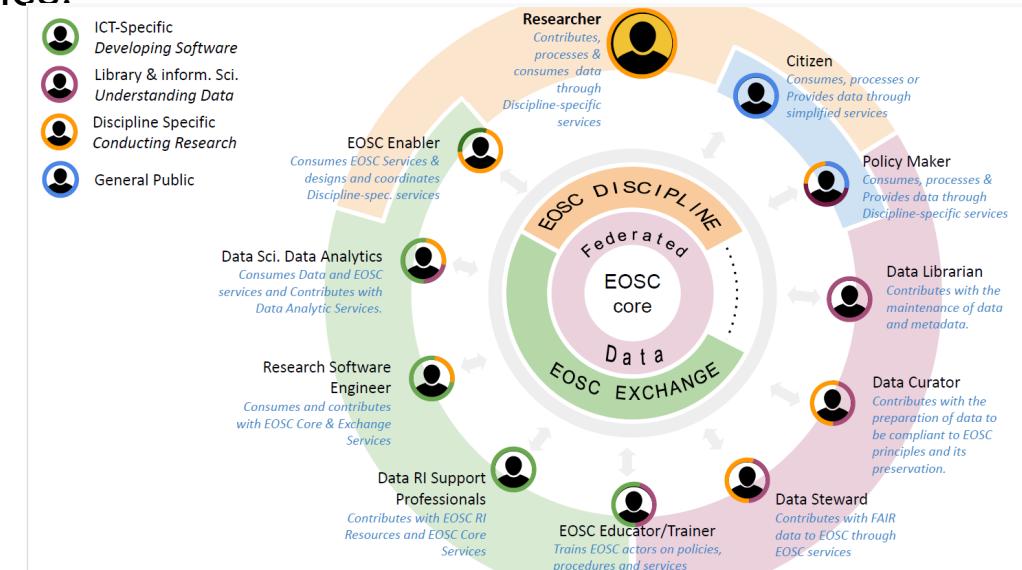
Some final thoughts



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- In the past period OA5EG has been working on identifying key topics and gathering the training experts from the community to define Work streams and activities
 - Competence Centres
 - Training Catalogues
 - Rewards & Recognition
 - Strategy & Engagement (working with EOSC Focus/Gravity)
- Establishment of the Training and Competencies Working Group for the Federation helps to further position and scope OA5EG activities.
 - E.g. the work on the Training Catalogue will be taken further by the WG
- OA5EG will refine its scope and objectives
 - Option: Establish a Task Force to serve the trainings/skills needs of the EOSC ecosystem





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ÉGALITÉ
FRÉRELLÉ

recherche.data.gouv.fr

Maybe we didn't start from the right place?

- We need to move from:
 - **"We've built something, let us now tell you why you need it and how to use it"**
- To:
 - **"Let us help/train/support you doing open science right. Then we can work together on the tools you need"**



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Winter School Stakeholder Brokerage Event - What an experiment!



We said this was
an experiment

You made it a
successful
format!



EOSC The Brokerage Event in numbers

202



Registered participants

281



Booked meetings

844



Exchanged messages

112

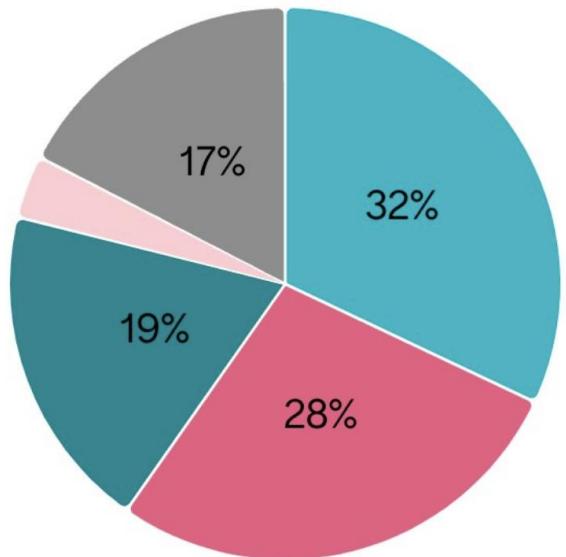


Posted opportunities

2185



Profile views



- 32% Resource/Service provider
- 28% Node representative
- 19% EOSC-related HE project
- 3% Policy maker/shaper
- 17% Other

24 Countries represented

14 Nodes Tables – 133 meetings

11 Hot Desk – 148 meetings

Meetings feedback – 101 positive ratings

An EOSC Federation matchmaking marathon

With an Olympic spirit!



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Team games: a community building exercise

How **relevant** did you find the event, its attendees and the **connections** you made?

Please rate on a scale of min 1 to max 5

 4.1

How satisfied are you with the **quality and quantity of networking opportunities** provided?

Please rate on a scale of min 1 to max 5

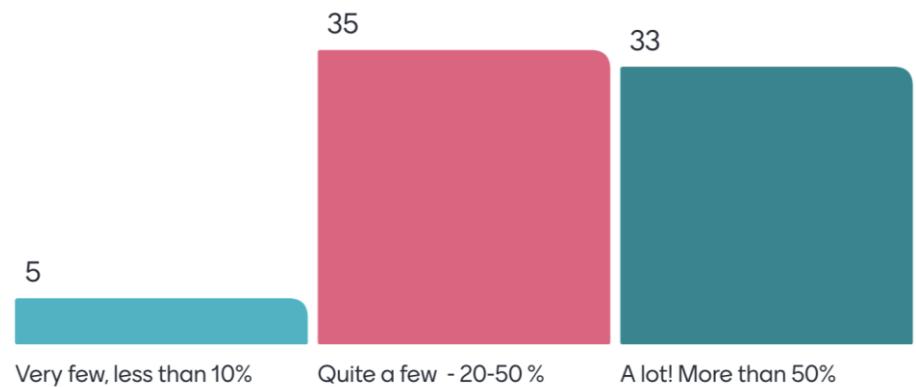
 4.1

How likely are you to **engage** with the connections you made, after the event?

Please rate on a scale of min 1 to max 5

 4.3

How many **meaningful connections** did you make at this event?



... driven by you as individuals

«Attendee profiles were essential. It was a key to manage the 10 minutes meeting»

«I was able to choose from a huge range of attendees as well as their specialisations. Furthermore, I found external contacts, emails, etc. to be able to sent related materials.»

«These were very useful. I would make profile photos mandatory.»

«I talked to some people that i would otherwise not easy have spotted as relevant»

... with room for improvement!

«Sometimes some profiles were not very informative and detailed»

«A pity that so many profiles were very concise and that quite some people did not create a profile»

«I was rather confused regarding the "skills" fields. Skills regarding what exactly?»

400 metres (hurdles):
going that extra mile
towards the EOSC
Federation finish line



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the European Union

Grant agreement ID: 101188045

eoesc Planned followed-up activities

How likely are you to bring some of the emerged opportunities **to a next level?**

Please rate on a scale of min 1 to max 5

3.8

Onboarding of services into a Node, implementation of technical requirements compliant with Nodes/Federation **Services** integration, discussion of new use cases on possible connection of services **Training** activities & specs/requirements for the EOSC Academy & **upskilling** activities **Assessment of feedback** gathered from the Node representatives Joining efforts in **project proposals** (HE, Gravity Call, & more) **Project related activities** Follow up with **public relations!**

Did the event help you clarify any open questions you had?

80% YES

Hearing different perspectives from national nodes was useful.

Yes, getting input from node representatives

Yes, it was helpful to get in contact on service and node specific questions with knowledgeable persons

Yes. Getting input from node representatives

Helped to better understand the needs of nodes

It was good to learn that the questions I have about the balance and models of collaboration between (envisaged) national and thematic nodes in the EOSC Federation were shared by many people yes, meetings allowed me to understand better the process of the second wave of nodes enrollment

Définition of an action plan to candidate as à node.

As a node provider I got a feeling of the expectations and opportunities we have

In adopting some capabilities we did not develop yet

Yes, we learned many details about services that are being offered by other nodes.

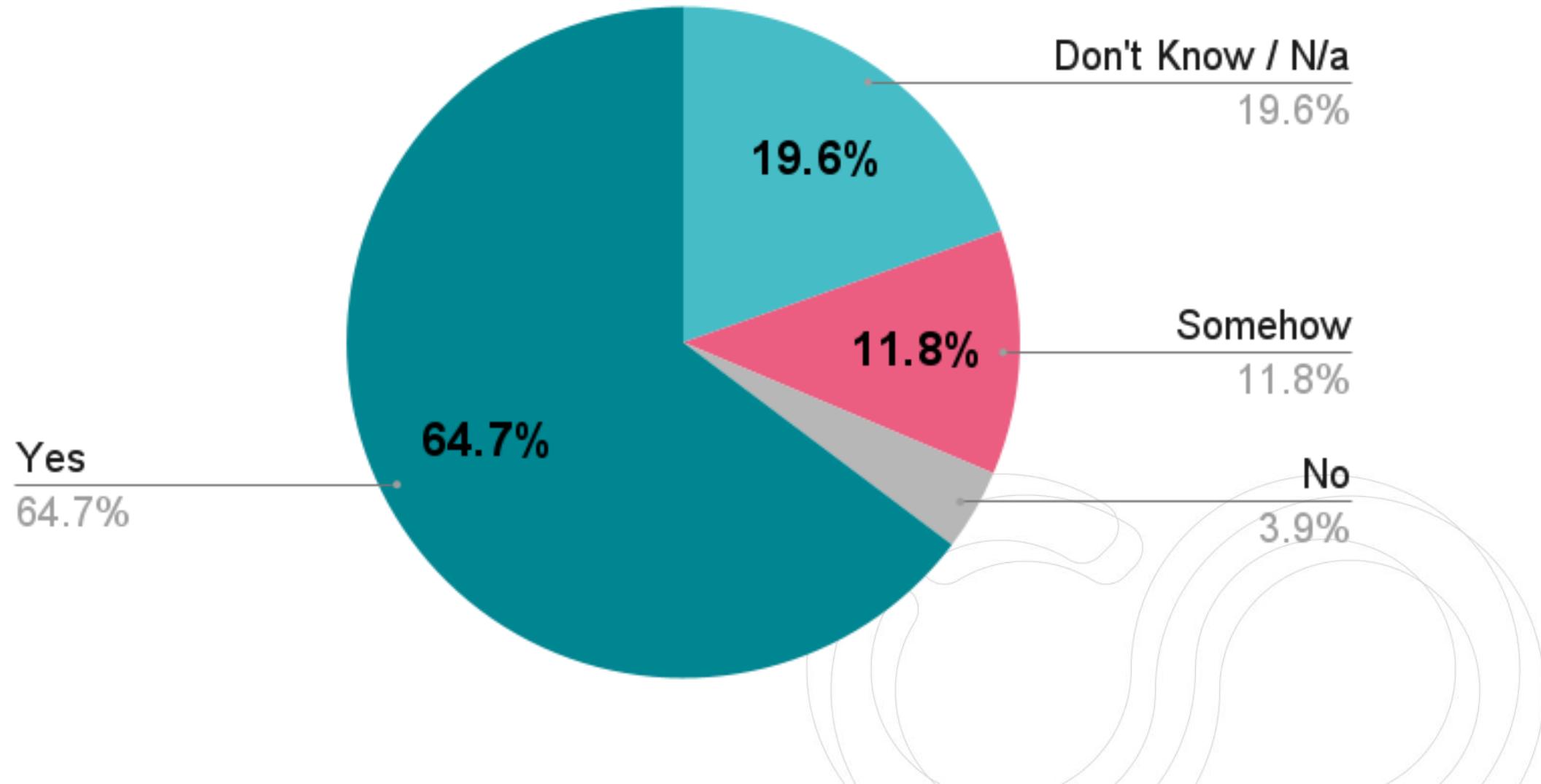
EOSC Winter School 2026 Brokerage Event Impact

Expand the EOSC Federation portfolio

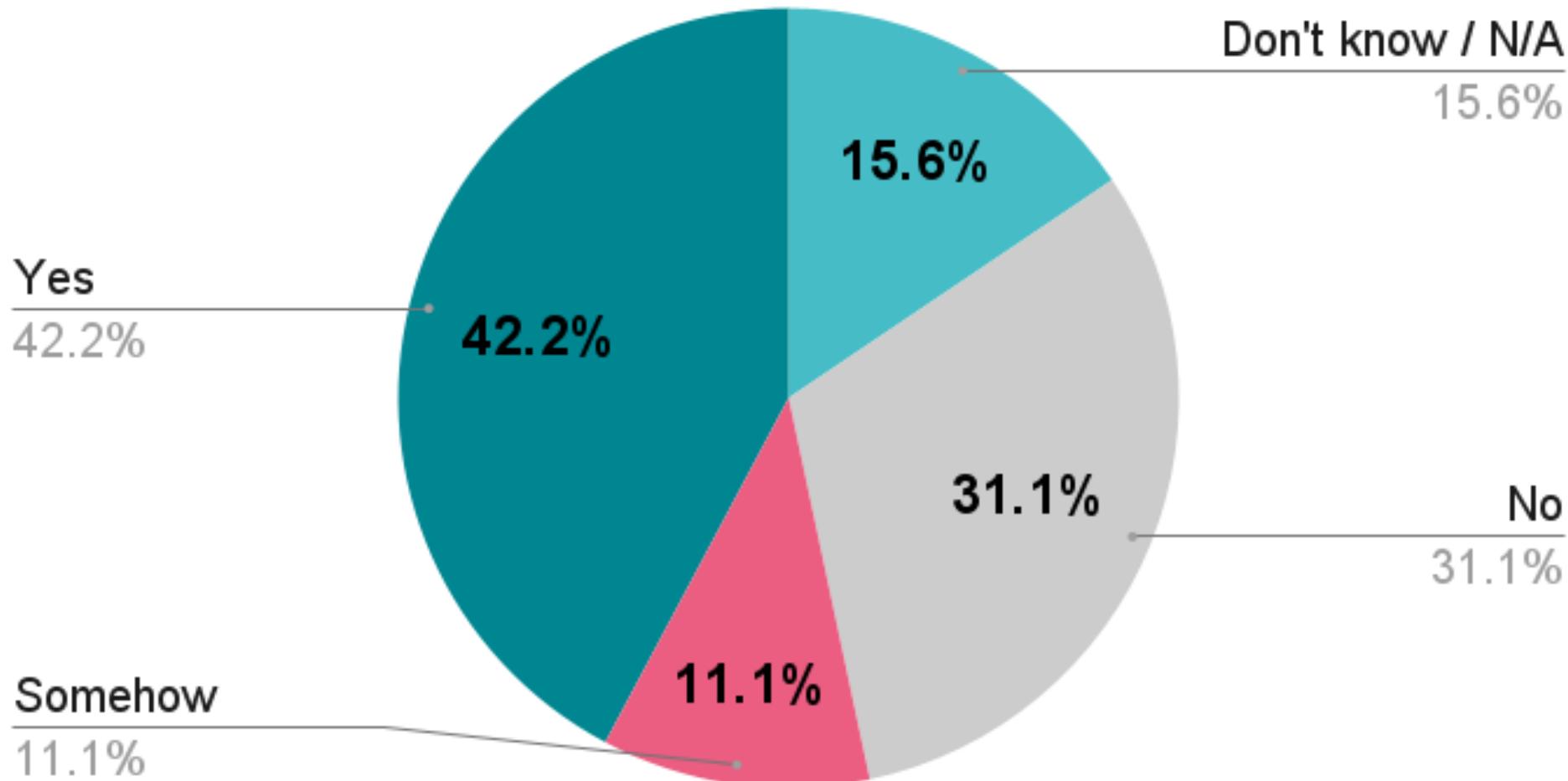


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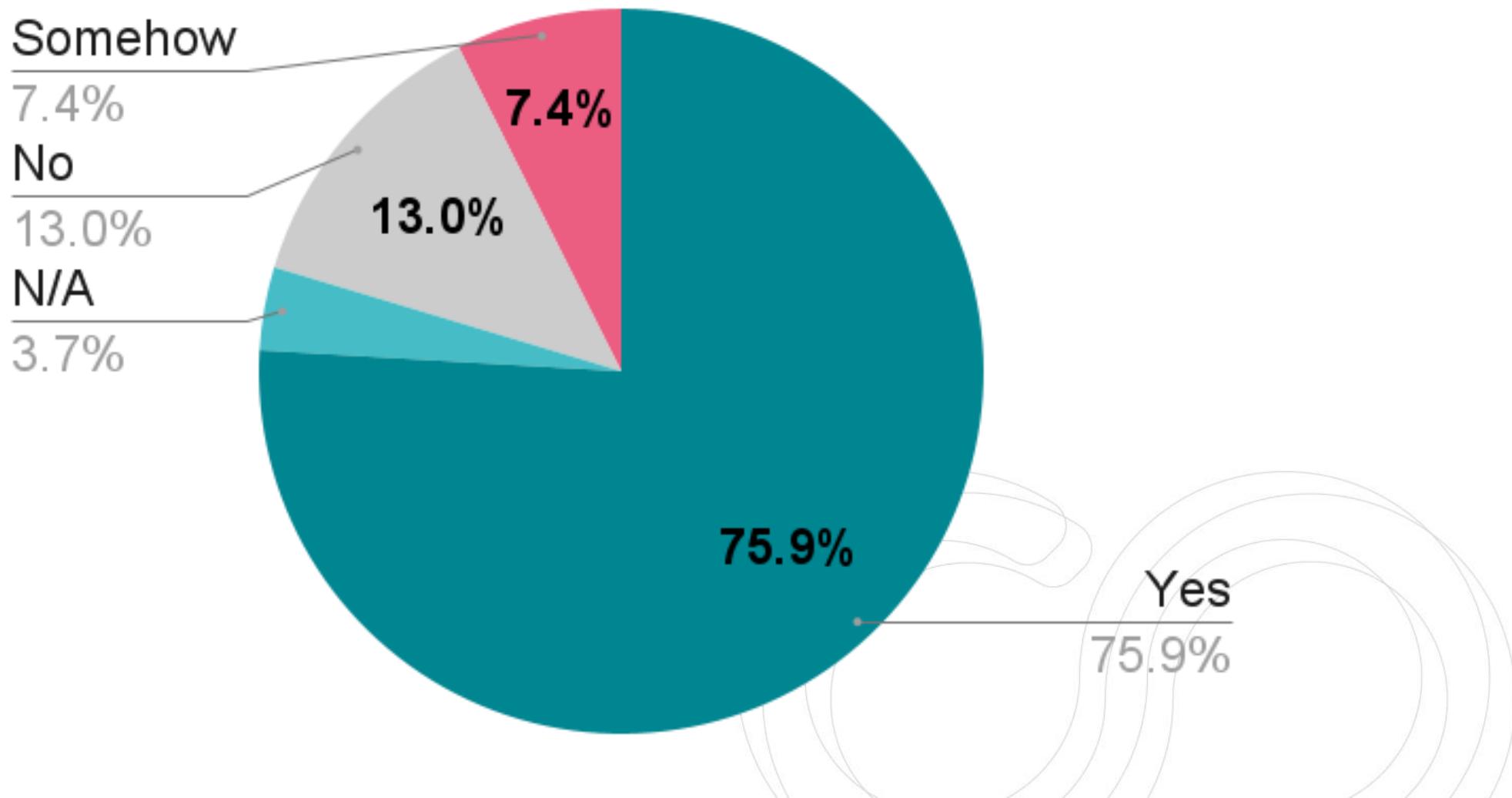
Do you think this event helped you increase **visibility** of your products/services as a provider or as a Node?



Do you think this event helped you **support the kick-start of an onboarding process** for your Node or for your services?



Was the EOSC Winter School Brokerage Event useful to learn anything new about products or services that you were not familiar with?



This brokerage event: if on one side...

«It helped with reassurance that I am not the only one who has a vague idea of EOSC»



«It made the future of EOSC a bit clearer»



Thank you to all Participants
and Organisers!