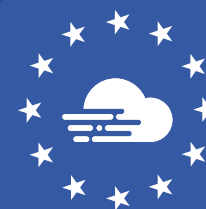# EOSC Association and its Strategic Research and Innovation Agenda (SRIA)

Karel Luyben

Chair EOSC Executive Board / Director EOSC Association

Friday 4th September
EUA-webinar

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EOSC Association

- **Four founding members (CESAER, GEANT, ICDI, CSIC)**

- **Was incorporated as AISBL on Wed 29th July 2020**

- **Eligible members will be provisionally accepted from 30th July**

- **First General Assembly planned for September to ratify membership**

- **Main General Assembly planned for December to elect President, Board of Directors and set budget**

https://www.eoscsecretariat.eu/news-opinion/setting-eosc-association-together

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SRIA & EOSC Association

EOSC Partnership Structure

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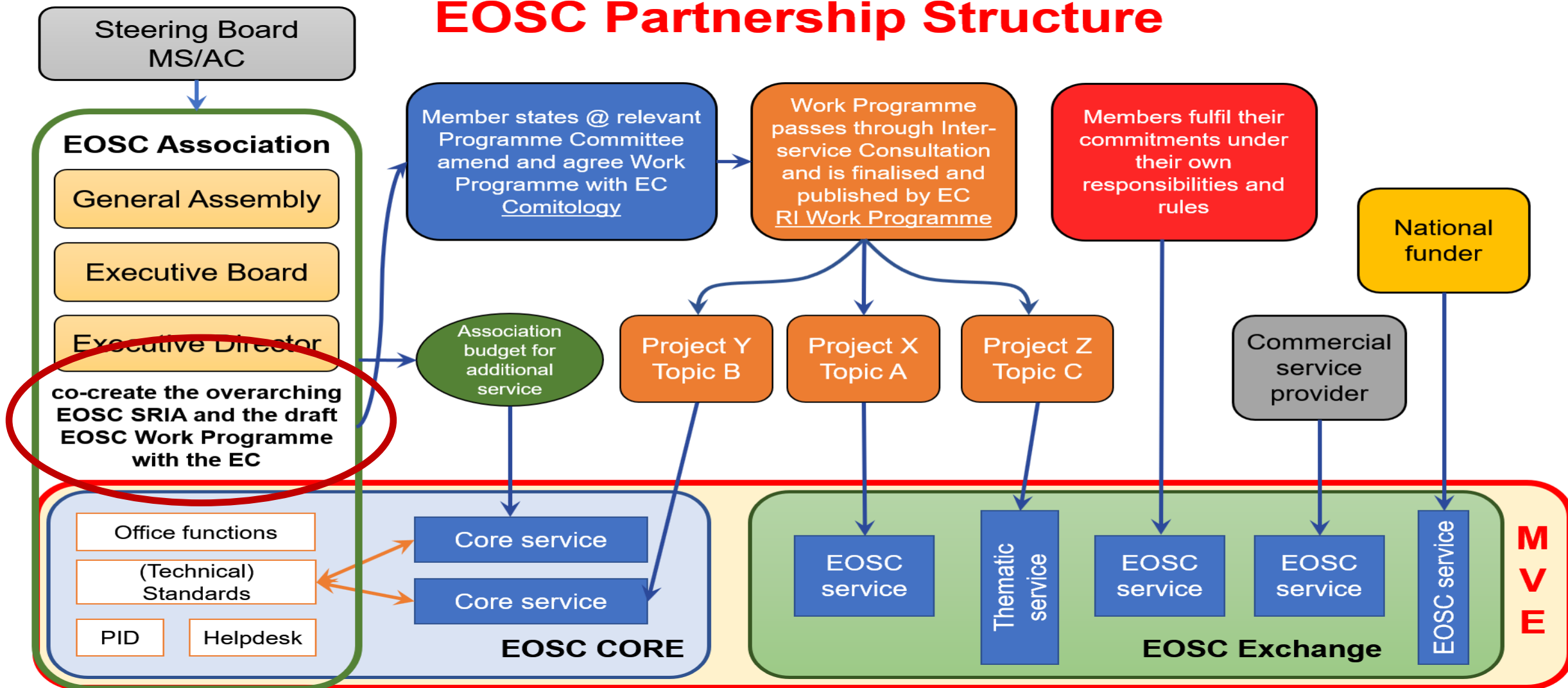
Strategic Research and Innovation Agenda (SRIA) for EOSC

The main purpose of this agenda is to provide coordinated guidance and recommendations for the next EU research and innovation framework programme Horizon Europe (2021-2027) on the strategic R&I needs to support the competitiveness of the EU Data domain and to enable researchers to use a trusted, virtual, federated environment in Europe to store, share and reuse digital outputs from research across borders and scientific disciplines.
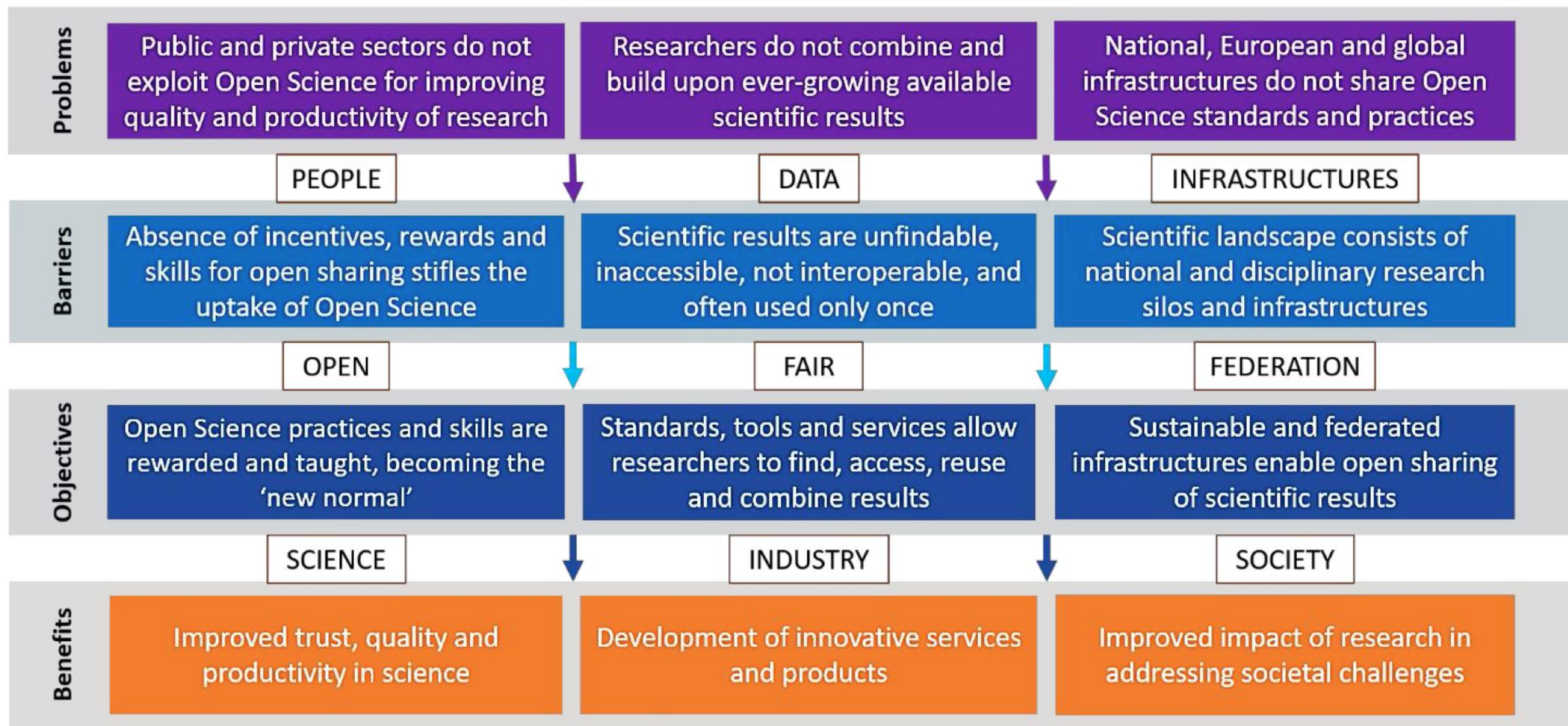
The agenda is being drafted in close consultation with relevant stakeholders, including Research Performing Organisations (RPOs), Research Funding Organisations (RFOs) and Service Providing Organisations.

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How are we developing the EOSC SRIA?

- **Grounding information taken from [Strategic Implementation Plan](), [EOSC Partnership Proposal]().**

- **Executive Board, together with European Commission and Governance Board have developed the high level outline**

- **EOSC Working Groups have submitted content on status, gaps and priority activities needed in each of 14 Action Areas**

- **Open Consultation to which also EUA responded**

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EOSC-ecosystem objectives tree

Problems	Public and private sectors do not exploit Open Science for improving quality and productivity of research	Researchers do not combine and build upon ever-growing available scientific results	National, European and global infrastructures do not share Open Science standards and practices
	PEOPLE	DATA	INFRASTRUCTURES
Barriers	Absence of incentives, rewards and skills for open sharing stifles the uptake of Open Science	Scientific results are unfindable, inaccessible, not interoperable, and often used only once	Scientific landscape consists of national and disciplinary research silos and infrastructures
	OPEN	FAIR	FEDERATION
Objectives	Open Science practices and skills are rewarded and taught, becoming the 'new normal'	Standards, tools and services allow researchers to find, access, reuse and combine results	Sustainable and federated infrastructures enable open sharing of scientific results
	SCIENCE	INDUSTRY	SOCIETY
Benefits	Improved trust, quality and productivity in science	Development of innovative services and products	Improved impact of research in addressing societal challenges

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Three overarching objectives (strategic priorities)

- **Open Science practices and skills are rewarded and taught, becoming the 'new normal'**

- **Standards, tools and services allow researchers to find, access, reuse and combine results**

- **Sustainable and federated infrastructures enable open sharing of scientific results**

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Guiding principles

- **Multi-stakeholder approach**
- **As open as possible, as closed as necessary**
- **Towards a web of FAIR data and related services for science**
- **Federating existing research infrastructures**
- **Machines and people**

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Translated for EOSC into 14 Action Areas

Implementation challenges

1. Identifiers
2. Metadata and ontologies
3. FAIR metrics and authentication
4. Authentication and Authorisation Infrastructure (AAI)
5. User environments
6. Resource provider environments
7. EOSC interoperability framework

Boundary conditions

8. Rules of Participation
9. Landscape monitoring
10. Business models
11. Skills and training
12. Rewards and recognition
13. Communication
14. Widening to public and private sectors

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Leading to 10 implementation priorities

1. **Implement** the EOSC Persistent Identifier **(PID) Policy and develop additional infrastructure required** to support the publication, curation and tracking of research outputs.
2. Offer a **common dataset search** to enhance discovery via EOSC.
3. **Support communities to develop metadata standards & controlled vocabularies** to enable all stakeholders to engage equally.
4. **Implement metrics** to assess FAIR digital objects **and iterate** based on testing.
5. Support **services** to demonstrate they enable FAIR via **certification or the definition of assessment frameworks**.
6. Establish and implement a **common framework for managing user identity and access** in a highly distributed ecosystem.
7. Ensure a **feedback mechanism** to engage with **users** and further develop the EOSC environment to meet their **needs**.
8. Implement procedures to **ensure services** that meet requirements **can be federated into EOSC easily and efficiently**.
9. Promote the **use of open specifications**, where available, **to ensure technical interoperability** when establishing EOSC services.
10. Agree and implement a common set of rules to **ensure data and services** within EOSC **support interoperability.**

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With 10 boundary condition priorities

11. Define the **cooperation framework** enabling **RDIs** to work together more fully and effectively.
12. Evolve EOSC by recognising enhanced standards for policy, processes and procedures to **provide increasing levels of assurance of quality and trust in the services** offered through EOSC.
13. Ensure **continuous monitoring** of the existing **readiness** of countries to contribute to EOSC.
14. Suggest **priorities for action based on the monitoring**.
15. Perform **cost assessments**.
16. Ensure **sustainable financing** for EOSC.
17. Develop Open Science **training** and **professionalise** associated **roles**.
18. Create a Europe-wide framework for **rewards and recognition** that **includes Open Science**.
19. **Inform stakeholders** about the developments of EOSC.
20. **Widen EOSC stakeholder engagement** in a strategic and timely manner.

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To be montored using 10 Critical Success Factors

1. Researchers performing publicly funded research make relevant **results available, as openly as possible**.
2. **Professional data stewards available** in research-performing organisations in Europe to support Open Science.
3. Researchers are **incentivised to perform Open Science**.
4. The **scope of EOSC is widened** to serve the public and private sectors.
5. **Research data** produced by publicly funded research in Europe is **FAIR by design**.
6. The EOSC Interoperability Framework **supports a wide range of FAIR digital objects** including data, software and other research artefacts.
7. European research is **increasingly discovered and reused across disciplines** as a result of EOSC.
8. EOSC is **operational and provides a stable infrastructure**, supporting researchers addressing societal challenges.
9. EOSC is populated with a **valuable corpus of interoperable data**.
10. EOSC is a valuable resource to a **wide range of users** from the public and private sectors.

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How can you shape the agenda?

- **EUA answered the consultation to ensure your voice / community is represented!**

- **Engage in events. Be active at EOSC stakeholder activities.**

- **Get involved. Join the EOSC Association**

  https://www.eoscsecretariat.eu/application-joining-eosc-association

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Let's co-create EOSC

The Vision

Building the EOSC ecosystem collaboratively with all stakeholders through the EOSC Partnership

Enable interdisciplinary research to address societal challenges

Support Open Science and contribute to the Digital Single Market

Offer EU researchers the digital resources they need to practise Open Science

Reduce fragmentation by federating existing research infrastructures

Stimulate the emergence of a competitive EU cloud sector

Develop a Web of FAIR Data and Services (including publications and software)

Give Europe a global lead in research data management

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