EOSC-FRANCE LANDSCAPE

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General Directorate for Research and Innovation (DGRI)
Service for Research and Innovation Strategy (SSRI)
Department for Digital Services and Infrastructures (A7)
Participating in the Digital Transition: a necessity

- Fast increasing need for being able to treat (FAIR*) data, provide services and e-infrastructures for all scientific domains and across domains.
- We entered the “Digital Decade”.
- Progress is only possible if data (and services) are FAIR-by-design
- Sharing and concentration of resources is key (Human resources, e-infrastructures, financing, …)
- EOSC as an important part of the solution toolbox in France

*FAIR : Findable, Accessible, Interoperable, Reusable
Digital Transition in France: how to proceed?

• Mutualisation: identify key e-infrastructures and actors, concentrate investments
• Provide solutions for the long tail of science: Research Data Gouv (RDG)

EOSC:
• Develop solutions through projects financed by the European Commission
• Increase the EOSC service offer (EOSC-Future, procurement, EOSC-Association, EOSC projects)
• Ensure sustainability on EU, national and institutional level

Transition Numérique in France:
preparation of a road map for digital services and infrastructures 2023
Obligation to publish in open access all articles and books resulting from publicly funded calls for proposals

Obligation to disseminate publicly funded research data.

Promote widespread adoption of data policies that cover the whole lifecycle of research data, to ensure that they are Findable, Accessible, Interoperable and Reusable (FAIR)

Create Recherche Data Gouv, the federated national platform for research data

Continue to structure the French community in its contribution to the EOSC: promote the EOSC membership to French research organisations, moderate the community of French EOSC stakeholders, organise an annual EOSC-France event

Triple the budget for open science through the National Fund for Open Science and the Investments for the Future Programme
Examples of EOSC-relevant policies at institutional level*: 

- **CNRS Roadmap Open Science**, **CNRS Research Data Plan**, 
- **La Politique de Science Ouverte d'INRAe** 
- **Charte du CEA pour une Science Ouverte** 
- **La Science Ouverte @ Inserm** 
- **La Science Ouverte à l’Université Paris-Saclay** 
- **Les engagements de l’Université de Lorraine en faveur de l'ouverture de la science** 
- **La science ouverte à l'Université de Strasbourg** 
- **Science Ouverte Université Montpellier** 
- …

* There are 179 Research Performing Organisations in France
EOSC Vision France : requirements

1. Trusted repositories
2. FAIRisation of data, *Data Management Plans* (DMPs)
3. Uptake and consolidation of services
4. Workflows across different e-infrastructures (HPC, HTC, …)

Main interests in EOSC topics expressed per CNRS institute, see « *CNRS Institutes and the EOSC – status and vision* » (2020)
EOSC in France

- EOSC: pillar of the digital transition in France
- Coordinated by the Collège EOSC-France (since 02/2022): representatives of French organisations* which are members of the EOSC-Association + ministry (DGRI)
- Collège EOSC-France gives advice and proposes actions to the Comité Pilotage Services et Infrastructures Numérique (CoPil-SIN)
- Project groups on Communication and Mediation
- Strong link between user community and deciders

*Membres Collège EOSC-France: CEA, CINES, CNRS, France Universités, GÉNICE, IFREMER, ILL, INRAE, INRIA, INSERM, Observatoire Paris, RENATER, Soleil, Université de Bordeaux, Université de Montpellier, Université Paris Cité, Université Paris Nanterre, Université Paris-Saclay, Université Strasbourg, CGE, Couperin, ANR, IRD, Sorbonne Université, Udice, Université de Univ. Lorraine, Nantes Université, Université Grenoble Alpes, Université Paris 1 Panthéon-Sorbonne, MESR/DGRI

Direction générale de la recherche et de l’innovation (DGRI), Service de la Stratégie de la Recherche et de l’Innovation (SSRI), Département Services et Infrastructures Numériques (A7)
French participation in EOSC projects

French RPOs have been and are significantly involved in (nearly) all EOSC projects (H2020 + Horizon Europe) *

EOSC-pilot, EOSC-hub, EOSC-Pillar, EOSC Future, EGI-ACE, TRIPLE, ESCAPE, ENVRI-FAIR, SSHOC, PaNOSC, EOSC-Life, ExPaNDS, BlueCloud, FAIRsFAIR, Skills4EOSC, FAIRCORE4EOSC, EuroScienceGateway, FAIR-EASE, FAIR-IMPACT, EOSC4Cancer, GraspOS, CRAFT-OA, BlueCloud 2028… *

* H2020 EOSC-related projects with an EC budget assigned to French partners > 500 k€ and all HORIZON-INFRA-EOSC projects with French partners’ participation
French examples for EOSC in action

Open Access: HAL is a platform to promote Open Access to publications. Publications are easy to find, well referenced by search engines and interconnected with other services (ORCID, preprint servers). The largest French research organizations and the majority of French universities have chosen and support HAL, a public, sustainable and responsible infrastructure. HAL guarantees the long-term preservation of publications. A set of services (CV, institutional portals, collections, documentary watch, APIs, identifiers) contribute to their valorisation.

Open Source: Software Heritage collects, preserves, and shares software that is publicly available in source code form.

Data Management: DMP OPIDoR guides through the drafting and implementation into practice of data or software management plans. It is accessible by any member of the French High Education and Research community as well as its French or foreign partners. The DMPs are machine actionable, which facilitates data entry and interactions with data management services.

FAIR Data: Recherche Data Gouv supports the FAIRisation of data with a focus on the long tail of science. It fosters training activities and sharing of expertise to make data FAIR and offers support to link published or publishable data to publications.
French examples for EOSC in action

e-infrastructures for EOSC:

- EOSC needs e-infrastructures to host, operate, enable the necessary services
- Storage, processing (different systems), networks
- Need to help e-infrastructures at the national level to support EOSC
- **PIA3** (troisième volet du Programme d’Investissements d’Avenir) / EquipEx+ (Équipements structurants pour la recherche) supports a number of e-infrastructures, also to enable EOSC-relevant activities.
## EquipEx+ project

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<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>MESR budget contribution</th>
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<tbody>
<tr>
<td>4D-OMICS</td>
<td>Infrastructure to store and process biological data, model relevant living organisms and integrate the impact of molecular and cellular changes in normal or pathological biological systems. Handle the entire data life cycle in terms of acquisition, storage and analysis, in line with the FAIR principles.</td>
<td>6.6 M€</td>
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<tr>
<td>FITS</td>
<td>Bring together the services and expertise of IDRIS and CC-IN2P3, while respecting their specific missions, through the implementation of a distributed infrastructure for storing, processing and making data available, disseminating and exploiting it.</td>
<td>15.5 M€</td>
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<tr>
<td>GAIA DATA</td>
<td>Distributed data and services infrastructure for observing, modelling and understanding the Earth system, biodiversity and the environment</td>
<td>16.2 M€</td>
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<td>MesoNET</td>
<td>Set up a distributed infrastructure dedicated to coordinating HPC-AI in France.</td>
<td>14.3 M€</td>
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<tr>
<td>MuDiS4LS</td>
<td><em>Mutualised Digital Spaces for FAIR Life Sciences</em> to deploy a shared digital infrastructure across all regions, and to orchestrate the flow of biology-health data throughout its life cycle</td>
<td>16.5 M€</td>
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EOSC-France landscape

• French partners have been heavily involved in EOSC from the very beginning
• Large variety of EOSC-relevant services that could and should be connected to the EOSC ecosystem
• Strong policy framework at national and institutional level to align activities
• Collège EOSC-France is the national EOSC initiative
• France is present in nearly all EOSC-relevant projects
• Large variety of EOSC-relevant services that are already or could and should be connected to the EOSC ecosystem
• supporting e-infrastructures are key for EOSC, EquipEx+ projects address this aspect

Plus d'informations? Inscrivez-vous sous
https://groupes.renater.fr/sympa/info/eosc_france_info

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Annex
## EOSC Calendar 2023

<table>
<thead>
<tr>
<th>Date</th>
<th>Événement</th>
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<tbody>
<tr>
<td>13-14/06</td>
<td>Evénement tripartite de l’EOSC-France (midi à midi, Montpellier) : <a href="https://eoscfrance2023.sciencesconf.org">https://eoscfrance2023.sciencesconf.org</a></td>
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<tr>
<td>19-20/06</td>
<td><strong>The Potential of Research Data: How Research Infrastructures Provide New Opportunities and Benefits for Society</strong> (Lund, Suède)</td>
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<tr>
<td>19-23/06</td>
<td><strong>EGI Conference 2023</strong> (Poznań, Pologne)</td>
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<tr>
<td>20-21/06</td>
<td><strong>e-IRG Workshop</strong> (Malmö et en ligne)</td>
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<tr>
<td>20-22/09</td>
<td><strong>EOSC Symposium 2023</strong> (Madrid)</td>
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EOSC Key Documents

- Qu’est-ce que l’European Open Science Cloud / What is the EOSC
- EOSC en 7 questions
- EOSC Executive Board final progress report
- Results of the EOSC Working Groups (2019 / 2020)
- EOSC Strategic Research and Innovation Agenda (SRIA)
- EOSC Association Statutes
- Scholarly Infrastructures for Research Software
- ESFRI Science Clusters Position Statement on Open Science
- Horizon Europe Work Program for Research Infrastructures / EOSC
EOSC : Important Links

- EOSC Portal
- EOSC Association
- EOSC Association Advisory Groups
- Journées EOSC-France, 13-14 juin 2023
- MESR Horizon Europe web page
- European Commission EOSC page
- EOSC-Pillar
- EOSC-Future
- EOSC Symposium 2022
- EOSC Symposium 2023