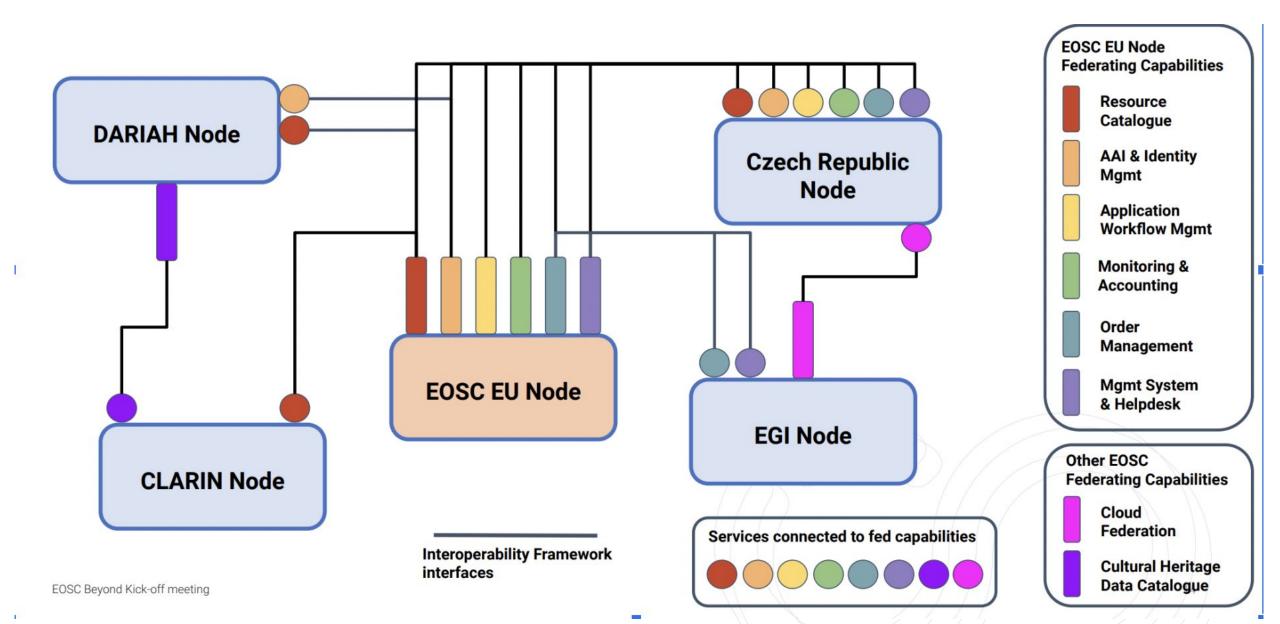


# Empowering Open Science: EGI Community's Impact on EOSC.

Introduction









### Scope - communities involved

### **National & Regional**

- 1.Germany (NFDI)
- 2.Czech Republic (e-Infra CZ),
- 3.NI4OS Southeast Europe (GRNET, IPB, UKIM)

### **Data Spaces**

1.CESSDA

2.ENES Data SPace

e-Infra

1.EGI

#### **Thematic**

- 1.Environmental (LifeWatch)
- 2.Health and Food (METROFood-RI)
- 3.Structural Biology (Instruct-ERIC, CNB-CSIC)
- 4. Social and Human Sciences (CESSDA, CLARIN, DARIAH)





### Scope - communities involved

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- 1.CESSDA
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e-Infra 1.EGI

#### **Thematic**

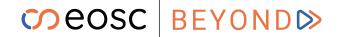
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- 2.Health and Food (METROFood-RI)
- 3.Structural Biology (Instruct-ERIC, CNB-CSIC)
- 4. Social and Human Sciences (CESSDA, CLARIN, DARIAH)

**EOSC EU Node** 



# speosc | BEYOND Scope - communities involved





## 

5000 TI				
EOSC Pilo				
Node Name				
Node legal entity name				
Node legal representative/signing person				
Entity type (i.e. Research Infrastructure, National infrastructure, e-Infrastructure, Data Space, etc)				
Countries building/delivering in the pilot Node (list the countries only)				
Entities participating in the EOSC Node - Institutional level list of entities (legal or non-legal)				
Node type (i.e. thematic, national, regional, e-infra)				
Scope of the Node (provide a solid description)				
Scientific disciplines supported by the Node https://confluence.egi.eu/display/EGI G/Scientific+Disciplines? Please use appropriate values from the standard above. In addition, list any other scientific discipline, if it's not included in the standard.				
Node representative contact				
Support/Technical contact				
Benefits/resources wished from the EOSC Federation (i.e. what the Node needs) Be precise. Try to include the technologies and capacities in the description				





### ⇔eosc | BEYOND≫ Methodology - integration matrix vol. 1

EOSC Pilo	ot Node Technical Template
Node Name	
Node legal entity name	
Node legal representative/signing person	
Entity type (i.e. Research Infrastructure, National infrastructure, e-Infrastructure, Data Space, etc)	
Countries building/delivering in the pilot Node (list the countries only)	
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Node representative contact	
Support/Technical contact	
Benefits/resources wished from the EOSC Federation (i.e. what the Node needs) Be precise. Try to include the technologies and capacities in the description	

CORE SERVICE	PILOT NODE														
	EGI Pilot Node		Instruct-ERIC		LifeWatch		NI4OS		e-INFRA CZ		NFDI	METROFOOD-RI	CESSDA	CNB-CSIC	ENES
AAI	Pre-Integrated	*	Pre-Integrated	~	Planned	~	Pre-Integrated	~	Planned	*	Planned 🔻	Planned 🔻	Planned 🔻	Possibly	Planned 🔻
Service Accounting	Planned	*	Not applicable	~	Not applicable	~	Planned	~	Planned	*	Planned 🔻	Not applicable 🔻	Not applicable 🔻	Possibly	Planned
Service Monitoring	Pre-Integrated	*	Pre-Integrated	~	Planned	~	Planned	~	Pre-Integrated	*	Planned 🔻	-	Planned •	Pre-Integrated •	Planned •
Research Product Accounting	Planned	*	Not applicable	~	Not applicable	~	Planned	~	Not applicable	~	Not applicable 🔻	Not applicable 🔻	Not applicable 🔻	Possibly	Not applicable 🔻
Resource Catalogue	Planned	*	Planned	~	Planned	~	Planned	~	Planned	*	Planned -	Planned 🔻	Planned 🔻	Planned	Planned •
Order Management	Planned	w	Not applicable	*	Not applicable	~	Planned	~	Not applicable	~	Not applicable 🔻	-	Not applicable 🔻	Not applicable 🔻	Not applicable 🔻
Helpdesk	Planned	*	Planned	~	Planned	~	Planned	~	Pre-Integrated	~	Planned 🔻	Planned 🔻	Planned 🔻	Pre-Integrated •	Not applicable 🔻
PID Service	Planned	*	Planned	~	Not applicable	~	Planned	~	No idea	*	Not applicable 🔻	-	Planned 🔻	Planned -	Planned 🔻
Marketplace	Not applicable	*	Planned	~	Planned	~	Planned	~	No idea	*	Planned 🔻	-	Pre-Integrated 🔻	Planned	Not applicable 🔻
Interoperability Framework Registry	Pre-Integrated	~	Not applicable	~	Pre-Integrated	~		~	No idea	~	Planned =	~	Planned =		Not applicable *
Messaging System	Pre-Integrated	*		*	Pre-Integrated	~		*	Not applicable	~	Planned 🔻	~	Not applicable 🔻	-	Not applicable ▼



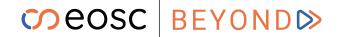


### ∽eosc | BEYOND>> Methodology - integration matrix vol. 2

EOSC Pilo
Node Name
Node legal entity name
Node legal representative/signing person
Entity type (i.e. Research Infrastructure, National infrastructure, e-Infrastructure, Data Space, etc)
<b>Countries</b> building/delivering in the pilot Node (list the countries only)
Entities participating in the EOSC Node - Institutional level list of entities (legal or non-legal)
<b>Node type</b> (i.e. thematic, national, regional, e-infra)
Scope of the Node (provide a solid description)
Scientific disciplines supported by the Node https://confluence.egi.eu/display/EGI G/Scientific+Disciplines? Please use appropriate values from the standard above. In addition, list any other scientific discipline, if it's not included in the standard.
Node representative contact
Support/Technical contact
Benefits/resources wished from the EOSC Federation (i.e. what the Node needs) Be precise. Try to include the technologies and capacities in the description

CORE SERVICE		PILOT NODE																
	EGI Pilot Node		Instruct-ERIC	LifeWatch	ı	NI4OS	e-INFRA CZ		NFDI		METROFOOD-RI	CES	SDA		CNB-CSIC		ENES	
AAI	Pre-Integrated	~	Pre-Integrated 🔻	Planned =	*	Pre-Integrated 🔻	Planned	*	Planned	*	Planned 🔻	Pla	nned	~	Possibly	*	Planned	~
Service Accounting	Planned	*	Not applicable 🔻	Not applicable 🔻	~	Planned 🔻	Planned	*	Planned	*	Not applicable 🔻	No	t applicable	*	Possibly	*	Planned	~
Service Monitoring	Pre-Integrated	*	Pre-Integrated 🔻	Planned •	~	Planned 🔻	Pre-Integrated	*	Planned	~	*	Pla	nned	*	Pre-Integrated	*	Planned	~
Research Product Accounting	Planned	~	Not applicable 🔻	Not applicable 🔻	~	Planned 🔻	Not applicable	~	Not applicable	~	Not applicable 🔻	No	t applicable	~	Possibly	~	Not applicable	*
Resource Catalogue	Planned	*	Planned 🔻	Planned	7	Planned 🔻	Planned	*	Planned	*	Planned •	Pla	nned	*	Planned	*	Planned	-
Order Management	Planned	*	Not applicable 🔻	Not applicable 🔻	~	Planned 🔻	Not applicable	*	Not applicable	*	*	No	t applicable	*	Not applicable	*	Not applicable	*
Helpdesk	Planned	~	Planned 🔻	Planned	~	Planned 🔻	Pre-Integrated	*	Planned	~	Planned •	Pla	nned	*	Pre-Integrated	*	Not applicable	~
PID Service	Planned	~	Planned 🔻	Not applicable 🔻	~	Planned 🔻	No idea	*	Not applicable	~	~	Pla	nned	~	Planned	~	Planned	~
Marketplace	Not applicable	*	Planned 🔻	Planned	~	Planned 🔻	No idea	*	Planned	~	~	Pre	-Integrated	*	Planned	*	Not applicable	~
Interoperability Framework Registry	Pre-Integrated	•	Not applicable 🔻	Pre-Integrated •	~	~	No idea	w.	Planned	₩.	*	Pla	nned	₩.		*	Not applicable	~
Messaging System	Pre-Integrated	*	*	Pre-Integrated ▼	~	*	Not applicable	*	Planned	~	~	No	t applicable	*		*	Not applicable	~

					,	are you willing to sha	re your AAI (users dat	a) data with the other	nodes?					
	EGI Pilot Node	Instruct-ERIC	LifeWatch	NI40S	e-INFRA CZ	NFDI	METROFOOD-RI	CESSDA	CNB-CSIC	ENES	EU Node	ENVRI	Clarin	ssнос
EGI Pilot Node	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint
Instruct-ERIC	Under restriction ▼	•	Under restriction •	Under restriction ▼	Under restriction ▼	Under restriction ▼	Under restriction ▼	Under restriction •	Under restriction ▼					
LifeWatch	Under restriction 💌	Under restriction ▼	•	Under restriction ▼	Under restriction 💌	Under restriction ▼	Under restriction 🔻	Under restriction •	Under restriction ▼	Under restriction •	Under restriction ▼	Under restriction ▼	Under restriction •	Under restriction ▼
NI40S	Under restriction 💌	Under restriction ▼	Under restriction •	Under restriction ▼	Under restriction •	Under restriction •	Under restriction 💌	Under restriction •	Under restriction 💌	Under restriction 💌	Under restriction ▼	Under restriction ▼	Under restriction •	Under restriction •
e-INFRA CZ	Yes •	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Yes 💌	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint
NFDI	Yes •	Under restriction ▼	Under restriction •	Under restriction ▼	Under restriction 💌	Yes ▼	Under restriction 💌	Under restriction ▼	Under restriction ▼	Under restriction •	Yes •	Under restriction ▼	Under restriction ▼	Under restriction 💌
METROFOOD-RI	Under restriction 💌	Under restriction ▼	Under restriction •	Under restriction ▼	Under restriction •	Under restriction ▼		Under restriction •	Under restriction ▼	Under restriction 💌	Under restriction 💌	Under restriction ▼	Under restriction •	Under restriction •
CESSDA	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint	Through normal processes for sharing AAI data under AARC blueprint
CNB-CSIC	No ▼	( No ▼)	No ▼	No ▼)										
ENES	Yes •	( No •)	No 🕶	No v	No ▼	No 👻	No 🔻	No 🔻	No 🔻	•	Yes	No •	No 💌	No ▼)

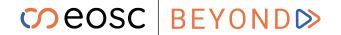


### ∽eosc | BEYOND>> Methodology - integration matrix vol. 3

EOSC Pile					
Node Name					
Node legal entity name					
Node legal representative/signing person					
Entity type (i.e. Research Infrastructure, National infrastructure, e-Infrastructure, Data Space, etc)					
Countries building/delivering in the pilot Node (list the countries only)					
Entities participating in the EOSC Node - Institutional level list of entities (legal or non-legal)					
Node type (i.e. thematic, national, regional, e-infra)					
Scope of the Node (provide a solid description)					
Scientific disciplines supported by the Node https://confluence.egi.eu/display/EGIG/Scientific+Disciplines? Please use appropriate values from the standard above. In addition, list any other scientific discipline, if it's not included in the standard.					
Node representative contact					
Support/Technical contact					
Benefits/resources wished from the EOSC Federation (i.e. what the Node needs) Be precise. Try to include the technologies and capacities in the description					

EOSC EU Node												
	Node name	Level of integration	Use case	Comment	Timeline	Any other remarks						
Service/Capability	CESSDA	Describe what part of the node Exchange resouces are in the scope of chosen status and forseen results from the user perspective*	Describe how a specific user or group of users will interact with a system or service to achieve a particular goal	A short explanation why the service will not be integrated (complete only if applicable)	Point out the month of the BEYOND project when integration becomes achievable							
File Sync and Share	Planned	Partial integration for organizations within a Node			M18							
Interactive Notebooks	Planned	Integrate eg. Jupyter Hub to be enable users to			M35							
Large File Transfer	Planned	Partial integration to enable secure transfer of research			M18							
Virtual Machines	Not applicable •			No need For current services "Cloud containers"	NA							
Cloud Container Platform	Planned	Migrate current development and staging			M18							
Bulk Data Transfer	Not applicable -			File sync and share and Large File Transfers should	NA							





### ⇔eosc | BEYOND>> Methodology - integration matrix vol. 4

EOSC Pilo	ot Node Technical Template
Node Name	
Node legal entity name	
Node legal representative/signing person	
Entity type (i.e. Research Infrastructure, National infrastructure, e-Infrastructure, Data Space, etc)	
Countries building/delivering in the pilot Node (list the countries only)	
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Node type (i.e. thematic, national, regional, e-infra)	
Scope of the Node (provide a solid description)	
Scientific disciplines supported by the Node https://confluence.egi.eu/display/EGI G/Scientific+Disciplines? Please use appropriate values from the standard above. In addition, list any other scientific discipline, if it's not included in the standard.	
Node representative contact	
Support/Technical contact	
Benefits/resources wished from the EOSC Federation (i.e. what the Node needs) Be precise. Try to include the technologies and capacities in the description	
	1

EOSC EU Node											
	Node name		Level of integration	Use case	Comment	Timeline	Any other remarks				
Service/Capability	CESSDA		Describe what part of the node Exchange resouces are in the scope of chosen status and forseen results from the user perspective*	Describe how a specific user or group of users will interact with a system or service to achieve a particular goal	A short explanation why the service will not be integrated (complete only if applicable)	the BEYOND project					
File Sync and Share	Planned	*	Partial integration for organizations within a Node			M18					
Interactive Notebooks	Planned		Integrate eg. Jupyter Hub to be enable users to			M35					
Large File Transfer	Planned	*	Partial integration to enable secure transfer of research			M18					
Virtual Machines	Not applicable	*			No need For current services "Cloud containers"	NA					
Cloud Container Platform	Planned		Migrate current development and staging			M18					
Bulk Data Transfer	Not applicable	*			File sync and share and Large File Transfers should	NA					

	EGI Pilot Node	Instruct-ERIC	LifeWatch	NI4OS	e-INFRA CZ	NFDI	METROFood-RI	CESSDA	CNB-CSIC	ENES
EGI Pilot Node										
Instruct-ERIC										
LifeWatch										
NI4OS										
e-INFRA CZ										
NFDI				)						
METROFood-RI										
CESSDA										
CNB-CSIC										
ENES										
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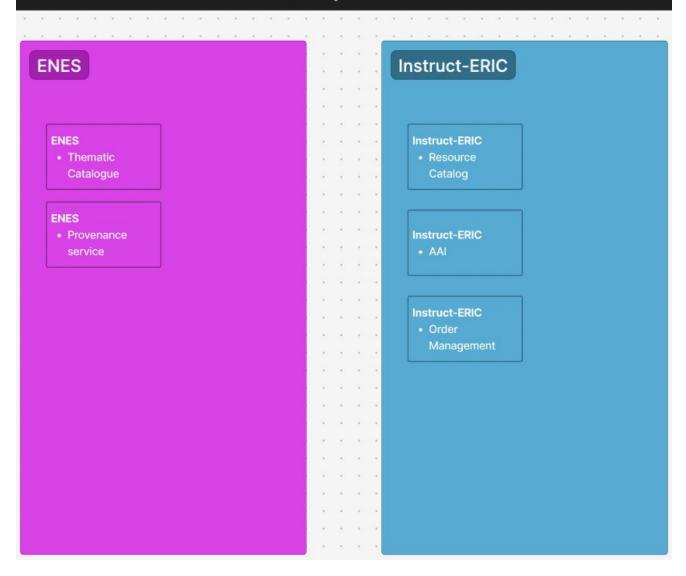
# coesc | BEYOND Methodology - user stories

	Pilot Name	User Story of highest priority	User journey	Core Service involved	Exchange service involved
		As a researcher I want to access computing resources so that I can run molecular dynamic simulations to characterise perovskite materials. My research group at the university would need to have access to the model and evaluate the results.	1. Research scientist would need to register in the EGI node with an EGI recognised identity provider. (EGI NODE service CHECKIN) 2. Researcher would need to request from the service catalogue and order management system the type of computational and storage resources e.g. Cloud /HPC (EU Node service order management) 3. The order would be processed and a cloud /HPC /storage provider would be identified with the capacity requested by the user. Cloud /storage provider would (Cloud and storage federated service) 4. A Virtual Organisation is created and members of the research scientist team are added	AAI, Order Management	Storage, Compute ▼
		As an IT administrator I want to synchronise monitoring data of services through my Node with the EU Node monitoring system so that we can control our services' SLAs fulfilment	1.IT administrator requests monitoring schema used by the EU monitoring node. 2. IT administrator ensures that monitoring data from the services are made available to the monitoring (e.g. service uptime) 3. IT administrator ensures that the EGI Node is authenticated (Federated AAI) with the monitoring service of EU Node. 4. Monitoring data (uptimes) are consumed by ARGO. 5. EGI Node provides Service Performance Reports to Services Providers to inform them of fulfilment with SLAs	Service Monitoring, AAI	•
	EGI Node	As EGI Foundation I want to support the RI's to scale up computing capacity (providing resources, training, know-how) so that RI users can capitalise on data and compute colocation to train AI models	1. EGI assembles "pools" of similar resources across multiple providers (e.g. certain kinds of cloud compute, storage, HPC, etc.)  2. "Virtual Access" scheme is organized so that user access and ordering work automatically  3. Distinct pools of resources are listed in resource catalogue, not as individual endpoints/ servers, but using AWM orchestration as front end.  4. Specific deployment recipes are designed and put into Tools Market (part of Marketplace) and linked to data analytics and AI algorithms (e.g. containers) that are also in the Marketplace.  5. User Notes/Training is linked to algorithms in the Marketplace to guide users in how to use.  6. Researchers must select input data, use Data Transfer services to move to File Synch and Share resources accessible to required Cloud Compute or Virtual Machine resources from the pools  7. Containers are split into "data local" and "scale out" components. Data Local components are deployed by AWM on to compute next to storage. Scale out containers can be deployed to non-local compute.  8. Final Analytics result is moved to Researcher's designated storage location by Data Transfer service	Marketplace, Resource ▼ Catalogue	Data Transfer, File sharing
Pr€		As a researcher I want to understand what is the service offering of the EGI node so that I can concentrate on science and not on the technical set up	1.Researcher logs into EGI node (CHeckin). Log in provides attributes 2. Researcher accesses marketplace for EGI Node. Selects "filter by my credentials" 3. Marketplace displays resources to which researcher has access 4. Related training and comments/reviews(?) from other users help me assess possible resources for their suitability to my needs 5. Researcher can "like" or otherwise keep track of resources of interest for possible future use. 6. Liked resources are used by Marketplace to suggest similar resources, or to notify about changes to resources I have already tagged. 7. Researcher access order management service to get access to specific resources. Details about these resources are stored in researchers "shopping cart" for ease of future use. 8. Combinations of Ordered resources might be flagged as interoperable and "wizards" are available to get them set up and ready to use.	AAI, Marketplace, Order ▼ Management	Open research data, Data sources



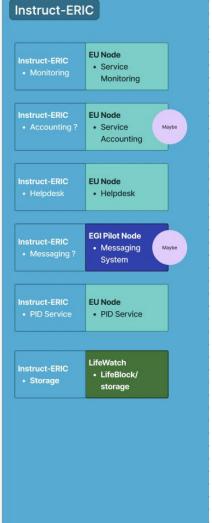
### cosc | BEYOND Methodology - shopping mall

### Distributors/Capabilities Offered



# Consumers/Capabilities to Take









### **EOSC Beyond's Roadmap** for Data Spaces and Node Integration

Discover our deliverable D15.1, outlining integration plans for Data Spaces and Pilot EOSC Nodes, in...

Read more

Published August 1, 2024 | Version 1 Under EC Review



### 194

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Version 1 Under EC Review

the latest one. Read more.

10.5281/zenodo.13152335

158 **★** DOWNLOADS

Aug 1, 2024

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Cite all versions? You can cite all versions by

using the DOI 10.5281/zenodo.13152334. This DOI

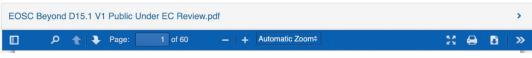
represents all versions, and will always resolve to

#### EOSC Beyond D15.1 Service integration plans of the Data Spaces and EOSC Nodes

Lechowska-Winiarz, Katarzyna; Wilk, Roksana; Gutiérrez, Marta

EOSC Beyond builds on Pilot Nodes activities to enhance and validate the EOSC Core functionalities and evolve the EOSC Federation model. This deliverable presents the outcomes of the interviews and workshops carried out with the Pilot Nodes during the early phase of the project to deliver a service integration plan driven by real, science-based user stories.

#### Files



Published August 1, 2024 | Version 1

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#### EOSC Beyond D15.1 - Complementary Annex

Lechowska-Winiarz, Katarzyna; Wilk, Roksana; Gutiérrez, Marta; Dietrich, Mark; Povey, Marcus; de Jong Leung, Yvonne; Fiore, Nicola; Mishev, Anastas; Šustr, Zdeněk; Ruda, Miroslav; Wetzel, Tim; Apweiler, Sander; Bundke, Ulrich; Winkers, Marvin; Czach, Joanna; Presser, Karl; Żołynia, Anna; Shepherdson, John; Vodopijevec, Alen; Simon, Carolina; Sanchez, Irene; Carazo, Jose Maria; Antonio, Fabrizio: Fiore, Sandro

Complementary Annex for EOSC Beyond deliverable D15.1.

#### Files

EOSC Beyond D15.1 Supplementary Annex V1 Public.pdf

Versions

Version 1

10.5281/zenodo.12819857

Cite all versions? You can cite all versions by using the DOI 10.5281/zenodo.12819856. This DOI represents all versions, and will always resolve to the latest one. Read more.

August 19, 2024



Put your name, if u want to answer one of the questions below during the session. This slide should be hidden

- 1 From the previous EOSC to the Nodes, tell us what you think about the transition (5)
- 2 Expectations from the federation (wishes, crystal ball ), what would you bring forward, what would you leave behind (5 min)
- 3 How to go beyond target communities (is this good /bad), how do you serve users that don't know you. (5 min)





#### Get in touch with us

Website <a href="www.eosc-beyond.eu">www.eosc-beyond.eu</a>
LinkedIn <a href="mailto:/company/eosc-beyond/">company/eosc-beyond/</a>
YouTube <a href="mailto:/@EOSCBeyond">@EOSCBeyond</a>
Email <a href="mailto:eosc-beyond-po@mailman.egi.eu">eosc-beyond-po@mailman.egi.eu</a>

- Katarzyna Lechowska-Winiarz, Cyfronet (k.lechowska-winiarz@cyfronet.pl)
- Marta Gutierrez, EGI (marta.gutierrez@egi.eu)
- Roksana Wilk, Cyfronet (r.wilk@cyfronet.pl)



