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EOSC Tripartite Introduction

Ignacio Blanquer
EOSC-A

10|10|2022 **Tripartite Event | Spain and Portugal**

The European Open Science Cloud initiative

- EOSC aims to offer a virtual environment for open access to services to store, share, process and reuse research data and other research digital objects, such as software
  - The EOSC initiative was proposed in 2016 by the EC as part of the European Cloud initiative, funded through the so-called H2020-INFRAEOSC-2018-2020 (€ 157M).
  - Main objective of HEU destination 2 with 89M€ in the HORIZON-INFRA-2021/22-EOSC-01 calls.
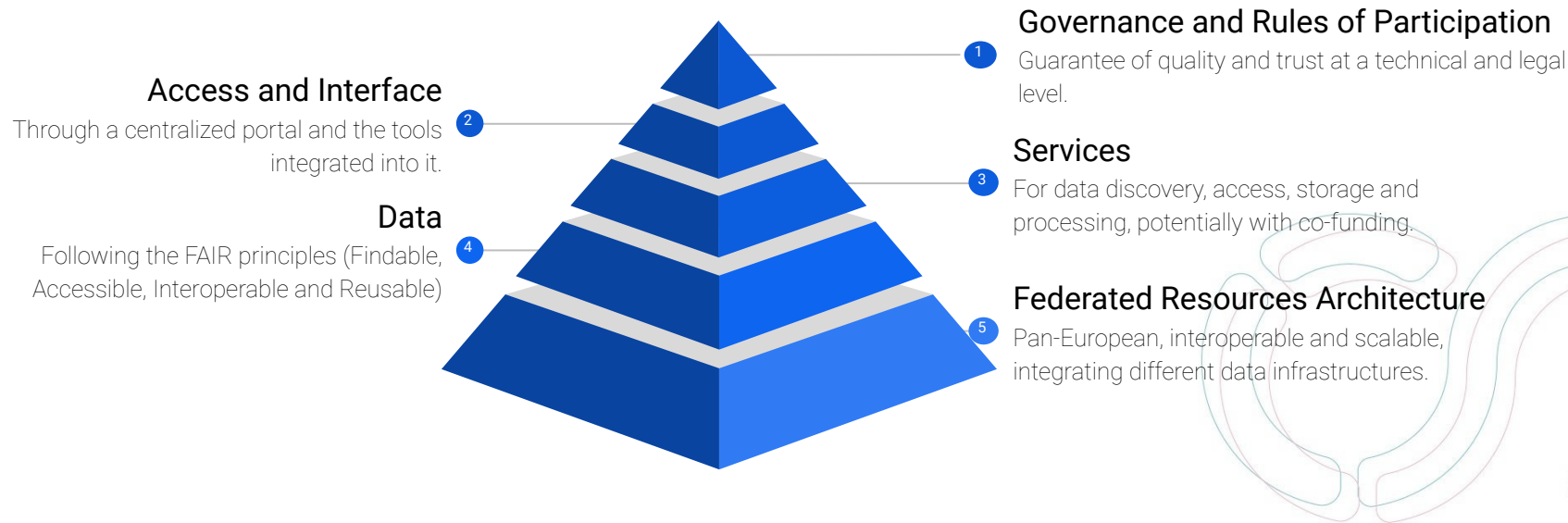

First report from the HLEG EOSC "Realising the European Open Science Cloud"

EOSC Declaration

Launch of the European Open Science Cloud

EOSC-5B Regional Projects

EOSC-A foundation

EOSC-A 1st GA

Set-up of the EOSC-A Task Forces

Jan 2018   Jan 2019   July 2019   April 2021   May 2022

Oct 2016   Oct 2017   Nov 2018   Sept 2019   July 2020   Dic 2020   Oct 2021

INFRAEOSC Projects

Start of EOSC-Secretariat

EOSC EB Working Groups

EOSC Future

EOSC Focus

# "A web of scientific insight"

- **Web of FAIR Data and Services for research**

- **Federation of relevant existing and future data sources and service providers**

- **Virtual space where science producers and consum**

- **An open-ended range of content and services**

- **Meeting all European data requirements**

- **In interaction with other regions of the world**

- The overarching principle for developing EOSC is that research has to be at the centre of the EOSC initiative
  - Multi-stakeholderism, Openness, Data Following FAIR principles, Federation of infrastructures, Machine-actionable Services.

- Holistic Approach.

Access and Interface
Through a centralized portal and the tools integrated into it.

Data
Following the FAIR principles (Findable, Accessible, Interoperable and Reusable)

Governance and Rules of Participation
Guarantee of quality and trust at a technical and legal level.

Services
For data discovery, access, storage and processing, potentially with co-funding.

Federated Resources Architecture
Pan-European, interoperable and scalable, integrating different data infrastructures.

- With the Researcher on the top, but also addressing ICT-Specific, Library and Information Science and General Public actors.

- Described in the "Digital skills for FAIR and open science" Report from the EOSC Executive Board Skills and Training Working Group.
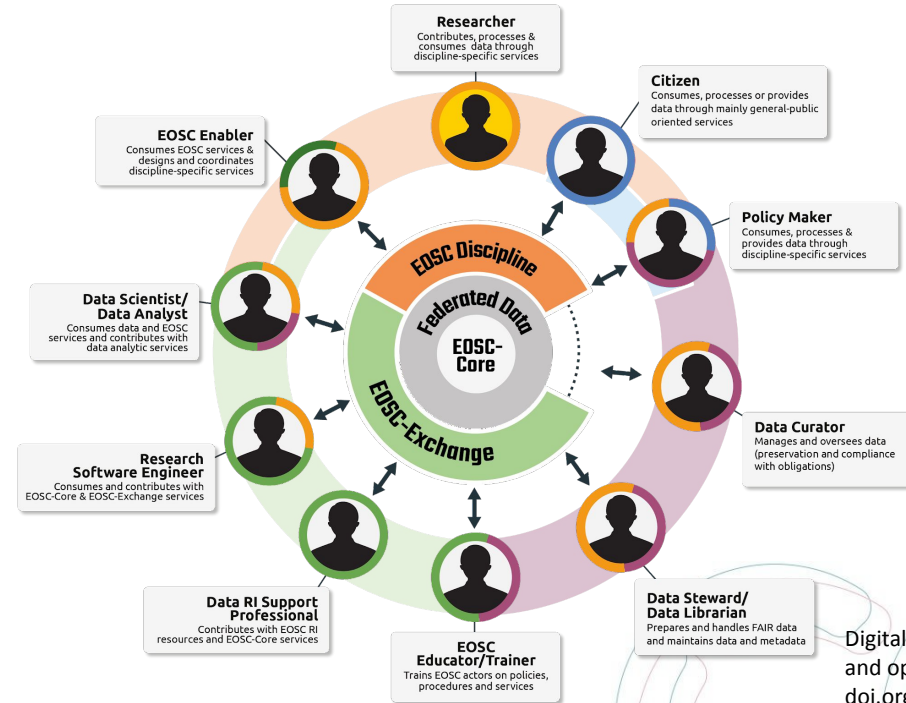
Digital Skills for FAIR and open science
doi.org/10.2777/59065

- It structures the aims of EOSC in terms of people, data and infrastructures.

- Three General Objectives identified.

(EOSC Strategic Research Implementation Agenda v1.0)
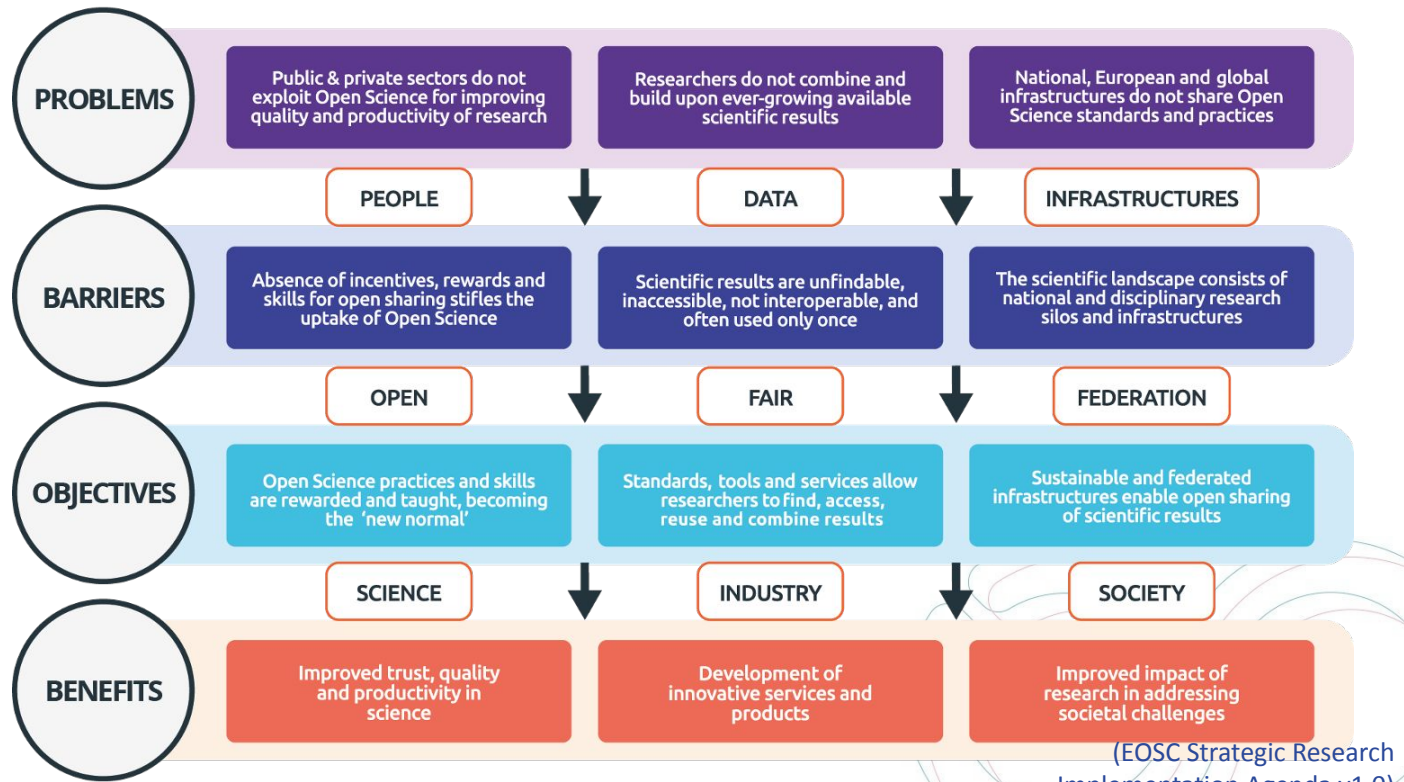
Guiding principles for EOSC

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The overarching principle for developing EOSC is that research has to be at the centre of the EOSC initiative.

- **Multi-stakeholderism**
  - EOSC will succeed if and only if it follows a multi-stakeholder approach;
- **Openness**
  - EOSC will ensure research artefacts be 'as open as possible, as restricted as necessary';
- **FAIR principles**
  - EOSC research artefacts need to be findable, accessible, interoperable and reusable;
- **Federation of infrastructures**
  - EOSC will federate existing and upcoming data- and e-infrastructures;
- **Machine-actionable**
  - EOSC will strike the right balance between machines and people in delivering the services that will serve the needs of European scientists.

Position of EOSC according to the European Commission

Taken from EC slides

Health | Industrial & Manufacturing | Agriculture | Finance | Mobility | Green Deal | Energy | Public Administration | Skills

EOSC: a crosscutting data space for Research and Innovation

"**EOSC** is the basis for a science, research and innovation data space that will bring together data resulting for research and deployment programmes and will be connected and articulated with the sectoral data spaces"
(European Data Strategy, COM(2020) 66 final)

EOSC as one of the key priorities in the ERA

- By 12 September, the Commission received written commitments on 15 ERA actions which will be supported by at least half of the EU Member States

  - With 26 Member States committing, Actions 4 (Research careers and mobility) 1 (Open Science) and 8 (Research infrastructures) received most support.

- Action 1 – Enable Open Science

  - 24 Member States (MS), 3 associated countries (AC) & 9 stakeholders (SH) so far committed to the action.

  - Most MS have been developing a new national strategy for Open Science policy and FAIR principles across national research funding programmes.

  - Most countries have national action plans for the creation of national platforms and data services to enable the connection of national/regional research infrastructures to the EOSC platform.

Member States' commitment per action

History of a partnership

Initial EOSC Governance	EOSC Association AISBL	Co-programmed EOSC Partnership
2019-2020	29-07-2020	23-06-2021

- The new governance model agreed with EU countries for the EOSC implementation phase is tripartite including:

  - The EU represented by the Commission.

  - The European research community represented by the EOSC Association.

  - EU countries and countries associated with Horizon Europe represented through a Steering Board.

- The EOSC-A was constituted on 7/29/2020 by four founding members (CESAER, GARR, CSIC and GEANT)

  - Members have voice and vote and observers only voice

  - In addition, mandated members act as entrusted entities on behalf of the countries and are appointed by the relevant ministries in each country.

  - The association signed a partnership agreement co-programmed with the EC.

    - Belonging to the EOSC association implies being part of this partnership.

European Commission

EOSC Association

Steering Board

35 member and observer organisations in ES and PT

João Nuno Ferreira (FCT|FCCN) & Inmaculada Figueroa (MICINN)

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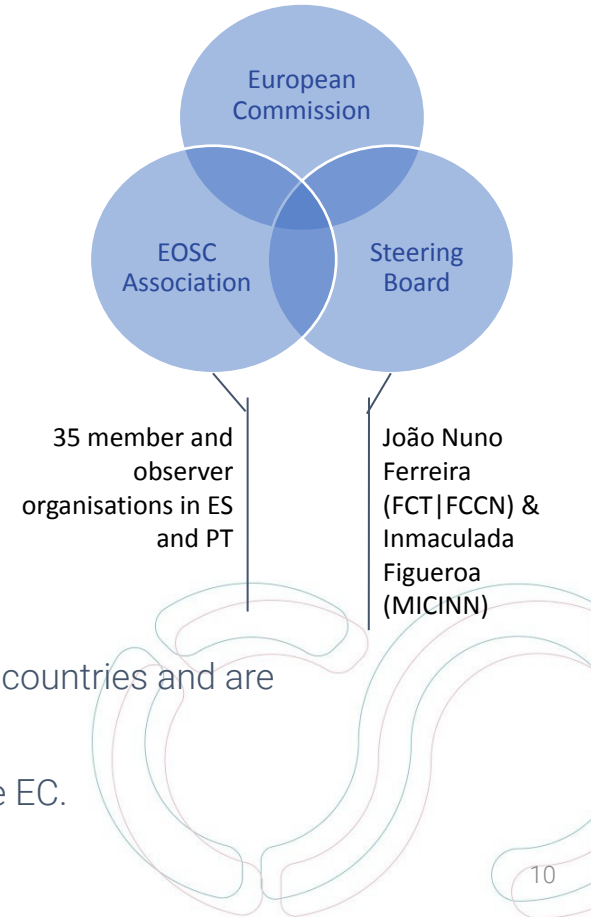
EOSC Partnership

EOSC STEERING BOARD

Anna Panagopoulou

European Commission

DG-RTD
DG-CNECT

Volker Beckmann

Member States and Associated Countries

MoU

Partnership Board

MS/AC collective representation

Exchange of information

Tripartite Collaboration

EOSC ASSOCIATION

President
Karel Luyben

Secretary General
Ute Gunsenheimer

BOARD

General Assembly

(including organisations performing research, funding research, providing services, organisations mandated by MS/AC and other organisations)

Tripartite Events

28 September 2022
Tripartite Event | Ireland

4 October 2022
Tripartite Event | Nordic & Baltic Countries

6 October 2022
Tripartite Event | Greece

10 October 2022
Spain and Portugal EOSC Tripartite Event

11 October 2022
Tripartite Event | Slovenia

24 October 2022
Tripartite Event | Poland

27 October 2022
Tripartite Event | Bulgaria

2 - 4 November 2022
Tripartite Event | Georgia

24 November 2022
Tripartite Event | Germany

EOSC Association

Ignacio Blanquer
EOSC-A

The Purpose of EOSC-A

Incorporation, 29 July 2020

(1)   to provide a single voice for the advocay and representation of the boarder EOSC stakeholder community,

(2)   to promote the alignment of European Union research policy and priorities with activities coordinated by the Association;

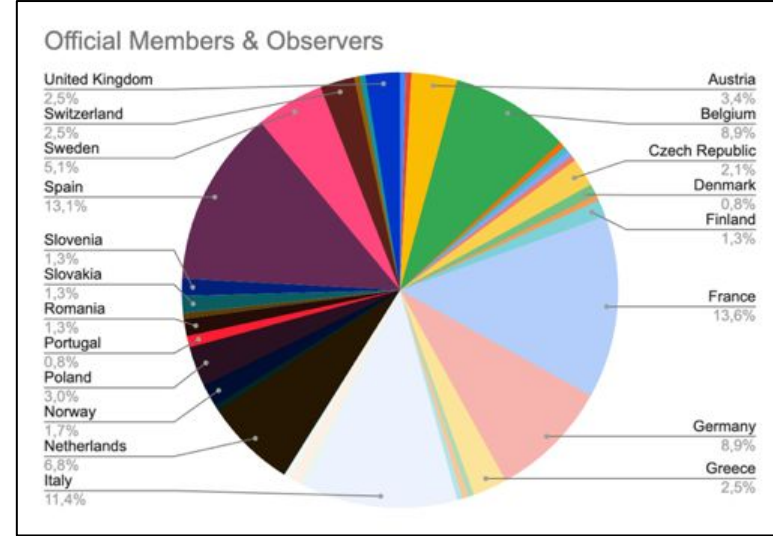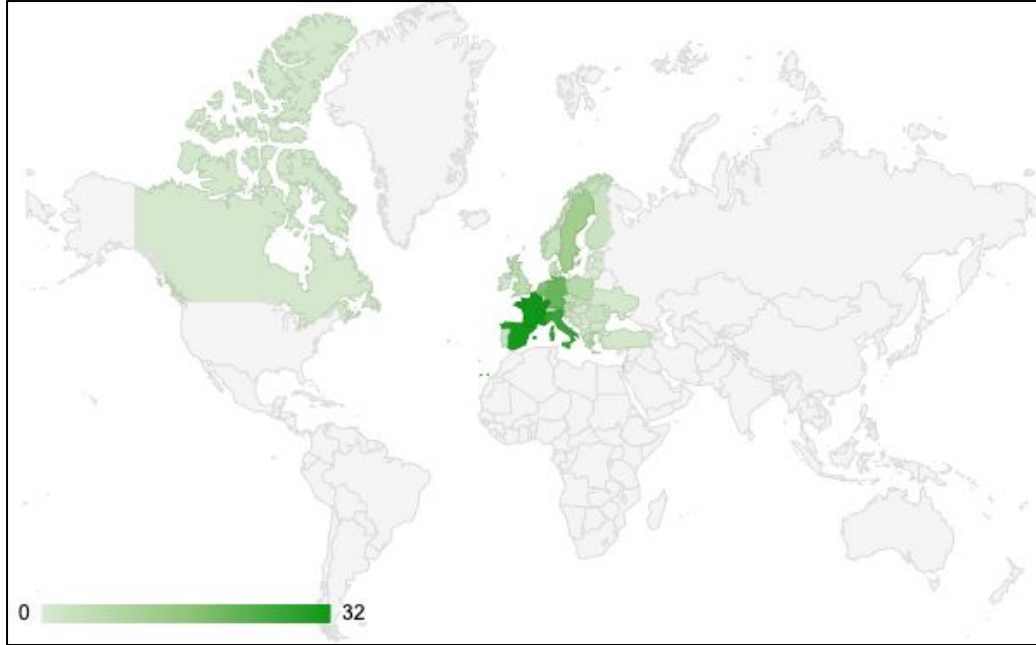(3)   to enable seamless access to data through interoperable services that address the entire research data life cycle.
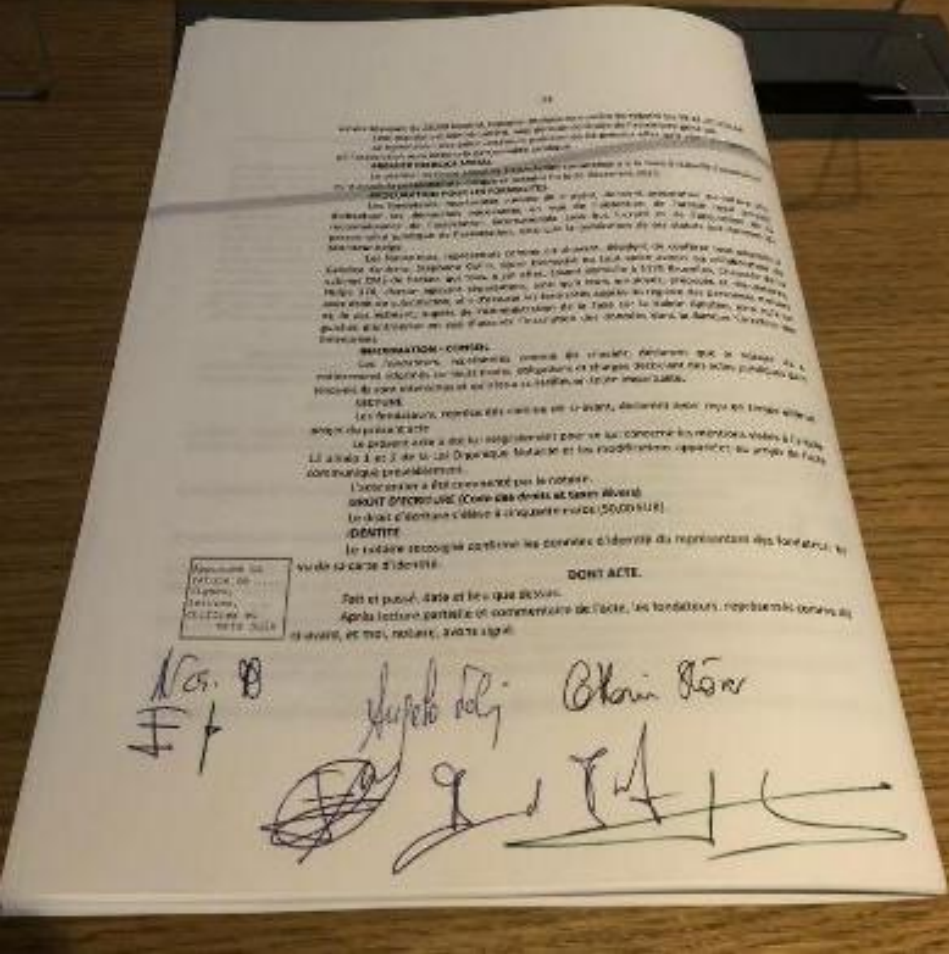
163 Members and 78 Observers

A strong memberbase
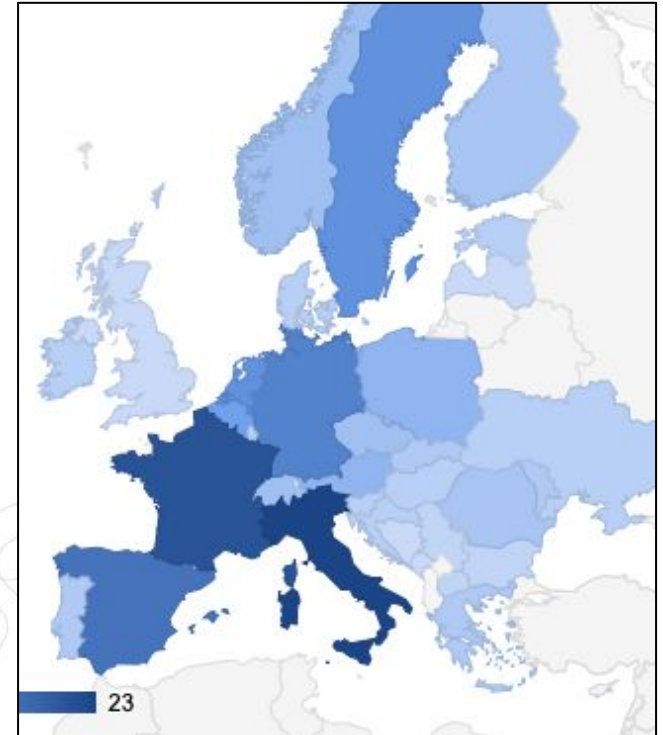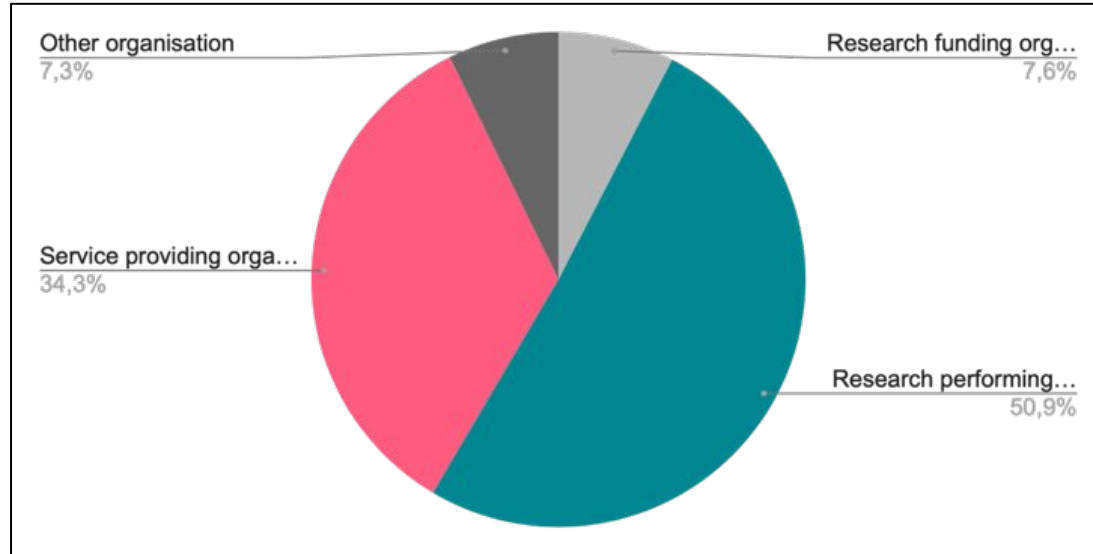
Members & Observers

Geographic Distribution

Official Members & Observers

The Board of Directors

Nine Independent Individuals

Karel Luyben President, 2021-22	**Marialuisa Lavitrano** Vice-President, 2021-23	**Suzanne Dumouchel** 2021-23	**Klaus Tochtermann** Treasurer, 2021-23	**Sarah Jones** 2021-22
Ignacio Blanquer 2021-22	**Sara Garavelli** 2022-24	**Bob Jones** 2022-24	**Wilhelm Widmark** 2022/24	

EOSC-A Brain-Pool: 13 Task Forces

Over 400 volunteers

Implementation of EOSC

- Rules of Participation compliance monitoring
- PID policy and implementation
- Researcher engagement and adoption

Technical challenges on EOSC

- Technical interoperability of data and services
- Infrastructure for quality research software
- AAI Architecture

Metadata and data quality

- Semantic interoperability
- FAIR metrics and data quality

Research careers and curricula

- Data stewardship curricula and career paths
- Research careers, recognition and credit
- Upskilling countries to engage in EOSC

Sustaining EOSC

- Financial sustainability
- Long-term data preservation

- EOSC Association members & observers are the primary members of AGs.

- Representatives of the key implementation projects should be members of relevant AGs to present work in progress and receive advice and steers from the community.

- The ideas and priorities of the EOSC Association Advisory Groups should feed into the Descriptions of Work of the upcoming Horizon Europe projects.

- TF members, chairs and charters can be found on the web site.

Organization type
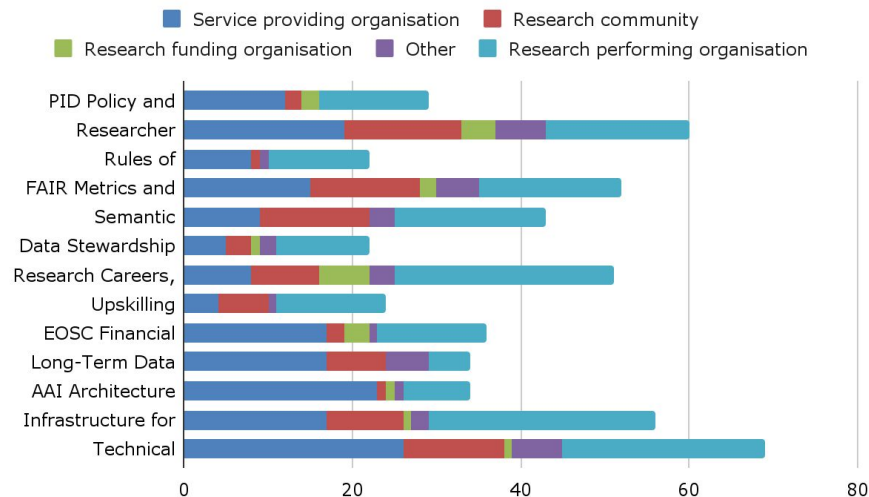
- Upskilling Countries to Engage in EOSC
  - Cymon Cox (Centro de Ciencias Do Mar).
  - Moira Torrent (CSIC)
- Technical Interoperability of Data and Services
  - Paul Crocker (Univ. of Beira Int.), Jorge Gomes (LIP Lisboa).
  - Álvaro López García (CSIC), Joan Maso (CREAF), Jose Norberto Mazón (UAL), Gonzalo Merino (CIEMAT), Jordi Rambla (CRG), Alex Sánchez Pla (EATRIS), Antonio J Sanchez-Padial (FECYT).
- Infrastructure for Quality Research Software
  - Isabel Campos (CSIC), Salvador Capella (BSC), Laura del Caño (INSTRUCT-ERIC), Daniel Garijo (UPM)
  - Mario David (LIP Lisboa).
- Long-term Data Preservation
  - Rui Fernandes (University of Beira Interior)
  - Lluís Anglada (CSUC), Lara Lloret Iglesias (CSIC)

- AAI Architecture
  - Antònia Tugores (CSIC)
- Defining Funding Models for EOSC
  - Alberto Perez (Red.es/RedIRIS), Ramón Torrecillas (CSIC)
- FAIR Metrics and Data Quality
  - Fernando Aguilar-Gómez (CSIC), Carlo Lacagnina (BSC), Mark Wilkinson (UPM)
- Researcher Engagement and Adoption
  - Angelo Romasanta (ESADE Business School) , Nadia Tonello (BSC)
- Rules of Participation Compliance Monitoring
  - Susana Sánchez Expósito (IAA -CSIC)
- Semantic Interoperability
  - Oscar Corcho (Universidad Politécnica de Madrid), José J. Pazos Arias (UVIGO)
- Research Careers, Recognition, and Credit
  - Delfim Leão (University of Coimbra).
  - Carlos García Aparicio (CSIC).

The EOSC Association Today

General Assembly #4, 24-25 May 2022

Content of the MoU (2021 – 2030)

- **The MoU is established between the Partners**
  - The EU represented by the Commission
  - The EOSC Association ("Partners other than the Union"), including its constituent entities (members)

- **The MoU is a contractual arrangement, not legally binding**

- **Scope & objectives**
  - To contribute to the objectives defined in the SRIA incl. the KPIs to measure progress
  - Expected financial and in-kind commitments by the partners (490 MEUR + 500 MEUR)

- **Governance: Partnership Board**
  - Composition: Representatives appointed by the Partners other than the Union, Commission officials and Representatives of the Steering Board

- **Commitments of the EC**
  - To duly take into account the input and advice from EOSC-A when defining call topics relative to the scope and objectives of the SRIA

- **Commitments of EOSC-A**
  - In-kind contributions
  - Monitoring and Reporting

SRIA and MAR

Strategic Research and Innovation Agenda

Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC)

Version 1.0
21 June 2021

Independent Expert Report

EOSC Executive Board

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

Multi-annual roadmap sets priority activities and outcomes grouped by three implementation levels – European, National, Institutional

Three phases of MAR
- 2021-2022: development towards a functional federation of infrastructure
- **2023-2024: expansion to production that generates added value**
- 2025-2027: expansion to develop impact from Open Science

- The [EOSC Multi-Annual Roadmap 2023-2024](#) forms part of the Strategic Research and Innovation Agenda (SRIA).

- The EOSC Association is currently updating the MAR to devise a set of priority actions and outcomes for the 2023/24 period.

  - It also draws from the European Commission's forthcoming Work Programme to identify new areas of interest such as data quality, digital preservation and infrastructure for sharing sensitive data from public authorities.

- These priorities are assigned to three levels for implementation: european, National and Institutional.
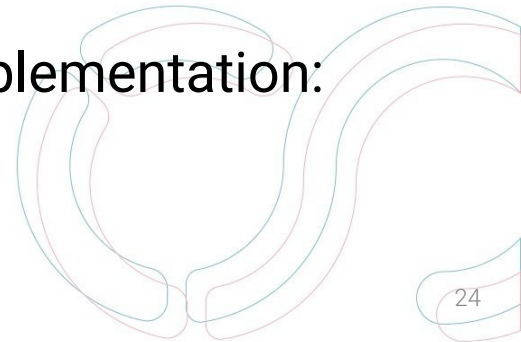
Establishing the
EOSC Brand

An EOSC Vision
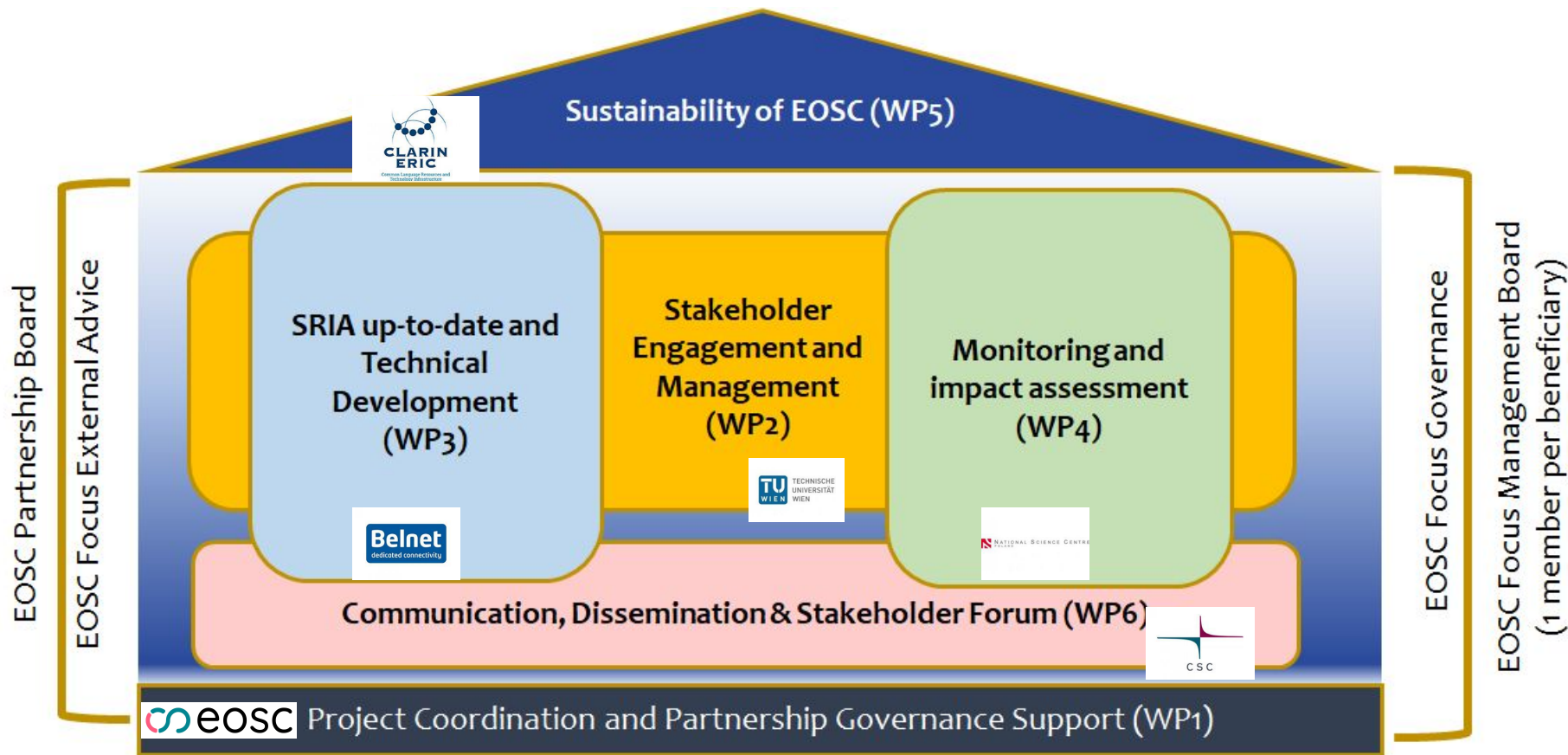
- The **key enabler** of Open Science and the cultural change agent enabling inter- and cross-disciplinary research.

- A **well defined Infrastructure** with a mandated coordination built on accountable **federated** resources.

- An **inspirational model** integrating closely into the Global Research community.

- A **dependable and sustainable contribution** to the research process with **long term support** from National and European Agencies.

- A **user friendly collaboration ecosystem** with easy access to scientific data, software and tools.

Let's co-create EOSC

THANKS