

How can EOSC help you sustain and promote your results?

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Some EOSC speak (1)

What is EOSC, what is the EOSC vision?

- EOSC stands for European Open Science Cloud
- EOSC is an ecosystem for/a **web of FAIR data** that contributes to data reuse and cross-disciplinary research (a data cloud, not an IT cloud)
- EOSC is a **unique opportunity** to
 - Address the issues around FAIR data including data quality, management, metadata, publication, tools for processing, sharing, training data for AI, so that we can
 - Increase the scientific impact of research data from the various domains and save time and money!



Some EOSC speak (2)

Who 'owns' EOSC?

- In **2016** EOSC was an initiative by the **European Commission** to bring together Thematic Research Infrastructures (RIs), Research Performing Organisations (RPOs) and e-Infrastructures to help **Researchers** implement **Open Science**
- In **2021** the EC created the **EOSC Partnership** and **EOSC Association** (aka EOSC-A), governed by three 'parties' (**EOSC Tripartite**):
 - European Commission
 - Steering Board representing the EU member states
 - Assembly of member organisations (RIs, RPOs, NRENs, etc) represented by the EOSC-A Board
- In **2024** the **EOSC Tripartite** decided to create the **EOSC Federation** which would be made up of **EOSC Nodes**.

Some EOSC speak (3)

Funding for EOSC

- EOSC project funding **started in 2017** with the EOSC-Pilot project
- From **2019 to 2023** the INFRAEOSC calls of H2020 funded a number of RI projects in different scientific domains (aka clusters): **ENVRI, ESCAPE, PaNOSC, EOSC-Life, SSHOC** (see <http://www.science-clusters.eu/>)
- From 2021 **~50 EOSC projects*** were funded, including **OSCARS**



* <https://eosc.eu/eosc-macro-roadmap/>

Some EOSC speak (4)

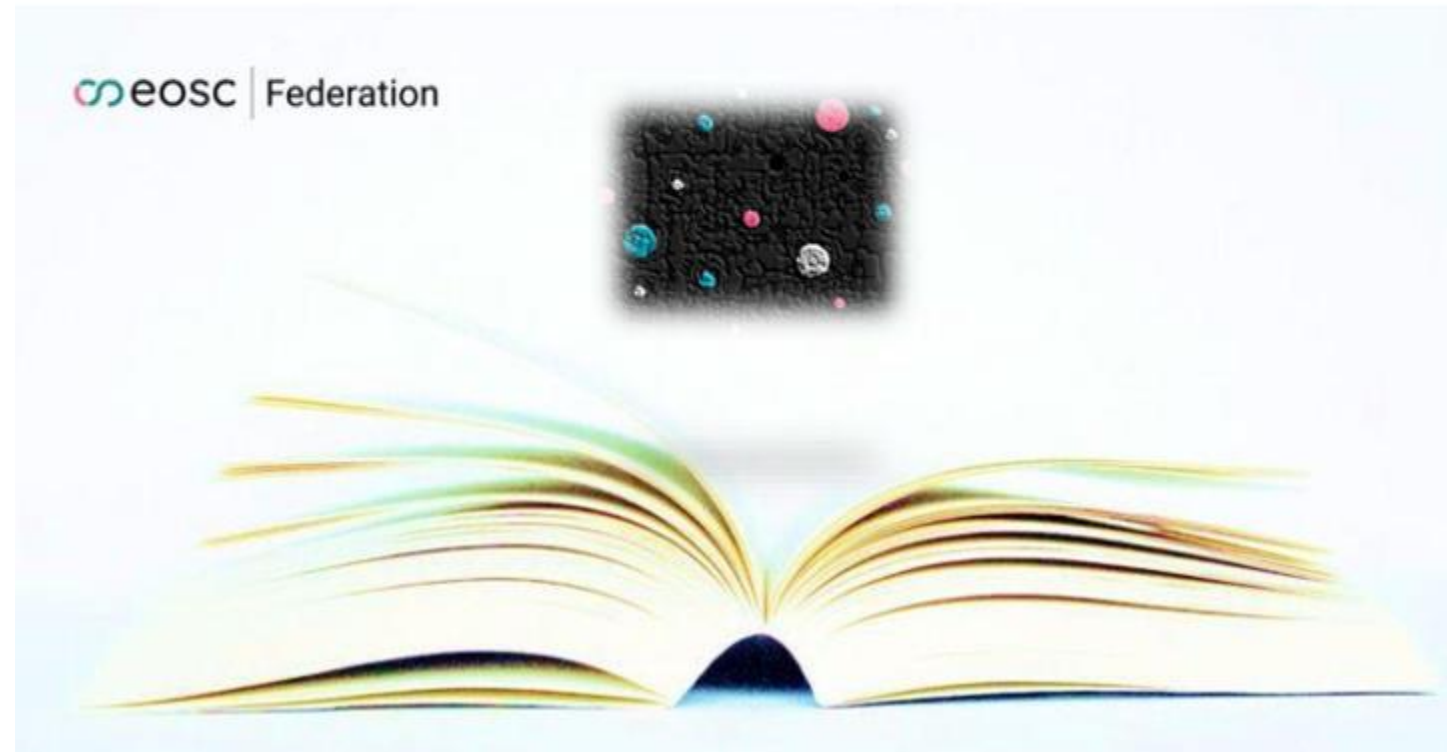
What is the **EOSC Federation?**

What is **the role of EOSC Nodes?**

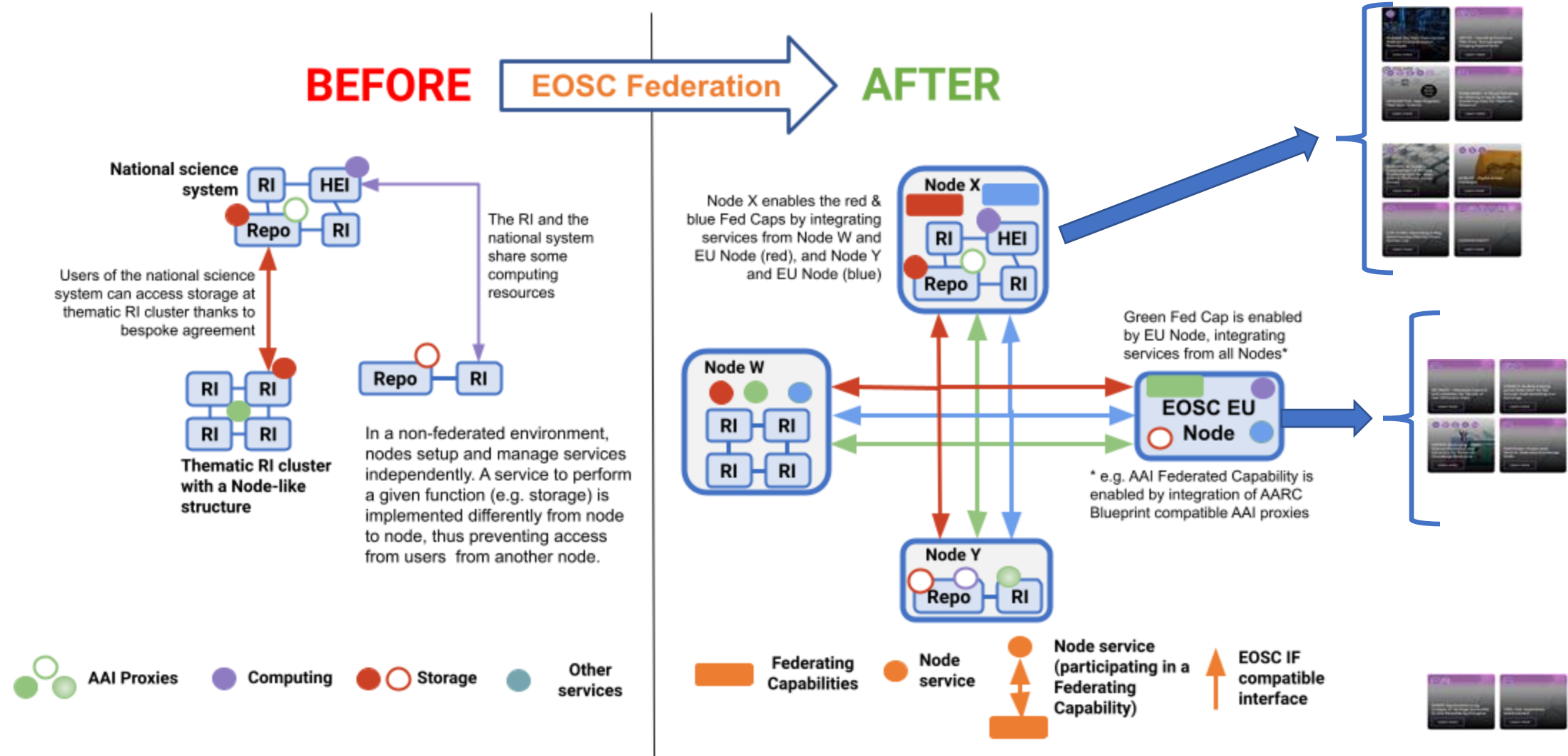
In **2024** the EOSC Tripartite decided to create the **EOSC Federation**, to be made up of **EOSC Nodes**.

The EOSC Federation Handbook

- **EOSC Federation Handbook** is a **collaborative** effort to document what an **EOSC Node** is and how to build the **EOSC Federation** from the EOSC Nodes
- It is in its **final draft** and will be made **public** soon (planned for **mid-March?**)
- Webpage:
<https://eosc.eu/eosc-federation-handbook/>

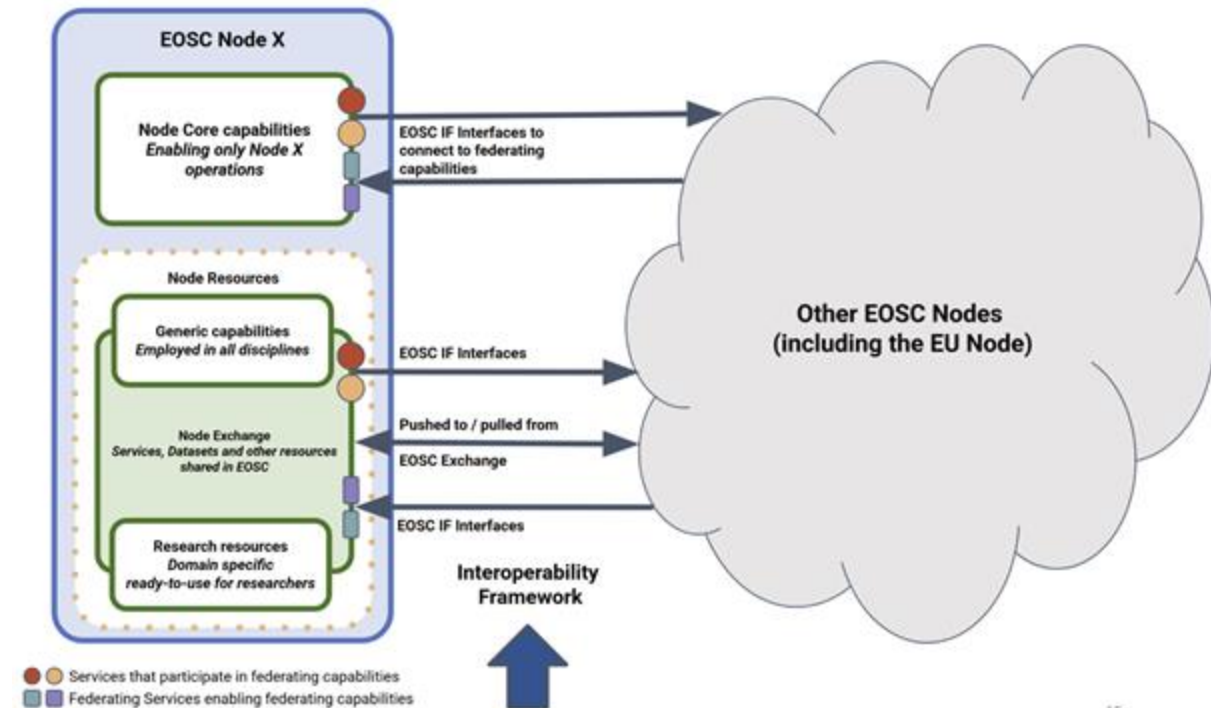


Vision of the EOSC Federation



What is an EOSC Node?

- EOSC Federation a **virtual infrastructure** made up of **EOSC Nodes**
- **EOSC Nodes** are organisations or groups of organisation that offer data, services and IT infrastructure
- EOSC Nodes must **federate services** by linking to some or all the other Nodes
- The EOSC Federation is **under construction**, lots of details need to be worked out
- The Federation will start with **13 Nodes** and should be operational by **November 2025**



First wave of EOSC Nodes + EU Node

- BBMRI ERIC
- CERN
- CNR (Blue-Cloud 2026)
- CNRS (Data Terra)
- CSC – IT Center for Science
- CVTI SR
- Life Science Research Node (on behalf of four Life Science Research Infrastructures: ELIXIR, EMBL, Euro-BioImaging ERIC, and Instruct-ERIC)
- ESRF (PaNOSC)
- EUDAT
- Foundation ICSC
- NCN
- NFDI
- SURF

What is the EOSC EU Node?

<https://open-science-cloud.ec.europa.eu/>

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European Open Science Cloud EU Node

Access your account and take advantage of the free resources, perform research and collaborate.

Log in

Chosen authentication provider



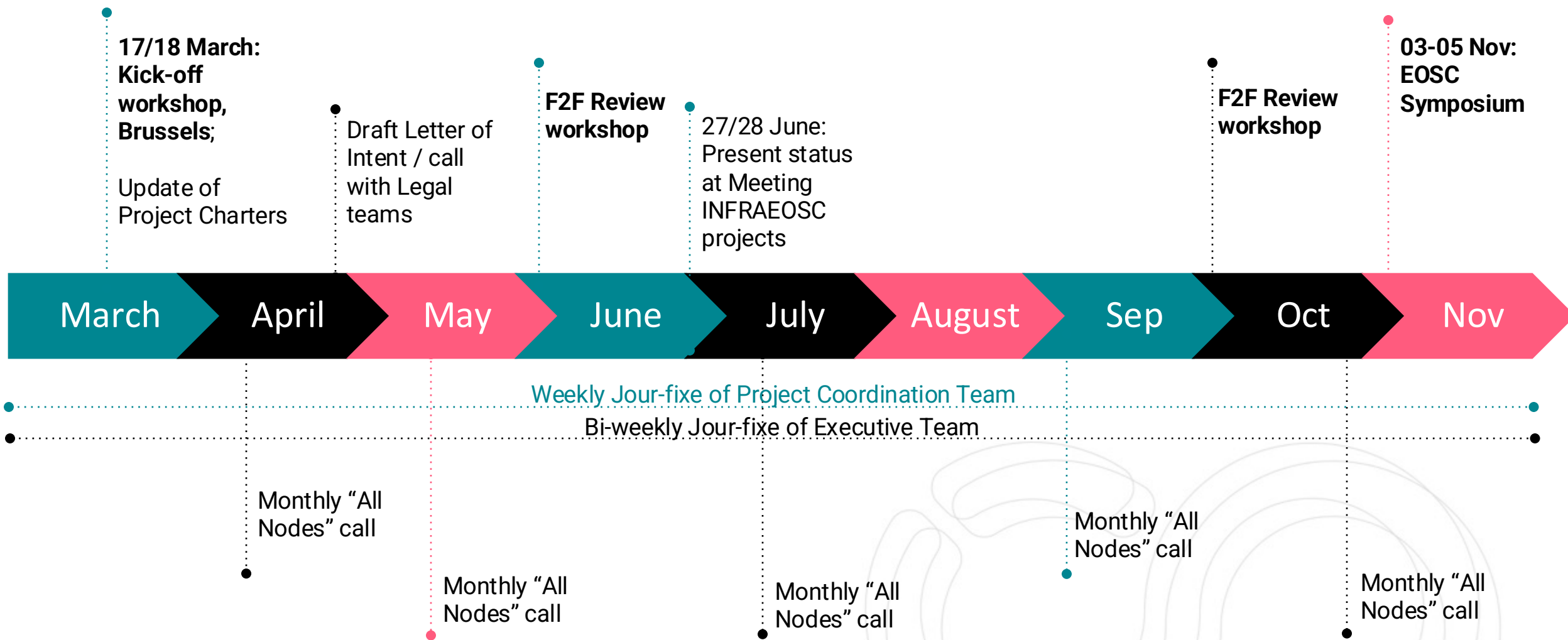
[+ Add another institution](#)

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- A free resource for all EU researchers offering IT services like file sharing, VMs, containers, file transfer, common AAI, resources
- All researchers have 500 credits/3 months on the EU Node

The screenshot shows the user interface of the EOSC EU Node. On the left is a navigation sidebar with the following items: 'EOSC EU Node', 'Resource Hub', 'Andrew Goetz user' (with a 'Logout' button), 'Overview' (selected), 'Notifications', 'Tools Hub', and a 'SERVICES' section containing 'File Sync & Share', 'Interactive Notebooks', 'Large File Transfer', 'Cloud Container Platform', and 'Virtual Machines'. The main content area displays a welcome message: 'Hello Andrew Goetz. This is the overview of your EOSC EU Node account.' Below this is a 'Welcome to the EOSC EU Node!' notification box. The 'Services' section is divided into two rows of three cards each. The first row includes 'File Sync & Share' (30 credits consumed), 'Interactive Notebooks' (Access enabled), and 'Large File Transfer' (Access enabled). The second row includes 'Virtual Machines' (Access enabled), 'Cloud Container Platform' (Access enabled), and 'Bulk Data Transfer' (Access enabled). Each card has a 'View Service >' link. At the bottom right of the main content area, there is a grid of partner logos including MyAccessID, eIDAS, eduGAIN, corris, data.europa.eu, Software Heritage, esgi, okd, openstack, argo Monitoring Service, and Zammad.

eosc Tentative Timeline for build-up phase of the EOSC Federation



OSCARS projects are good examples of Open Science led by Researchers.

Results of OSCARS OS projects should be sustained and continue to be available after OSCARS.

What can EOSC do for you?

EOSC as vehicle for sustainability (1)

1. Increasing the visibility and impact of datasets and tools
2. Providing tools for improving the **FAIRness of data**, e.g. sample metadata, processed data metadata etc.
3. **Linking discipline-specific data** to other data repositories, databases, wikidata, etc.
4. Making **FAIR data management** the new normal in all nodes
5. Supporting the availability of **open databases** and sustainable over the long term
6. Making **high quality data** available for **AI machine learning**

EOSC as vehicle for sustainability (2)

How to ensure that OS project results remain available post-OSCARS?

- EU Node? Maybe ...
- The Science Clusters, or more precisely: the associated RIs in the EOSC landscape and their nodes, offer facilities for
 - harvesting of metadata that comply with their interoperability standards
 - hosting of data, services and workflows relevant for the disciplines served
 - sharing of expertise, training (in part via the OSCARS competence centres)

What to do here / now ?

- Identify the existing thematic RIs that given the disciplinary orientation of your project could be suited for collaboration/ training/mentoring
- Get in touch to check the interoperability approach of the relevant thematic node(s). Ask for support/training and start adopting / implementing relevant standards/methods/etc *asap*.

Conclusion

1. OSCARS OS projects already profit from EOSC outputs.
2. OSCARS OS projects are providing useful scientific outputs e.g. FAIR data, tools, software etc.
3. EOSC Nodes can boost the sustainability of the activities for FAIR data and Open Science in the EOSC community,
4. To improve the potential for sustainability and benefit from the visibility through EOSC – identify an EOSC Node or associated repository where you can on-board your data and services.