

The Dutch EOSC Node: Federating National Research Infrastructure with European Open Science

Friday, 20 March 2026 10:50 (25 minutes)

The European Open Science Cloud (EOSC) creates a federated environment where researchers across Europe can publish, find, and reuse data, tools, and services. Implemented as a 'system of systems', EOSC connects data repositories, research infrastructures, and e-infrastructures through a network of national and thematic nodes. The Dutch EOSC Node, operated by SURF, is one of the initial candidate nodes working to bridge national infrastructure with the broader European ecosystem.

While SURF has been running established services like SURF Research Cloud (computing resources), Research-Drive (file sync and share), and FAIR data repositories for years, the SURF EOSC Node itself is still in active pilot phase. A demonstration at the EOSC Symposium in November 2025 showcased progress in federating these services within the EOSC Federation. We're building out the node infrastructure, leveraging services we already operate reliably for Dutch research institutions and now making them available through a federated EOSC node approach—extending their reach and impact across Europe while maintaining interoperability with other nodes.

The Dutch pilot demonstrates how national research infrastructure providers can serve their research communities while contributing to pan-European open science. By federating proven services using AAI standards and federation protocols, SURF is addressing practical challenges of cross-border service delivery—maintaining institutional control while enabling seamless collaboration that truly advances open science in Europe and globally.

This presentation shares our current status, lessons learned during the build-up phase, and our confident path forward based on solid operational foundations. We'll discuss what's working, remaining challenges, and how our federated approach might inform other nations developing their EOSC nodes.

Target Audience:

This presentation is directed at research communities and infrastructure providers as well as the general audience with an interest in Open Science

Aims of the presentation:

- Share honest from the Dutch EOSC Node pilot phase
- Demonstrate how federated infrastructure advances open science in practice
- Encourage collaboration, knowledge exchange and promote uptake of federated management practices

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Track Classification: Track 5: Virtual Research Environment (including tools, services, workflows, portals, ... etc.)