



ENVRI Board meeting – December 2024 Content slides

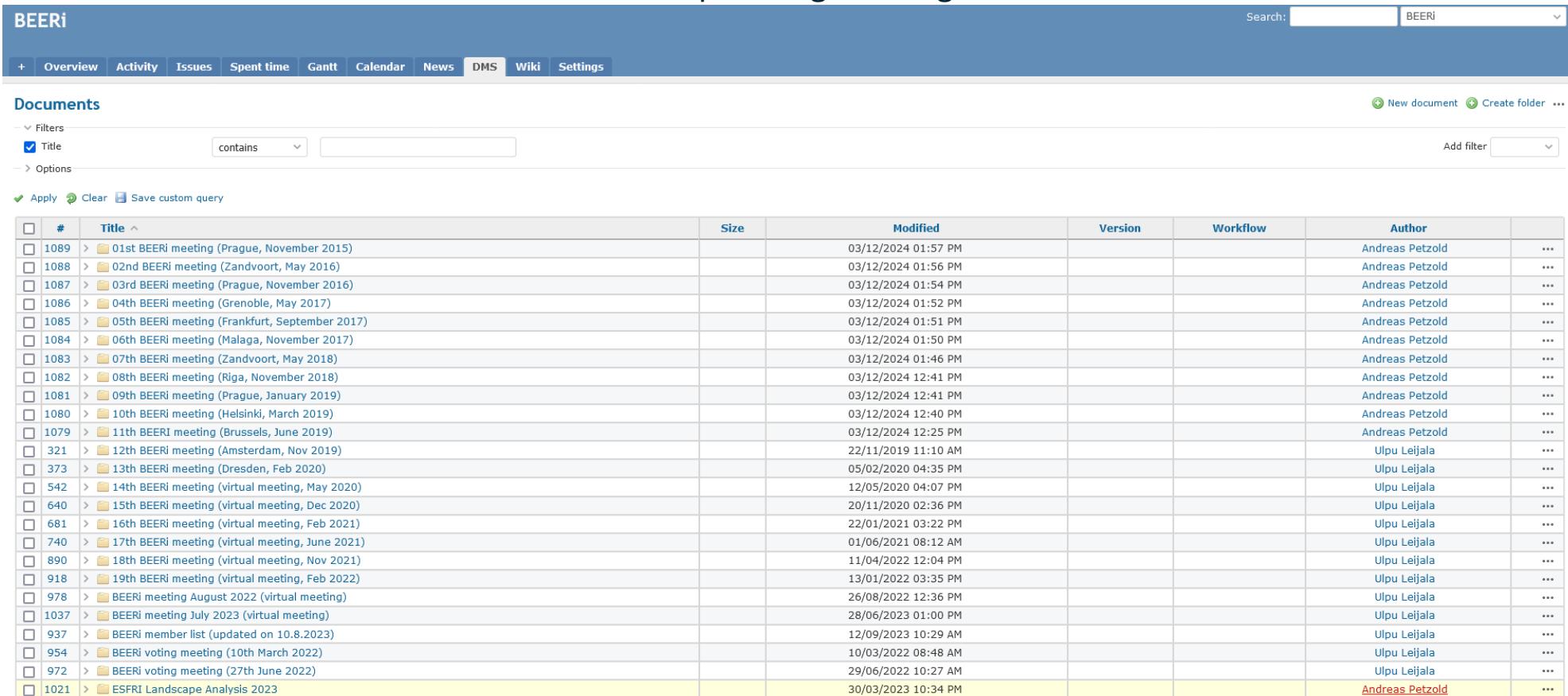
Virtual meeting on **Wednesday, 18th December 2024, at 9-11 CET** via Zoom:

<https://fz-juelich-de.zoom.us/j/65728264524?pwd=JJYbcJ68aBbpUHQNZFauesZ3nLL2In.1>

Meeting ID: 657 2826 4524, Passcode: 702969

Status of the ENVRI archive

- All BEERi documents from its start in ENVRIplus are added to the BEERi archive on Redmine hosted at Juelich
- We started a new archive for the ENVRI Board for upcoming meetings



BEERi

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#	Title	Size	Modified	Version	Workflow	Author
1089	> 01st BEERi meeting (Prague, November 2015)		03/12/2024 01:57 PM			Andreas Petzold
1088	> 02nd BEERi meeting (Zandvoort, May 2016)		03/12/2024 01:56 PM			Andreas Petzold
1087	> 03rd BEERi meeting (Prague, November 2016)		03/12/2024 01:54 PM			Andreas Petzold
1086	> 04th BEERi meeting (Grenoble, May 2017)		03/12/2024 01:52 PM			Andreas Petzold
1085	> 05th BEERi meeting (Frankfurt, September 2017)		03/12/2024 01:51 PM			Andreas Petzold
1084	> 06th BEERi meeting (Malaga, November 2017)		03/12/2024 01:50 PM			Andreas Petzold
1083	> 07th BEERi meeting (Zandvoort, May 2018)		03/12/2024 01:46 PM			Andreas Petzold
1082	> 08th BEERi meeting (Riga, November 2018)		03/12/2024 12:41 PM			Andreas Petzold
1081	> 09th BEERi meeting (Prague, January 2019)		03/12/2024 12:41 PM			Andreas Petzold
1080	> 10th BEERi meeting (Helsinki, March 2019)		03/12/2024 12:40 PM			Andreas Petzold
1079	> 11th BEERi meeting (Brussels, June 2019)		03/12/2024 12:25 PM			Andreas Petzold
321	> 12th BEERi meeting (Amsterdam, Nov 2019)		22/11/2019 11:10 AM			Ulpu Leijala
373	> 13th BEERi meeting (Dresden, Feb 2020)		05/02/2020 04:35 PM			Ulpu Leijala
542	> 14th BEERi meeting (virtual meeting, May 2020)		12/05/2020 04:07 PM			Ulpu Leijala
640	> 15th BEERi meeting (virtual meeting, Dec 2020)		20/11/2020 02:36 PM			Ulpu Leijala
681	> 16th BEERi meeting (virtual meeting, Feb 2021)		22/01/2021 03:22 PM			Ulpu Leijala
740	> 17th BEERi meeting (virtual meeting, June 2021)		01/06/2021 08:12 AM			Ulpu Leijala
890	> 18th BEERi meeting (virtual meeting, Nov 2021)		11/04/2022 12:04 PM			Ulpu Leijala
918	> 19th BEERi meeting (virtual meeting, Feb 2022)		13/01/2022 03:35 PM			Ulpu Leijala
978	> BEERi meeting August 2022 (virtual meeting)		26/08/2022 12:36 PM			Ulpu Leijala
1037	> BEERi meeting July 2023 (virtual meeting)		28/06/2023 01:00 PM			Ulpu Leijala
937	> BEERi member list (updated on 10.8.2023)		12/09/2023 10:29 AM			Ulpu Leijala
954	> BEERi voting meeting (10th March 2022)		10/03/2022 08:48 AM			Ulpu Leijala
972	> BEERi voting meeting (27th June 2022)		29/06/2022 10:27 AM			Ulpu Leijala
1021	> ESFRI Landscape Analysis 2023		30/03/2023 10:34 PM			Andreas Petzold

ENVRI Week - Status

- At the last ENVRI Board meeting on 26 September 2024, there was a suggestion to hold an ENVRI Week in 2025 among all ENVRI-related projects (ENVRI-Hub NEXT, ENVRINNOV, IRISCC, OSCARS, ...)
- The suggested time slot was 31 March to 4 April 2025.
- Finances, available budget and further organisational matters were not discussed (e.g. who will be invited, number of participants).
- No progress was made in organizing a cross-project ENVRI week in 2025.

ENVRI Week - Suggestion

- Smaller lunch to lunch meeting in the agreed slot from 31 March to 4 April 2025 with representatives from the four projects (OSCARS, ENVRI-Hub NEXT, ENVRINNOV, IRISCC), as well as someone from ENVRI Communications, and the chairs of the ENVRI Board
 - Would result in a group size of 20-25 people
- Held at the Helmholtz offices in Brussels, which we can use free of charge, but it needs to be blocked quickly
 - Participants would only have to cover their own travel expenses and could account for these through their respective projects.
- Discussion about a large ENVRI Week could be one of the items on the agenda.

Topics	Type of Action	Budgets	Expected EU contribution per project	number of projects
<p>Opening: 06 May 2025 Deadline: 18 Sep 2025</p>				
HORIZON-INFRA-2025-01-EOSC-01: Foundational EOSC Nodes with federating capabilities for the EOSC Federation	RIA	24.00 Mio €	6.00 to 8.00 Mio €	4

<i>TRL</i>	Activities are expected to achieve TRL 7-8 by the end of the project
<i>Legal and financial set-up of the Grant Agreements</i>	<p>Beneficiaries will be subject to the following additional access rights:</p> <ol style="list-style-type: none">1. Each beneficiary must grant royalty-free access to its results to the EOSC Association for monitoring and developing policies and strategies for the European Open Science Cloud. Each beneficiary must also provide directly to the EOSC Association the information the beneficiary deems necessary for monitoring and developing policies and strategies for the EOSC.2. Each beneficiary must grant royalty-free access to its intellectual property rights which are part of the results and are needed for further developing the EOSC to legal entities identified by the granting authority and established in Member States or countries associated to the Horizon Europe Framework Programme. Such access rights are limited to non-commercial use. <p>Beneficiaries must deposit the digital research data generated in the action in a trusted repository federated in the EOSC in compliance with EOSC requirements.</p>

- Call aims to further develop the cross-domain EOSC system of systems, building upon the results of the previous INFRAEOSC calls
- Focus: developing and expanding the EOSC federation through a network of nodes as foundational elements of the federation model
 - Establish a set of essential federating capabilities, compatible with the EOSC EU Node reference architecture, following the EOSC Federation Handbook and EOSC interoperability framework
 - Need to have a clearly described identity and offer unique value to EOSC users, for example representing a specific thematic domain (e.g. data or computing) or geographical area amongst the Horizon Europe participating and associated countries.
- To become a foundational EOSC node, proposals need to...
 - Demonstrate the ability to assess and address the existing gaps regarding the federating capabilities at technical, legal and organisational level
 - Indicate adherence to the EOSC governance structure, federation policies and capabilities.
 - Address business models, service management procedures, and technical and semantic interoperability
 - Propose a credible plan to ensure the sustainability of the proposed solutions beyond the project lifespan, including how to take over or replicate the federating role currently ensured by the EOSC EU Node

Proposals shall focus on all of the following aspects:

- Satisfy the minimal node requirements as defined by the EOSC tripartite governance and go beyond them by further development and refinement of the harmonized participation model, taking into account the variety of thematic and national dimensions in the EOSC federation. These requirements include:
 1. Compliance with the requirements on the legal status of the organisation;
 2. Compliance with the requirements aiming at large-scale, quality service provisioning;
 3. Capacity to onboard third-party services;
 4. Capacity to contribute to and/or take-over the EOSC federating capabilities;
 5. Adoption and integration of the EOSC federation rules and policies, and further refinement and practical adaptation of best practices;
 6. Support to effectively monitor and report the activities of the services provided.

Proposals shall focus on all of the following aspects:

- Integrate and offer EOSC core federating capabilities pioneered by the EOSC EU Node, such as Authentication, Authorisation and Accounting, Research Catalogues and Knowledge Graph, Application Workflows, Monitoring and Helpdesk.
- Contribute to a robust and coordinated strategy for evolving and sustaining the federated governance model for EOSC by fostering effective collaboration and coordination among the other foundational node operators offering federating capabilities. This can be done for example by distributing the work and taking a share in facilitating the identification, selection and integration/enrolment of other organisations interested in becoming responsible for operating an EOSC node and representing various countries, regions and scientific disciplines.
- Enrich the existing guidelines and best practices for the onboarding and enrolment processes.
- Evolve and refine the EOSC federation specifications to drive the evolution across governance, operations, sustainability and technical interoperability.
- Designate and train the EOSC foundational node operators for high level of responsibilities within the EOSC federation.
- Develop and run community engagement and support programmes around the EOSC foundational node and the surrounding ecosystem.

HORIZON Europe Calls of interest

HORIZON-INFRA-2025-01-EOSC-04

Advancing AI-readiness and Machine-Actionability in the EOSC Ecosystem

RIA

30.0 Mio €

7.5 to 10.0 Mio €

4 projects

Opening: 06 May 2025; Deadline: 18 Sep 2025

The proposals shall focus on all following aspects:

- Develop and prototype tools to drive machine-actionability in repositories, data, and services, establishing a network of trusted repositories linked to the EOSC EU Node;
- Provide federated infrastructure services for serving AI models integrating horizontal and thematic EOSC nodes;
- Provide access to an easy-to-use technology platform offering reference implementations and recipes to quickly get started working with AI/ML with limited engineering overhead;
- Establish and/or provide access to existing AI/ML model repositories and services to serve models for retraining of generic models for specific needs for future predictions and reproducibility;
- Establish an EOSC AI/ML competency centre for the pooling of expertise and coordinated support on AI/ML use of data, compute infrastructure and AI/ML models for the upskilling and technical support of EOSC users and research operators, as a strategic asset that will enable a new paradigm for science production.

Comment: Project will be linked to HORIZON-INFRA-2025-01-EOSC-06

Call is probably targeting mainly e- Infras, participation to the consortium recommended.

HORIZON Europe Calls of interest

HORIZON-INFRA-2025-01-EOSC-06

Using Generative AI (GenAI4EU) for Scientific Research via EOSC

RIA

15.0 Mio €

7.5 to 15.0 Mio €

2 projects

Opening: 06 May 2025; Deadline: 18 Sep 2025

The proposals shall focus on all following aspects:

- Enrich the EOSC federation with Generative AI tools for evaluating research data quality, ensuring trustworthiness across the European network of trusted repositories, accessible by humans, machines, and Generative AI services: formulate protocols and policies to facilitate effortless data access, processing, and provenance updates within EOSC's repository and service network.
- Support European research infrastructures to improve the FAIRness of their data, so that they are ready to be combined with data of infrastructures in scientifically neighbouring domains, in order to provide Generative AI-ready data.
- Run community engagement and support programmes for implementing Generative AI in scientific workflows via EOSC.

Comment: Project will be linked to HORIZON-INFRA-2025-01-EOSC-04

Call is probably targeting mainly e- Infras, participation to the consortium recommended.

HORIZON Europe Calls of interest

HORIZON-INFRA-2025-01-TECH-01

New technologies and solutions for reducing the environmental and climate footprint of research infrastructures

RIA

25.0 Mio €

Around 5.0 Mio €

5 projects

Opening: 06 May 2025; Deadline: 18 Sep 2025

Proposals must include at least two different research infrastructures as beneficiaries.

Scope: The aim of this topic is to deliver innovative technologies and solutions which generate a step change in reducing the environmental and climate footprint of research infrastructures through the full life cycle of research infrastructures. Proposals should identify common methodologies, among the concerned research infrastructures, to assess environmental impact and strategies to reduce it, as well as efficiency gains in the broader ecosystem.

Consortia should be built on a leading core of at least two different world-class research infrastructures, each of them being an ESFRI infrastructure, a European Research Infrastructure Consortium (ERIC) or another research infrastructure that is an intergovernmental organisation of European interest, and can include a wider set of research infrastructures, and other technological partners.

Comment:

HORIZON Europe Calls of interest

HORIZON-INFRA-2025-01-TECH-04 AI-generated digital twins for science	RIA	40.0 Mio €	8.0 to 10.0 Mio €	4 projects
Opening: 06 May 2025; Deadline: 18 Sep 2025				
The aim is to use generative artificial intelligence (AI), in line with the GenAI4EU initiative, to deliver digital twins of complex real-world systems that advance the state-of-art of European research infra-structures (RIs) and show transformative potential in their operations. The solutions should pave the way for new methods to conduct research by the RIs through AI generated and powered digital twins.				
The proposals should cover all of the following aspects:				
<ul style="list-style-type: none">▪ Demonstrate the ability to setup complex modelling and digital twin setups using generative AI in line with the GenAI4EU initiative.▪ Ensure a data driven approach in which new simulations and Digital Twins are set up and demonstrate the chosen approach to work in at least three different application scenarios.▪ Enable non-technical decision makers to express scenarios for challenges to be translated into impactful simulations, making use of existing digital twins, models and data sources.▪ Demonstrate trustworthiness/reliability in the use of AI and practice clear and open communication of AI use and impact to users.				
Comment:				

HORIZON Europe Calls of interest

HORIZON-CL6-2025-03-GOVERNANCE-08: Effective environmental observing systems and associated governance

RIA

10.0 Mio €

5.0 Mio €

2 projects

Opening: 06 May 2025; Deadline: 24 Sep 2025

Scope: Efficiency and cost-effectiveness of observing systems will play a crucial key role in global policies and initiatives such as the Paris Agreement and the WMO Global Greenhouse Gas Watch, the Montreal Protocol and its Kigali Agreement, or GEO initiatives and flagships. Proposals are expected to exploit the latest digital technologies (e.g. Artificial Intelligence, digital twins, IoT) and science (e.g. data assimilation and analysis, or models) to develop innovative, generic, quantitative, cost-effective and user-friendly tools to optimize current and future/emerging orbital (baseline and small satellite constellations) and non-orbital observing systems (e.g. autonomous systems, manned and unmanned aerial vehicles (drones), citizen science networks) and their combinations from a performance and investment point of view, using approaches like Observing System Experiments (OSEs) and Observing System Simulation Experiments (OSSEs).

The approaches should be developed and demonstrated in the context of one of the following specific use cases:

- monitoring global anthropogenic and natural greenhouse gas emissions and sinks, in support of the Paris Agreement;
- ozone depleting substances and F-Gases, in support of the Montreal Protocol.

Tools and approach should be flexible enough to be applied to other observing systems and examples. The project is expected to benefit from and leverage underlying work of ESA, EUMETSAT, Copernicus, or European Infrastructures (ICOS, ACTRIS, etc.).

Comment:

HORIZON Europe Calls of interest

HORIZON-INFRA-2025-01-SERV-02:

Research infrastructure services to enable R&I addressing main challenges and EU priorities

RIA

20.0 Mio €

5.0 Mio €

4 projects

Opening: 06 May 2025; Deadline: 18 Sep 2025

Proposals must include at least one RI, being an ESFRI Landmark or a European Research Infrastructure Consortium (ERIC).

Expected outcome: Provision of innovative, customised and efficient research infrastructures services enhancing and increasing society's long-term and consistent problem-solving capacity and evidence-based policy making.

Area 3 of 4: RI services to improve the understanding and prediction of future climate changes and their impact:

- Reinforced support for cutting-edge research and innovation in understanding and predicting future climate changes and their impacts
- Wider, user-friendly and coordinated access for researchers to enhanced and further integrated state-of-the-art Earth system models, including high resolution or high complexity models and relevant high-performance computing resources
- More robust evidence underpinning the assessments of the Intergovernmental Panel on Climate Change (IPCC) about the state of scientific, technical and socio-economic knowledge on climate change, its impacts, risks and response options.
- More effective climate policies in the context of the implementation of the European Green Deal, the European Climate Law, and the Paris Agreement.

Comment: