



STRATEGIC WHITE PAPER ON A SWISS EOSC NODE



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
**State Secretariat for Education,
Research and Innovation SERI**

Impressum

Cover picture

AI generated image

Contact

State Secretariat for Education, Research and Innovation (SERI)
Einsteinstrasse 2, CH-3003 Bern
Tel. +41 58 463 50 50, europrogram@sbfi.admin.ch
www.horizon-europe.ch

Publication details

Publisher: State Secretariat for Education, Research and Innovation (SERI), © 2026
Project lead and editor: Dr Anna Fill
Layout: Cecilia Dannibale, SERI Communication Unit
Language review: SERI Language services, GS-EAER and the Swiss Federal Chancellery
Languages: English
ISSN 2296-391X

Executive Summary:

STRATEGIC WHITE PAPER ON A SWISS EOSC NODE

The international research landscape is undergoing a rapid transformation towards federated, interoperable and secure data-sharing ecosystems, which are also pertinent to Switzerland's research and innovation system. The European Open Science Cloud (EOSC) Federation represents the central European initiative in this context and is becoming a key reference framework for research data and services.

This White Paper, prepared by the State Secretariat for Education, Research and Innovation (SERI) in collaboration with key national stakeholders, is addressed to policymakers, institutional leaders and the scientific community. Its objective is to inform and enrich the national discussion on how Switzerland can position itself in relation to evolving international data-sharing initiatives and to support strategic preparation for future engagement.

Switzerland is already actively involved in EOSC through governance participation, institutional engagement and the ongoing Swiss EOSC Node Prototype (SENPro) project. These developments demonstrate that a Swiss EOSC Node is emerging as a concrete pathway to ensure interoperability and continued integration into the European and global research data ecosystem.

Preparing a Swiss EOSC Node is a strategic investment in research quality, digital sovereignty and long-term system resilience.

It enables Switzerland to:

- ▶ maintain interoperability with European and global data ecosystems
- ▶ strengthen secure and trusted data-sharing
- ▶ improve coordination and efficiency across the national research landscape
- ▶ position itself as a reliable partner in international science

Switzerland operates in an evolving context, which calls for a flexible, phased and scenario-based approach, ensuring adaptability while maintaining alignment with European developments.

Three core building blocks for a Swiss EOSC Node are:

- ▶ leveraging and coordinating the existing Swiss Open Research Data (ORD) landscape
- ▶ ensuring an interoperable technical framework aligned with EOSC
- ▶ establishing a coordination and management structure

Switzerland is well positioned to build on existing strengths. However, further coordination is now required to consolidate ongoing efforts and enable a scalable and sustainable approach.

The White Paper proposes a phased pathway that builds on the SENPro prototype, leverages European collaboration opportunities and follows a modular and adaptive approach, taking national realities into account. This enables progressive development while preserving flexibility and maintaining alignment with the evolving EOSC Federation.

1) Introduction

The international research environment is undergoing a rapid transformation, with intensified efforts to share, federate and secure data, datasets and digital services. The [European Open Science Cloud \(EOSC\) Federation](#) is one of the most advanced initiatives in this field, aiming to create a federated and multidisciplinary digital environment for research data and services. Comparable developments can be observed elsewhere, including the [Australian Research Data Commons](#) and the evolving data ecosystems of the [National Institutes of Health \(NIH\)](#) and the [National Artificial Intelligence Research Resource \(NAIRR\)](#) in the United States. At the global level, fora such as the OECD, the G7 and UNESCO are increasingly addressing the policy and governance dimensions of open science, trusted data-sharing and digital research infrastructures.

For Switzerland, these developments underscore the need for strategic preparation. To remain interoperable at European and global level, Switzerland must ensure that its infrastructures, governance approaches and research practices are compatible with emerging international frameworks, while safeguarding sovereignty, resilience and policy coherence. This is also essential to maintaining Switzerland's position as a trusted and reliable international partner in research and innovation. This White Paper aims to inform a national discussion on how Switzerland can best position itself in relation to evolving open science and data-sharing initiatives, with the EOSC Federation serving as the primary European reference framework. It focuses in particular on the conditions required to prepare a Swiss EOSC Node as a coordinated national approach for interoperability, participation and future integration where clear strategic added value exists.

EOSC is a flagship initiative of the European Union. It is designed to create a federated and secure environment for sharing and reusing research data and services across disciplines and borders. For researchers, EOSC offers a trusted framework that simplifies access to data and services across countries and scientific domains, enhances interoperability and supports reproducibility and collaboration at scale. It underpins the development of a [common European Data Space for Research and Innovation](#) and promotes digital sovereignty, scientific transparency and innovation. As EOSC enters a new phase of implementation through the federation of various nodes, it becomes essential for Switzerland to examine in what form and through which actors it wishes to participate in the EOSC Federation (see the definition of 'Node' in Chapter 2).

Building on Switzerland's strengths in open science, research infrastructures and governance, this White Paper outlines key considerations for preparing Switzerland's engagement in evolving international data-sharing ecosystems. It focuses on practical and strategic building blocks, including phased development, technical interoperability, coordination mechanisms and the implications of Switzerland's future association context under the next EU Framework Programme for Research and Innovation (2028–2034). Addressed to policymakers and institutional leaders, the paper argues that timely preparation is essential if Switzerland is to remain ready to seize emerging opportunities and to shape its role in the evolving international research data landscape.

The vision for an EOSC Node Switzerland is to prepare an interoperable, inclusive and efficient framework that builds on existing national structures in order to foster open science and seamless cross-border collaboration. It aligns with emerging FAIR (Findable, Accessible, Interoperable and Reusable) and security standards. Moreover, it supports access to digital services both nationally and internationally and positions Switzerland in a way that enables it to contribute meaningfully to European and global initiatives where participation offers clear and lasting added value.

This White Paper was prepared by the State Secretariat for Education, Research and Innovation (SERI) in close collaboration with the temporary SERI Working Group on a Swiss EOSC Node. It reflects the contributions of the organisations represented in the Working Group, including the two Federal Institutes of Technology ETH Zurich (including the Swiss National Supercomputing Centre, CSCS) and EPFL, FORS – the Swiss Centre of Expertise in the Social Sciences, the Paul Scherrer Institute (PSI), Premotec GmbH, the Swiss Academies of Arts and Sciences, the Swiss Data Alliance (SDA), the Swiss Data Science Centre (SDSC), the Swiss Institute of Bioinformatics (SIB), the Swiss National Science Foundation (SNSF), swissuniversities, and Switch.

The paper first outlines the evolving European context, recent EOSC developments and Switzerland's current involvement. It then explains why the Swiss research community should prepare for initiatives such as the EOSC Federation, highlighting benefits including research quality, digital sovereignty, international collaboration and stronger institutional capacity across the research data lifecycle. Rather than setting out a definitive institutional model, it identifies key building blocks for preparation, including anchoring future efforts in Switzerland's research and innovation and open science landscape, developing a minimum viable technical framework and establishing a Swiss support and coordination function. It concludes with proposed action steps.

2) The European Landscape: Building a Federated EOSC Infrastructure

Open science aims to make scientific research more accessible, transparent and collaborative. Central to this approach is the management and sharing of FAIR research data, which is increasingly recognised as a key enabler of scientific quality, reproducibility and impact. Both Switzerland and the European Union have identified Open Science and Open Research Data (ORD) as strategic priorities.

EOSC: A Strategic EU Initiative

EOSC is a flagship initiative under [Horizon Europe](#) and forms a core component of the Common European Data Space for Research and Innovation. It aims to establish a federated, decentralised ecosystem that enables researchers to access, share and reuse research data and digital services seamlessly and securely across disciplines and borders.

EOSC is jointly governed through a tripartite structure:

- ▶ The [European Commission](#) (EC)
- ▶ The [EOSC Steering Board](#) (EOSC-SB)
- ▶ The [EOSC Association \(EOSC-A\)](#), representing the research community

In its current phase, EOSC is being developed as a **federation of autonomous nodes** that connect national and/or thematic infrastructures through shared governance frameworks, technical standards and interoperability rules. Each node provides access to datasets, services and tools while remaining institutionally or nationally anchored.

Nodes may be

- ▶ **National**, acting as collective entry points for a country's institutions and potentially serving as neutral facilitators, promoting collaboration among research institutions, infrastructures and funding bodies while adhering to European standards.
- ▶ **Thematic**, serving specialised scientific communities.

This federated model is designed to strengthen Europe’s scientific capacity while preserving institutional and national autonomy. It also supports broader European objectives, including digital sovereignty, secure data-sharing and the development of sectoral data spaces.

The [EOSC EU Node](#) – launched in 2024 – acts as a reference implementation of the Federation, offering core capabilities to researchers such as secure and authenticated access, bulk and scalable data transfer, data science environments, cloud-based computing services and integrated virtual research environments. It is expected to interface with common sectoral European Data Spaces and potential [AI factories](#) resulting from the [EuroHPC Joint Undertaking](#).

To support the establishment of the EOSC Federation, a first wave of EOSC Candidate Nodes has been in place since 2025, including the EOSC EU Node, launched in October 2024. From 2025 onwards, these initial nodes progressively transitioned into operational nodes, contributing to the development of the Federation’s technical standards, governance arrangements, and operational rules. The EOSC Federation continues to evolve as additional nodes are integrated.

Implications for Switzerland

In this evolving architecture, EOSC Nodes are the primary interface through which countries and institutions connect to the EOSC Federation. For Switzerland, this highlights the relevance of preparing a coordinated national approach – such as an EOSC Node Switzerland – to enable structured participation, interoperability and a potential integration into the European research data ecosystem.

Switzerland’s Current Involvement

Since January 2025, Switzerland has been retroactively associated to Horizon Europe and is actively involved in EOSC governance and implementation. Swiss actors participate across multiple levels of the EOSC ecosystem.

- ▶ participates in the EOSC-Steering Board (EOSC-SB): SERI
- ▶ has active members in the EOSC Association (EOSC-A): including ETH Zurich (as Switzerland’s Mandated Organisation to EOSC-A), Premotec GmbH, SIB, SNSF and Switch. ETH Zurich also coordinates the monthly Swiss EOSC Forum.
- ▶ hosts institutions involved in major EOSC-related projects (e.g. FIDELIS, Data Commons, Gravity)

Beyond EOSC-specific activities, Swiss institutions are deeply integrated into European research and digital infrastructure initiatives, including GÉANT, ELIXIR and the EuroHPC Joint Undertaking. This provides a strong foundation for participation in federated international research data ecosystems and demonstrates Switzerland’s readiness to collaborate within emerging international data-sharing frameworks.

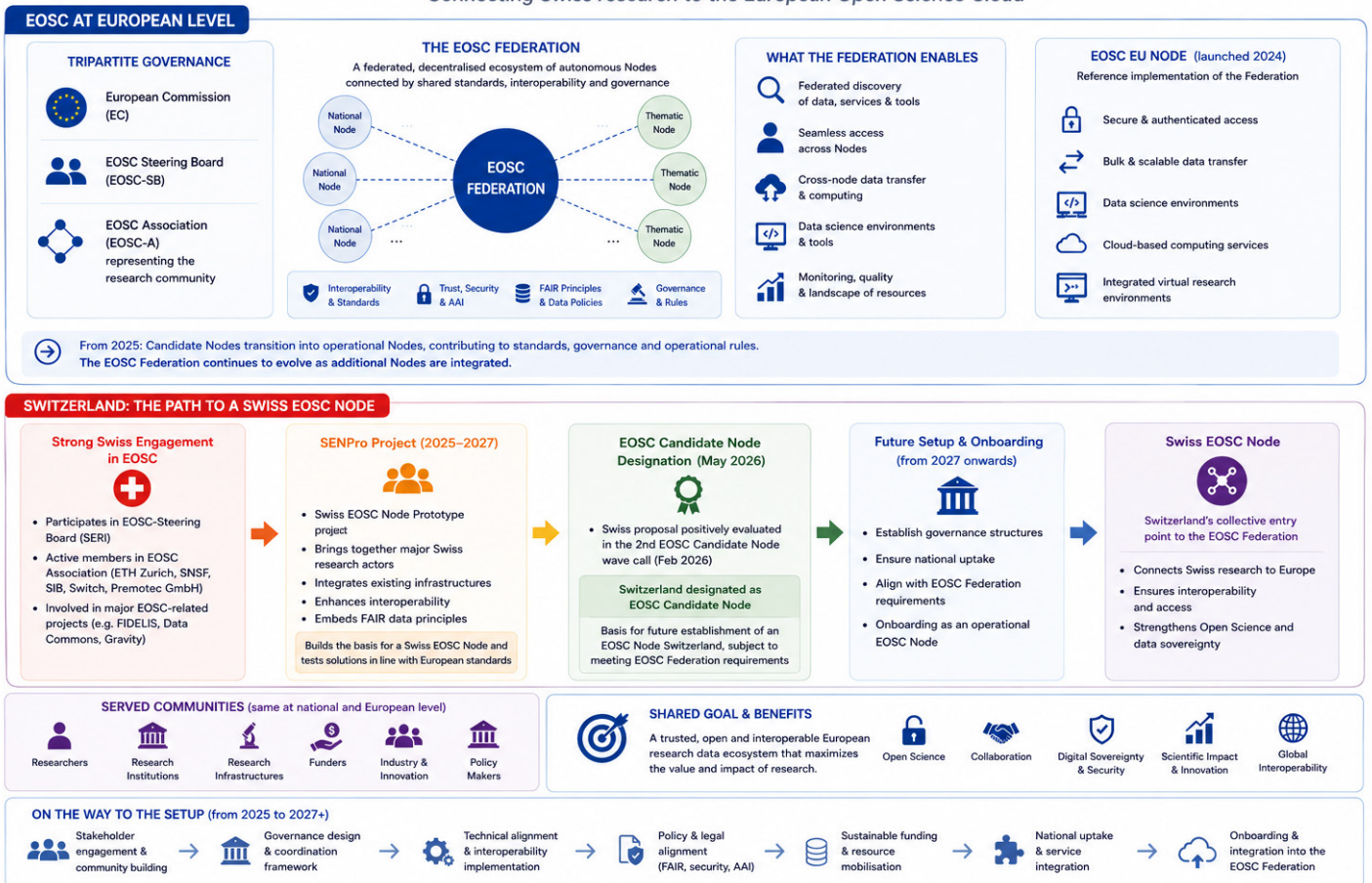
While Switzerland has not yet established an official national EOSC Node, a [Swiss EOSC Node Prototype project](#) (SENpro) is currently running until January 2027. The project brings together major Swiss research actors and aims to address fragmentation in the national research data landscape by integrating existing infrastructures, enhancing interoperability and embedding FAIR data principles. By strengthening coordination and technical alignment, SENPro provides a concrete basis for developing a Swiss EOSC Node and enabling Switzerland’s structured participation in the EOSC Federation. It allows Switzerland to test technical solutions, governance approaches and collaboration models in line with emerging European standards.

Building on these efforts, a Swiss proposal was positively evaluated under the second EOSC Candidate Node wave call, which opened in February 2026. Switzerland was therefore formally designated as an EOSC Candidate Node in May 2026. Subject to the successful implementation of governance structures, national uptake, and alignment with the EOSC Federation requirements, this designation provides the basis for the future establishment of an EOSC Node Switzerland. Further setup and onboarding activities are planned from 2027 onwards.

Together, these developments demonstrate both the strong engagement of the Swiss research community in EOSC-related activities and the growing maturity of the national landscape. Continued coordination and strategic alignment across stakeholders will be essential to ensure interoperability with the evolving European and global research data ecosystem and to support the successful development of a Swiss EOSC Node.

Switzerland and EOSC: From Engagement to a Swiss EOSC Node

Connecting Swiss research to the European Open Science Cloud



3) Why should Switzerland invest in preparing the ground for interoperability with international data initiatives such as the EOSC Federation?

Switzerland's research and innovation system is among the strongest worldwide, combining academic excellence, innovation capacity and a long-standing tradition of international collaboration. However, as research becomes increasingly data-driven and globally interconnected, strategic preparation for participation in emerging digital research infrastructures and data- and resource-sharing initiatives is essential to sustain competitiveness and scientific excellence.

Strengthening interoperability with international data ecosystems – in particular the EOSC Federation – will enable Switzerland to maintain access to shared data, services and infrastructures, while ensuring that its research community remains fully connected to evolving international standards and practices. This will allow Swiss researchers and institutions to both contribute to and benefit from collaborative research environments across disciplines and borders.

Setting up an EOSC Node Switzerland should therefore be understood as a strategic investment in research quality, digital sovereignty and long-term system resilience. It supports Switzerland's ability to act as a trusted partner in global science while reducing the risk of fragmentation or isolation.

Digital sovereignty and research security

A Swiss Node could enhance national and institutional control over research data and related digital assets. By using the EOSC Federation governance model as a reference framework, Switzerland can remain aligned with European regulatory standards such as the [General Data Protection Regulation](#) (GDPR), [the cybersecurity directive](#) and the [Data and AI Acts](#) while adhering to the [New Federal Act on Data Protection](#) (NFADP). This model strengthens the rights of data owners and contributes to digital and national data sovereignty, ensuring that data remain accessible under clearly defined conditions, are not subject to sudden political restrictions and can be stored locally as needed.

In this context, a Swiss EOSC Node can also further research security objectives. It provides a structured environment in which institutions can manage risks related to data misuse, cyber threats and unintended knowledge transfer, while maintaining openness where appropriate. This allows Switzerland to balance openness and protection in line with international best practices.

Scientific Culture

Preparing a Swiss EOSC Node enables Swiss institutions to actively engage in the evolving international open science landscape. As openness in science becomes the 'new normal' across Europe, alignment with shared standards, infrastructures and practices will be essential to avoid fragmentation and ensure continued relevance.

Participation in the EOSC Federation provides structured access to a common European Data Space for research and innovation, built on shared protocols, trusted infrastructures and collaborative governance. This strengthens transparency, interoperability and the overall impact of research, while fostering a culture of openness, trust and cross-border collaboration.

For the Swiss research community, a coordinated national approach can improve visibility and accessibility of existing resources – including datasets, services, infrastructures and training opportunities – across disciplines. This creates network effects, enabling broader use of funded services, more efficient resource allocation and stronger collaboration between institutions.

Institutional capacity

At the institutional level, a Swiss EO SC Node provides a framework that respects decentralised governance while enabling coordinated participation in a federated system. Institutions can contribute to and benefit from shared resources – such as data storage, computing, tools and support services – without the need to develop parallel infrastructures.

This reduces duplication, improves efficiency and supports cost-effective operations. It also allows smaller institutions and underfunded research areas – including the 'long tail' of science – to access infrastructures and services that would otherwise remain out of reach.

A coordinated approach further enables flexible participation aligned with national research priorities, while strengthening collaboration between institutions at both national and international level. Over time, this contributes to greater scalability, integration and sustainability of the national research system.

In the longer term, an EO SC Node Switzerland can strengthen Switzerland's role within the European and global research ecosystem. By enabling more efficient use of resources, improving data reuse and supporting cross-disciplinary collaboration, it enhances both the quality and the impact of Swiss research.



4) Requirements for a Swiss EOSC Node

The development of a Swiss EOSC Node requires a set of interdependent building blocks, spanning governance, technical infrastructure and coordination across the national research landscape. These elements need to be aligned with Switzerland's existing research and innovation system while ensuring interoperability with the evolving EOSC Federation.

Three core areas are particularly relevant:

- ▶ the Swiss Open Research Data (ORD) landscape
- ▶ a technical framework
- ▶ and a coordination and management structure.

■ 1. The Swiss ORD landscape

A Swiss EOSC Node would build on existing national digital assets, infrastructures and both past and ongoing initiatives. Switzerland hosts well-established research infrastructures, a national supercomputing centre and several institutional efforts that advance open science and FAIR data practices.

In this context, a Swiss EOSC Node should be understood as a coordinating and enabling layer within the existing Swiss research and innovation ecosystem, rather than as a new centralised infrastructure. It would involve bottom-up collaboration between established actors, including the [ETH Domain](#), universities and universities of applied sciences, national and international research infrastructures as well as [Switch](#), the National Research and Education Network (NREN). By facilitating interoperability, access and service integration across these actors, a Swiss EOSC Node would enable existing infrastructures and institutional services to be more effectively connected at national level and positioned within the EOSC Federation. This approach ensures that the Node strengthens and complements the current decentralised system while preserving institutional autonomy and leveraging existing investments.

Swiss Open Science initiatives

In Switzerland, a [National Open Access Strategy](#), developed by swissuniversities and the SNSF, was adopted in 2017 and reviewed in 2024. Its implementation is overseen by the swissuniversities Open Science Delegation. In 2021, a [National Open Research Data Strategy](#) was introduced and supported by a 2022–2028 Action Plan. It promotes the targeted development of ORD practices. The ETH Domain [Open Research Data Programme](#) further boosted institutional capabilities by supporting ORD practices within scientific disciplines, awareness-raising, training and legal guidance. Several Swiss institutions are already actively engaged in EOSC-related activities, while initiatives such as SENPro are helping to strengthen coordination and interoperability across the Swiss research data landscape (see Chapter 2 'Switzerland's Current Involvement').

[Analyses](#) of the Swiss ORD landscape, including work by the [National ORD Strategy Council \(StraCo\)](#), confirm that while the landscape remains fragmented, it holds strong potential for further coordination. Strengthening alignment across domains will be essential to ensure efficient use of resources and equitable access to FAIR and trusted data across disciplines.

Recent recommendations by the [Swiss Science Council \(SSC\)](#) further underline the growing strategic importance of digital infrastructures and data ecosystems for Switzerland's research system. In its 2026 [report](#) on a national AI infrastructure strategy, the SSC emphasises the need for coordinated investments in data, computing and digital capabilities to support scientific excellence, innovation and technological sovereignty. These recommendations highlight the value of interoperable and trusted research data infrastructures and reinforce the broader rationale for strengthening coordination across the Swiss research landscape.

Switzerland's status in Horizon Europe

Since January 2025, Switzerland has been retroactively associated to Horizon Europe (2021–2027), enabling full participation in EOSC-related activities and supporting its engagement in the evolving EOSC ecosystem.

Looking ahead, Switzerland's association to the next EU Framework Programme for Research and Innovation (2028–2034) is not yet fully determined. This will influence the general conditions for Switzerland's future participation in EOSC and the broader European research and innovation landscape. In this context, preparing a Swiss EOSC Node in a flexible and adaptable manner is essential. A phased and scenario-based approach will allow Switzerland to improve interoperability and engagement while remaining responsive to evolving institutional and political conditions.

Such an approach supports continued alignment with European developments while ensuring that Switzerland can contribute effectively to the EOSC Federation and related initiatives.

■ 2. Technical Framework

A Swiss EOSC Node requires a robust and interoperable technical framework that enables national infrastructures and researchers to connect effectively to the EOSC Federation and, more broadly, to international data-sharing ecosystems.

This framework should support seamless access to and exchange of:

- ▶ data and metadata
- ▶ digital services and tools
- ▶ computing and storage resources both within Switzerland and across the EOSC Federation.

To ensure compatibility with the EOSC Federation, a Swiss EOSC Node must provide a set of core capabilities as defined at European level:

- ▶ **Node Core Capabilities:** that enable the operation of the node (e.g. Resource Catalogue, EOSC AAI as [Authentication and Authorization Infrastructure](#) to identify end-users and authorise the usage of the available resources, Helpdesk, Monitoring, etc.).
- ▶ **Node Resources:** Services, data and other digital assets, usually listed in a catalogue, that end-users of this node can access easily.
- ▶ **Federating Services and Capabilities:** To federate a node and its resources (connect to the EOSC Federation), an initial set of mandatory and recommended capabilities were defined at the EU level in the [EOSC Federation Handbook](#).

Rather than developing solutions from scratch, a Swiss EOSC Node can build on existing European developments. Across Europe, EOSC candidate nodes are already implementing technical solutions that enable federation. In Switzerland, the SENPro project provides a foundation for reusing and adapting such solutions, particularly through open-source approaches and tested components.

From a strategic perspective, the development of the technical framework should prioritise:

- ▶ interoperability with European standards and architectures
- ▶ flexibility in participation, including modular and opt-in/opt-out approaches
- ▶ avoidance of vendor lock-in through open and reusable solutions
- ▶ alignment with Swiss legal and regulatory requirements, including data protection and security

A coordinated and phased approach will be essential to ensure that an EOSC Node Switzerland remains adaptable to evolving European developments, including the future general conditions of Horizon Europe, while enabling the sustainable integration of existing national infrastructures. In this context, participation in Horizon Europe INFRAEOSC calls may further support the development of federating capabilities and contribute to Switzerland's continued engagement in the broader EOSC ecosystem.

When determining the type and scope of node(s) to be developed in Switzerland, it is important to consider not only the technical and operational framework, but also the associated build-up and integration costs as well as broader aspects related to research data security, digital sovereignty, sustainability and governance. Particular attention should be paid to the access, use and storage of scientific data, ensuring alignment with Swiss legal and regulatory frameworks.

Overall, a carefully sequenced and coordinated national approach will be critical to achieving interoperability, long-term sustainability and the efficient integration of existing infrastructures and initiatives into a Swiss EOSC Node.

■ 3. Coordination and Management

In addition to the technical framework, a Swiss EOSC Node requires effective and efficient coordination across a diverse set of national stakeholders as well as the active involvement of the Swiss research community.

At the national level, this includes actors providing services and operational coordination, as well as stakeholders contributing to governance, strategic direction and advisory functions, such as SERI, swissuniversities, the SNSF, the Swiss EOSC-A Mandated Organisation (ETH Zurich), the Swiss Academies, higher education institutions, independent research organisations and Switch as the National Research and Education Network (NREN). Structured engagement with research communities as end users, as well as appropriate consultation and advisory mechanisms, will be essential to ensure that the Node reflects community needs, national priorities and developments at the European level.

Given this complexity, the establishment of a dedicated management structure is required to ensure coherent coordination, strategic alignment and effective representation of a Swiss EOSC Node at national and European level. Such a structure would support the alignment of priorities among stakeholders, facilitate decision-making and provide a clear interface between the Swiss research ecosystem and the EOSC Federation.

Drawing on experiences from international research infrastructures and federated initiatives, such a structure could bring together key stakeholders involved in the Swiss EOSC Node while ensuring appropriate mechanisms for strategic guidance, stakeholder consultation and community engagement. The precise governance and organisational arrangements should be determined in close consultation with the relevant stakeholders and remain adaptable to evolving national and European developments.

5) Pathways Toward a Swiss EOSC Node Landscape

As outlined above, Switzerland is already taking concrete steps towards preparing a Swiss EOSC Node and improving its interoperability with international data-sharing ecosystems, in particular the EOSC Federation. Building on this momentum, the next phase should focus on consolidating existing efforts, strengthening coordination and enabling a structured and scalable approach.

The process leading to this White Paper has demonstrated broad interest across Swiss institutions in engaging with international data-sharing initiatives. Continued institutional commitment, combined with strategic support at federal level, will be essential to advance a Swiss EOSC Node in a coherent and sustainable manner.

To move forward, the following priority action steps are proposed:

■ 1. Build on the Node Prototype

The further development of a Swiss EOSC Node should build on existing experience, in particular the SENPro project. Prototyping activities provide a practical basis for testing core functionalities, including access to data and services, interoperability mechanisms and coordination models. These efforts should inform a scalable development pathway and help identify how existing infrastructures and institutions can contribute to a coordinated national framework aligned with EOSC requirements.

■ 2. Leverage European funding and collaboration opportunities

Participation in Horizon Europe, including INFRAEOSC calls, can support the development of federating capabilities and strengthen Switzerland's engagement in the EOSC ecosystem. Such participation contributes not only to technical development, but also to alignment with European standards and collaborative practices.

■ 3. Implement a phased and modular approach

The development of an EOSC Node Switzerland should follow a phased and modular approach, allowing for incremental onboarding of services, infrastructures and stakeholders. This approach enables early benefits, supports iterative learning and allows Switzerland to remain responsive to evolving framework conditions, including its future association to Horizon Europe.

Early pilot activities, in particular SENPro, provide an opportunity to test operational models on a smaller scale before broader rollout. This reduces risk, supports evidence-based development and ensures that future steps are grounded in practical experience.

This approach enables Switzerland to derive tangible benefits in the short term while maintaining strategic flexibility. It also ensures that a Swiss EOSC Node can evolve in alignment with both national priorities and developments within the EOSC Federation and the broader international research data landscape.

6) Appendix

Glossary

▶ **AAI (Authentication and Authorisation Infrastructure)**

A framework for identifying users and controlling their access to digital services and data.

▶ **Common European Data Space**

A shared digital environment that enables secure and interoperable data exchange within a specific domain or sector.

▶ **EOSC (European Open Science Cloud)**

An EU initiative to develop a federated and secure environment for sharing and reusing research data across disciplines and borders.

▶ **EOSC-A (EOSC Association)**

A legal entity representing the interests of the research community within EOSC's tripartite governance structure.

▶ **EOSC EU Node**

The central operational implementation of the EOSC Federation launched in 2024. It provides a reference point for integration with other Nodes, offering core EOSC services and interfacing with national, thematic and institutional nodes.

▶ **EOSC Federation**

The operational and governance structure that interconnects EOSC Nodes under shared standards, policies and interoperability agreements.

▶ **EOSC Node**

An autonomous organisational and technical entry point into the EOSC Federation that offers access to data, services, tools and other digital assets.

▶ **EOSC-SB (EOSC-Steering Board)**

A body composed of representatives from EU Member States and associated countries (such as Switzerland), responsible for co-shaping EOSC policy and implementation within the tripartite governance.

▶ **FAIR Principles**

Guidelines to ensure that research data are Findable, Accessible, Interoperable and Reusable for both humans and machines.

▶ **Federating Services**

Services that enable interoperability and integration between Nodes within the EOSC Federation (e.g. authentication, catalogues, monitoring).

▶ **INFRAEOSC**

A Horizon Europe funding programme specifically designed to support the development of EOSC infrastructure and services.

▶ **ORD (Open Research Data)**

Research data that are openly accessible, reusable and managed in accordance with FAIR principles and legal/ethical standards.

▶ **Resource Catalogue**

A structured inventory of services, tools, datasets and other digital assets made available by a Node for EOSC users.

Acknowledgements

The following individuals contributed to the preparation of this White Paper and have agreed to be associated with it:

Alun Ashton – Paul Scherrer Institute (PSI)
Anna Fill – State Secretariat for Education, Research and Innovation (SERI)
Annika Glauner – ETH Zurich
André Golliez – Swiss Data Alliance (SDA)
Stefano Gorini – Swiss National Supercomputing Centre (CSCS)
Sylvia Jeney – Swiss National Science Foundation (SNSF)
Manuel Kugler – Swiss Academies of Arts and Sciences
Georg Lutz – Swiss Centre of Expertise in the Social Sciences (FORS)
Magali Mari – swissuniversities
Lucy Poveda – Swiss Institute of Bioinformatics (SIB)
Karl Presser – Premotec GmbH
Rok Rožkar – Swiss Data Science Centre (SDSC)
Sebastian Sigloch – Switch
Deborah Studer – State Secretariat for Education, Research and Innovation (SERI)

Bern, 01.07.2026