

# The EOSC Association

Karel Luyben

*National Tripartite Event*

IRELAND, 28 September 2022

About 35,500,000 results (0.65 seconds)

https://www.tudelft.nl · Translate this page

## TU Delft

Deze website maakt gebruik van cookies. Wanneer u op "Ik ga akkoord" klikt, geeft u toestemming voor het gebruik van cookies. Wat zijn cookies? TU Delft ...

Results from tudelft.nl

### Bachelors

This website uses cookies. By clicking "accept" you give your ...

### Masters

MSc Aerospace Engineering - MSc Computer Science - MSc Robotics

### Opleidingen

Bachelors - Masters - Minors - PhD - Exchange - ...

### Over TU Delft

Faculteiten - Zoek medewerkers - Onze campus - ...

### People also ask

Is it easy to get into Delft University of Technology? ▾

Is Delft a good university? ▾



## Delft University of Technology (TU Delft)

Website Directions Save

Research institution in Delft, Netherlands

Delft University of Technology, also known as TU Delft, is the oldest and largest Dutch public technical university, located in Delft, Netherlands. As of 2022 it is ranked by QS World University Rankings among the top 10 engineering and technology universities in the world. [Wikipedia](#)

**Address:** Mekelweg 5, 2628 CD Delft, Netherlands


**Phone:** +31 15 278 9111


**Undergraduate tuition and fees:** 2,060 EUR, International tuition 10,384 EUR (2018 – 19)

**Total enrollment:** 24,703 (2018)



Chartered Accountants Ireland



4.3  25 reviews  
Accountant

Directions Save Nearby Send to phone Share

47/49 Pearse St, Dublin 2, D02 YN40, Ireland

Closed - Opens 9AM Tue

charteredaccountants.ie

+353 1 637 7200


8QV2+MM Dublin 2, Ireland

Send to your phone

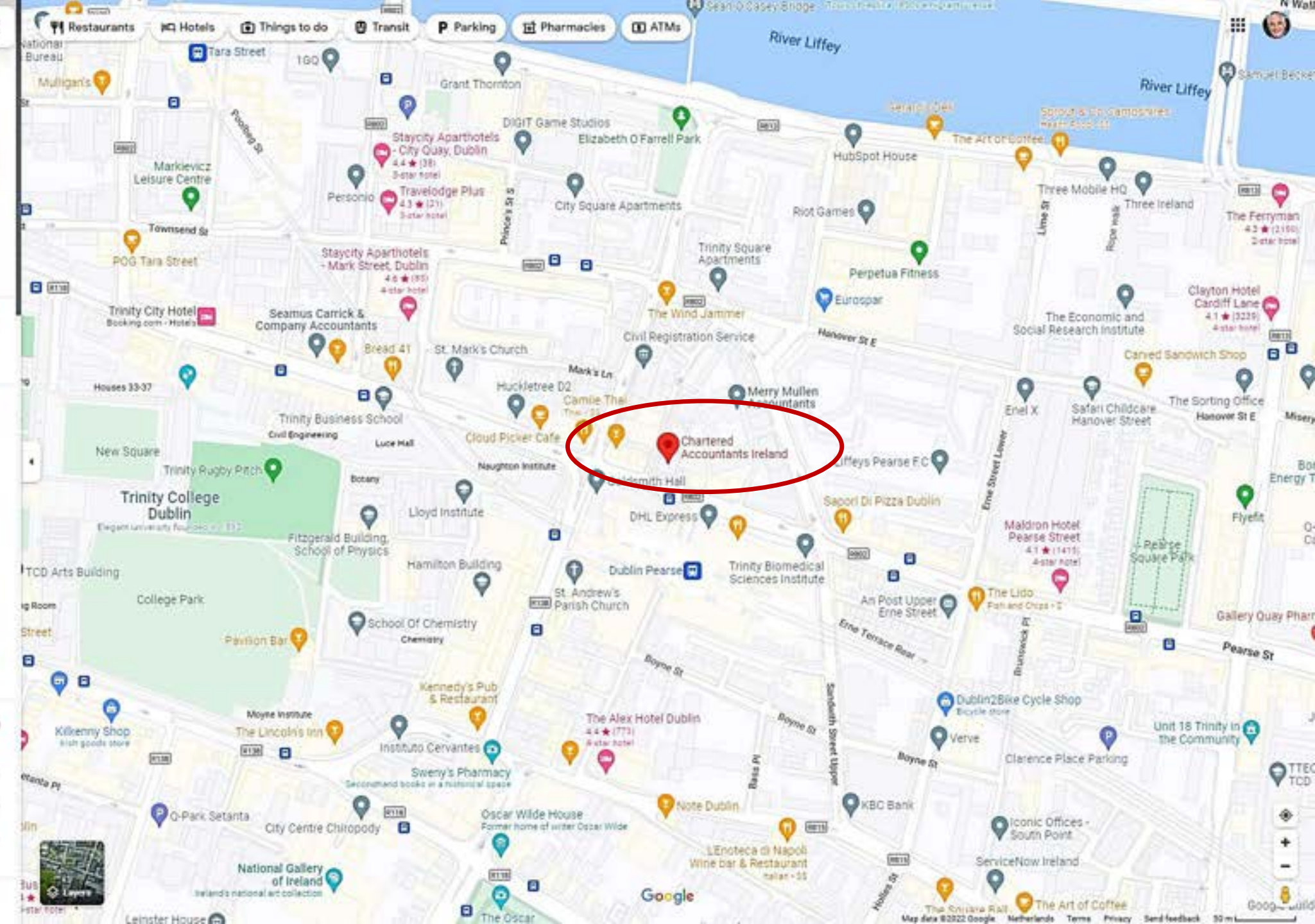
Add a label

Suggest an edit

Popular times Mondays



Photos



About 270,000 results (0.51 seconds)

<https://www.nature.com> › scientific reports › articles ⋮

## Optimization of fish gelatin drying processes and ... - Nature

by C da Silva Araújo · 2021 — This study aims to optimize **drying** methods such as convection hot air alone and combined with infrared radiation to obtain **gelatin** from acoupa ...

<https://www.agriculturejournals.cz> › web › cjfs ⋮

## The effect of drying temperature on the properties of gelatin ...

by J Tkaczewska · 2019 · Cited by 2 — The influence of **drying** temperature on the characteristics and gel properties of **gelatine** from *Cyprinus carpio* L. skin was studied.

<https://www.researchgate.net> › publication › 355401465\_... ⋮

## (PDF) Optimization of fish gelatin drying processes and ...

This study aims to optimize **drying** methods such as convection hot air alone and combined with infrared radiation to obtain **gelatin** from acoupa weakfish skin by ...



## Optimization of fish gelatin drying processes and characterization of its properties

**Author:** Cleidiane da Silva Araújo et al

**Publication:** Scientific Reports

**Publisher:** Springer Nature

**Date:** Oct 19, 2021

*Copyright © 2021, The Author(s)*

### Creative Commons

This is an open access article distributed under the terms of the [Creative Commons CC BY](#) license, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

You are not required to obtain permission to reuse this article.

To request permission for a type of use not listed, please contact [Springer Nature](#)

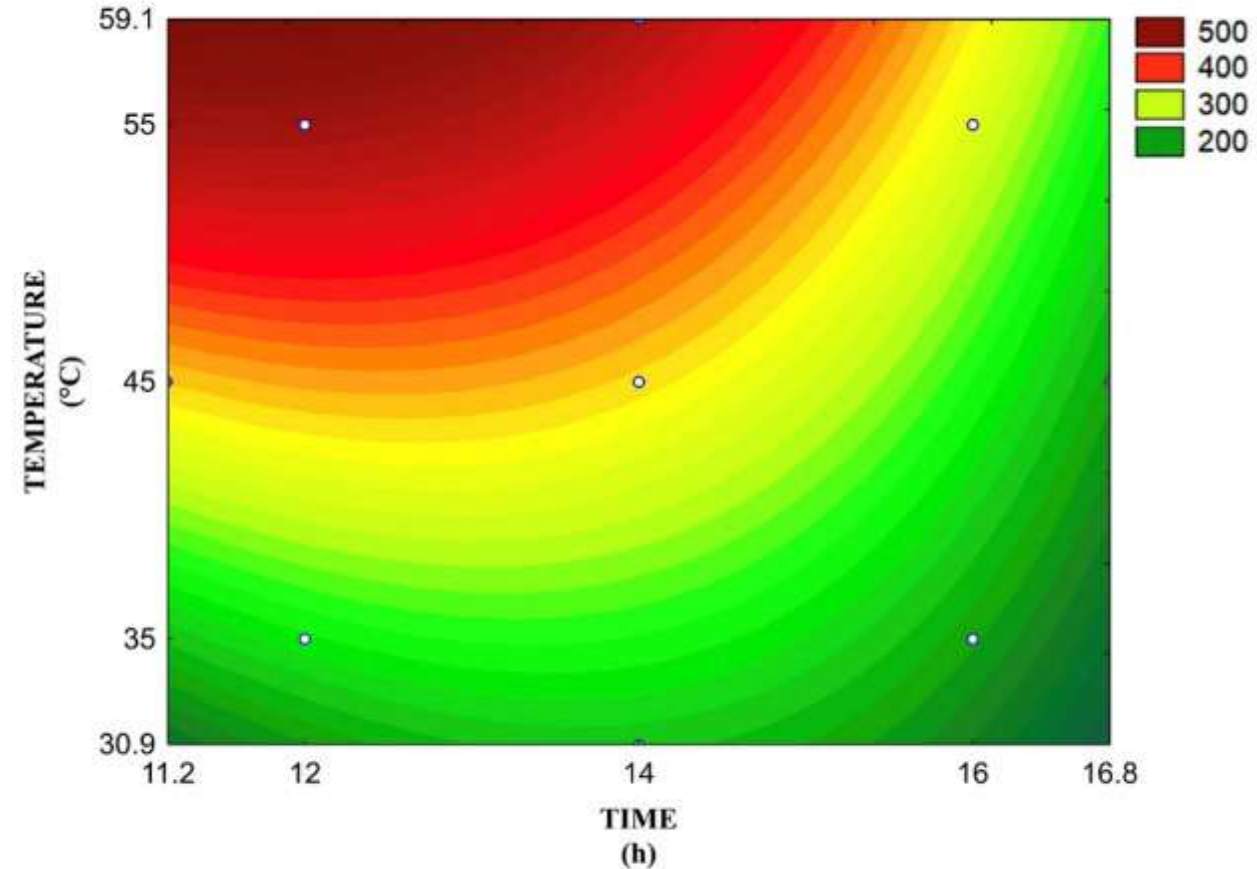
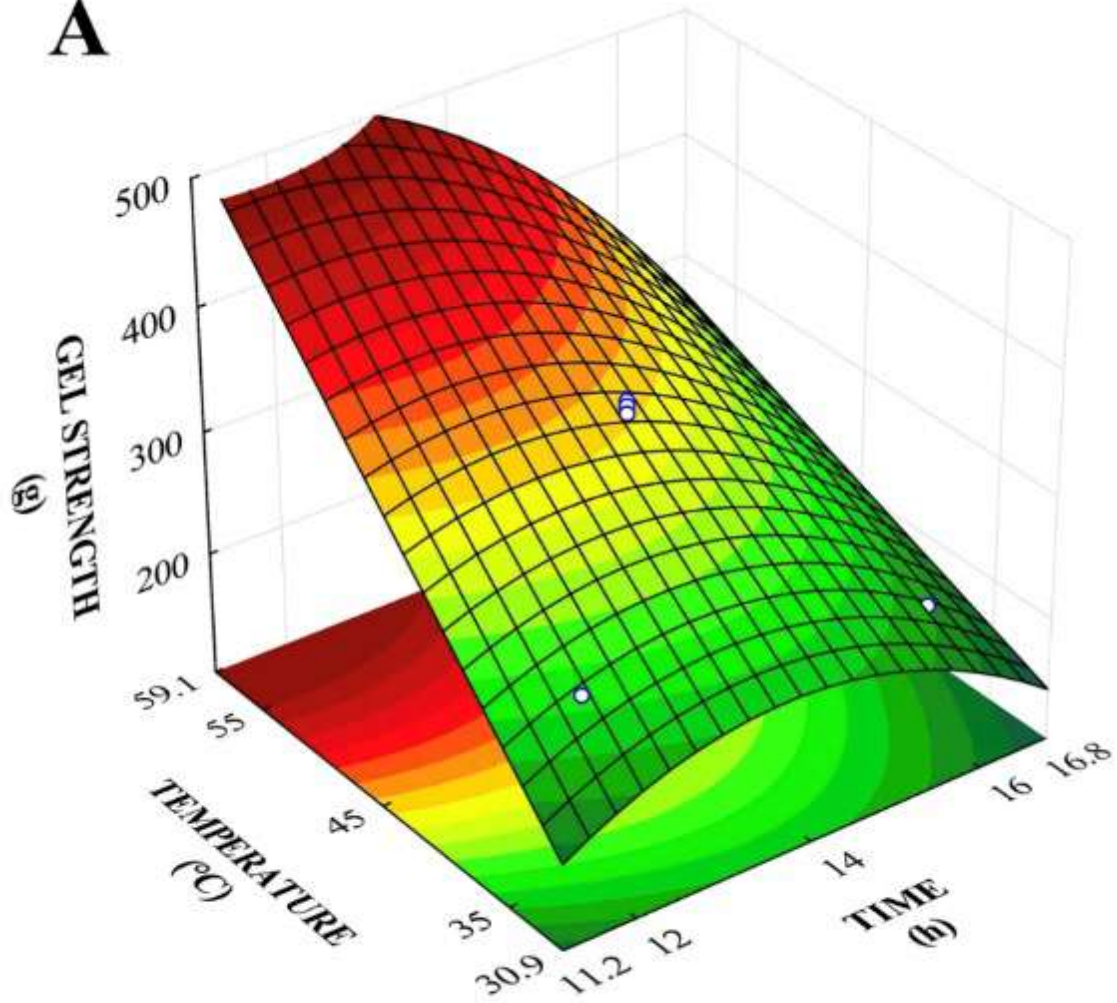
## Supplementary Information

---

### [Supplementary Tables.](#)

# Wordfile: 41598\_2021\_99085\_MOESM1\_ESM.docx

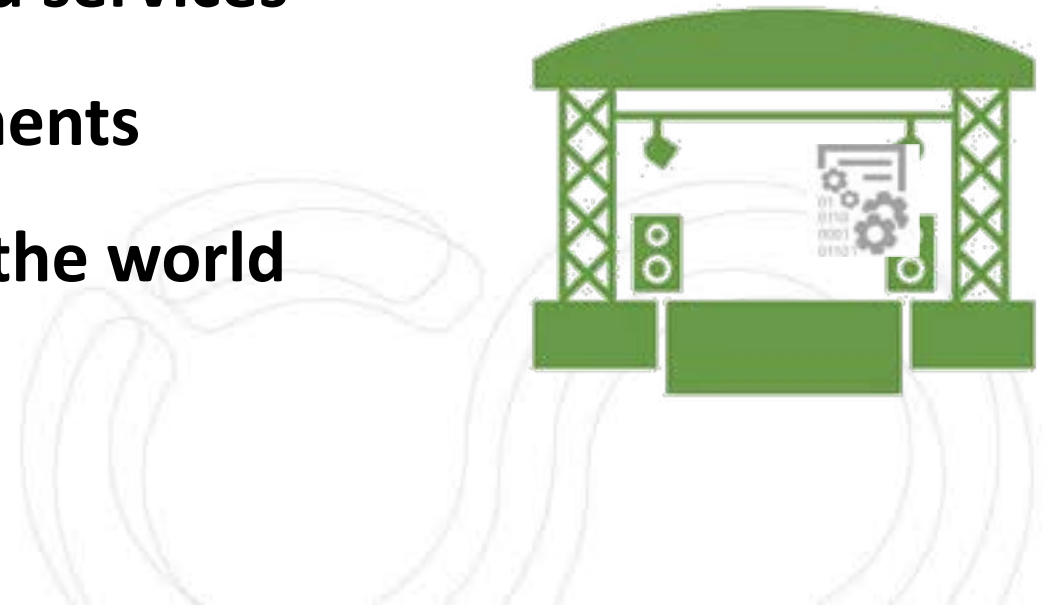
Independent variables			Experimental results			Predicted results		
Assays	Time (h)	Temperature (°C)	Gel strength (g)	Moisture (%)	Water activity	Gel strength (g)	Moisture (%)	Water activity
1	-1 (12)	-1 (35)	247.0	10.45	0.376	247.2	10.73	0.380
2	1 (16)	-1 (35)	203.0	10.33	0.370	2026	10.44	0.377
3	-1 (12)	1 (55)	461.6	6.74	0.168	479.7	7.18	0.189
4	1 (16)	1 (55)	299.7	6.55	0.165	317.3	6.79	0.189
5	0 (14)	-1.41(30.8)	219.2	10.85	0.375	223.0	10.67	0.373
6	0 (14)	1.41(59.1)	490.0	5.94	0.130	468.4	5.58	0.104
7	-1.41(11.2)	0 (45)	360.2	10.09	0.343	350.9	9.69	0.331
8	1.41(16.8)	0 (45)	213.0	9.34	0.345	204.5	9.21	0.329
9	0 (14)	0 (45)	350.6	8.96	0.276	345.8	9.17	0.287
10	0 (14)	0 (45)	346.5	9.39	0.289	345.8	9.17	0.287
11	0 (14)	0 (45)	340.3	9.15	0.297	345.8	9.17	0.287

**A**

Wouldn't it be great if we all could find a relevant dataset for our work as easy through the 'Web of FAIR data' as we can find many things through an adequate search engine?

# “A web of scientific insight”

- **Web of FAIR Data and related Services**
- **Federation of relevant existing and future data sources**
- **Virtual space where science producers and consumers come together**
- **An open-ended range of content and services**
- **Meeting all European data requirements**
- **In interaction with other regions of the world**





# Guiding principles for EOSC

***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-infrastructure;

- ***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*



“EOSC is the basis for a science, research and innovation data space that will bring together data resulting from research and deployment programmes and will be connected and articulated with the sectoral data spaces”

*(European Data Strategy, COM(2020) 66 final)*

# **EOSC on a global stage**

- ***Service providers from third countries can participate in EOSC but have to adhere to the EOSC Rules of Participation and applicable legislation***
- ***EOSC will work with other regional initiatives towards common goals for Open Science, driving global convergence on standards in support of the implementation of an open science commons***



# Grand Challenges for developing EOSC

## *Technical*

- *Create in the long run truly broad multidisciplinary interoperability*
- *For the short term this means: optimal Authentication and Authorisation Infrastructure (AAI); stepwise growing interoperability*

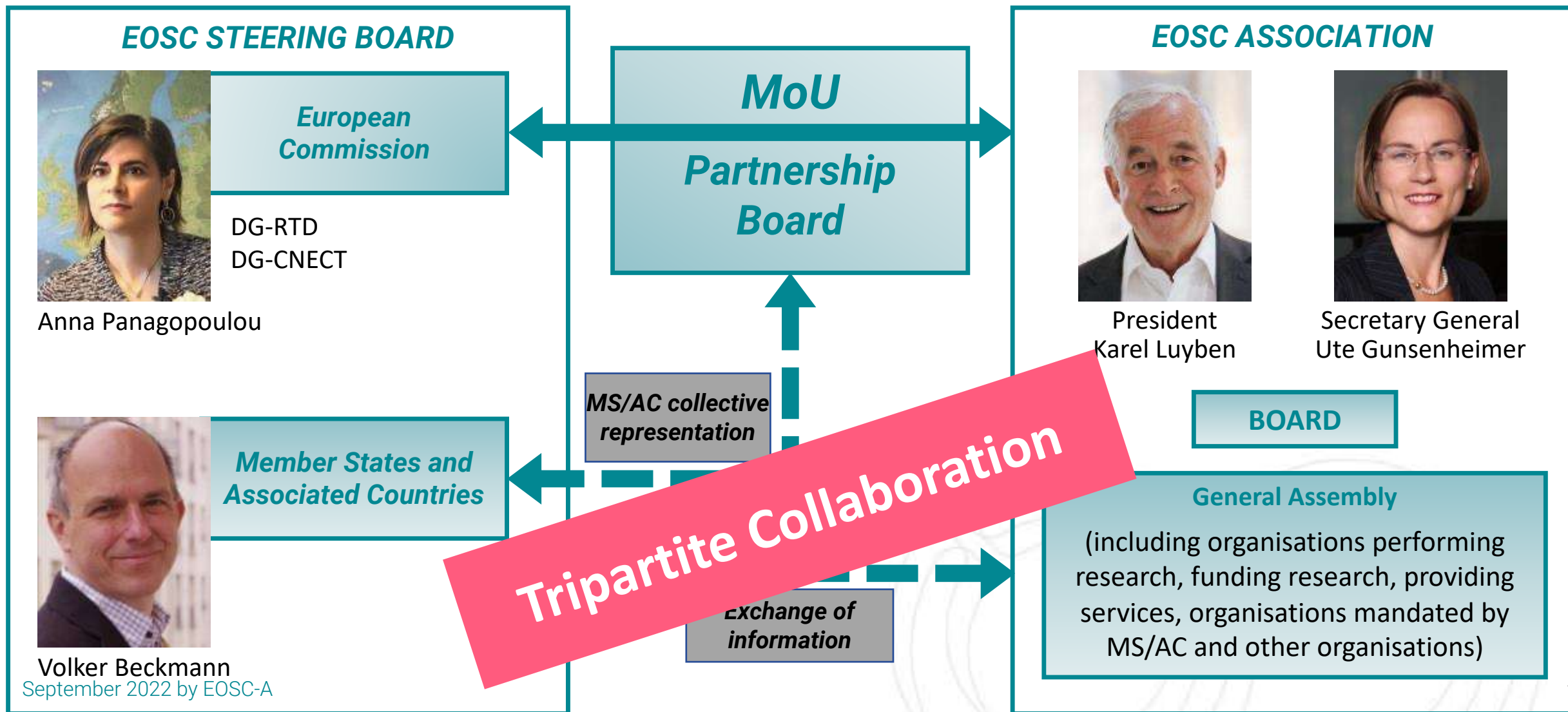
## *Social*

- *Getting the noses in the same direction*
- *Combining local and regional initiatives towards a true Open Science Commons with global convergence on standards in support of the implementation*



# eosc EOOSC Partnership

## Tripartite Collaboration



# eosc Tripartite Events

eosc 

28 September 2022  
Tripartite Event | Ireland

eosc 

4 October 2022  
Tripartite Event |  
Nordic & Baltic Countries

eosc 

6 October 2022  
Tripartite Event | Greece

eosc 

10 October 2022  
Spain and Portugal  
EOSC Tripartite Event

eosc 

11 October 2022  
Tripartite Event | Slovenia

eosc 

24 October 2022  
Tripartite Event | Poland

eosc 

27 October 2022  
Tripartite Event | Bulgaria

eosc 

2 - 4 November 2022  
Tripartite Event | Georgia

eosc 

24 November 2022  
Tripartite Event | Germany

eoosc

# EOOSC Association

An Overview

September 2022 by EOOSC-A

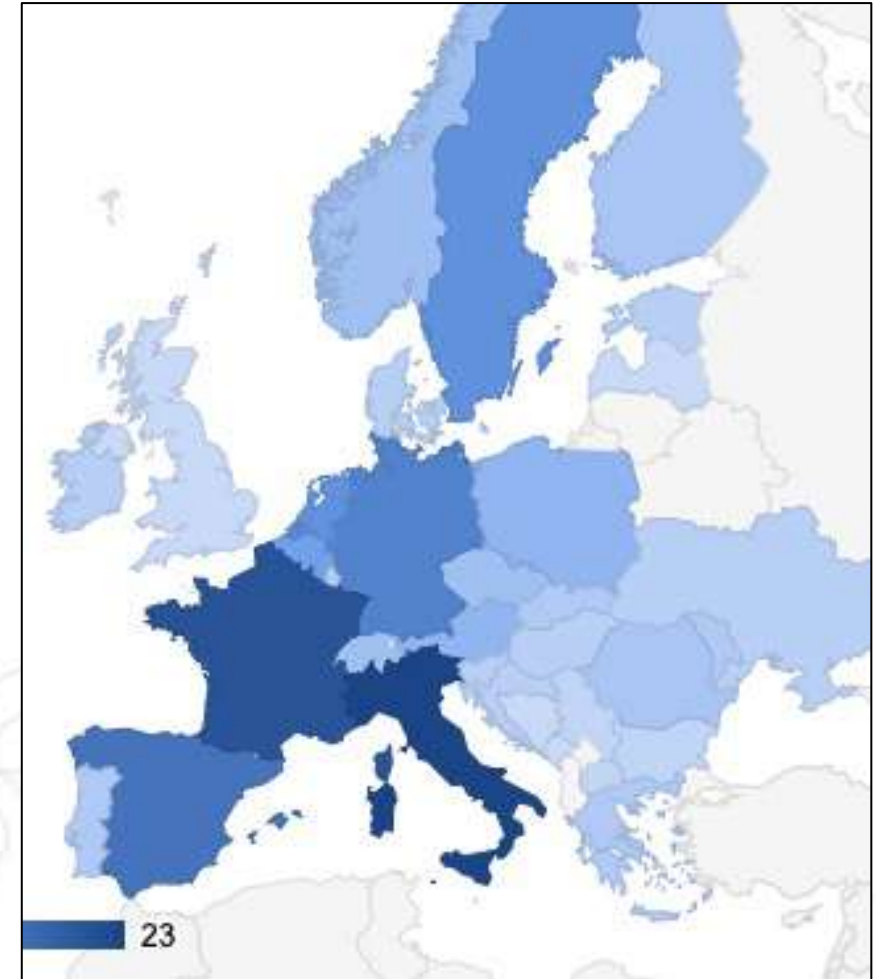
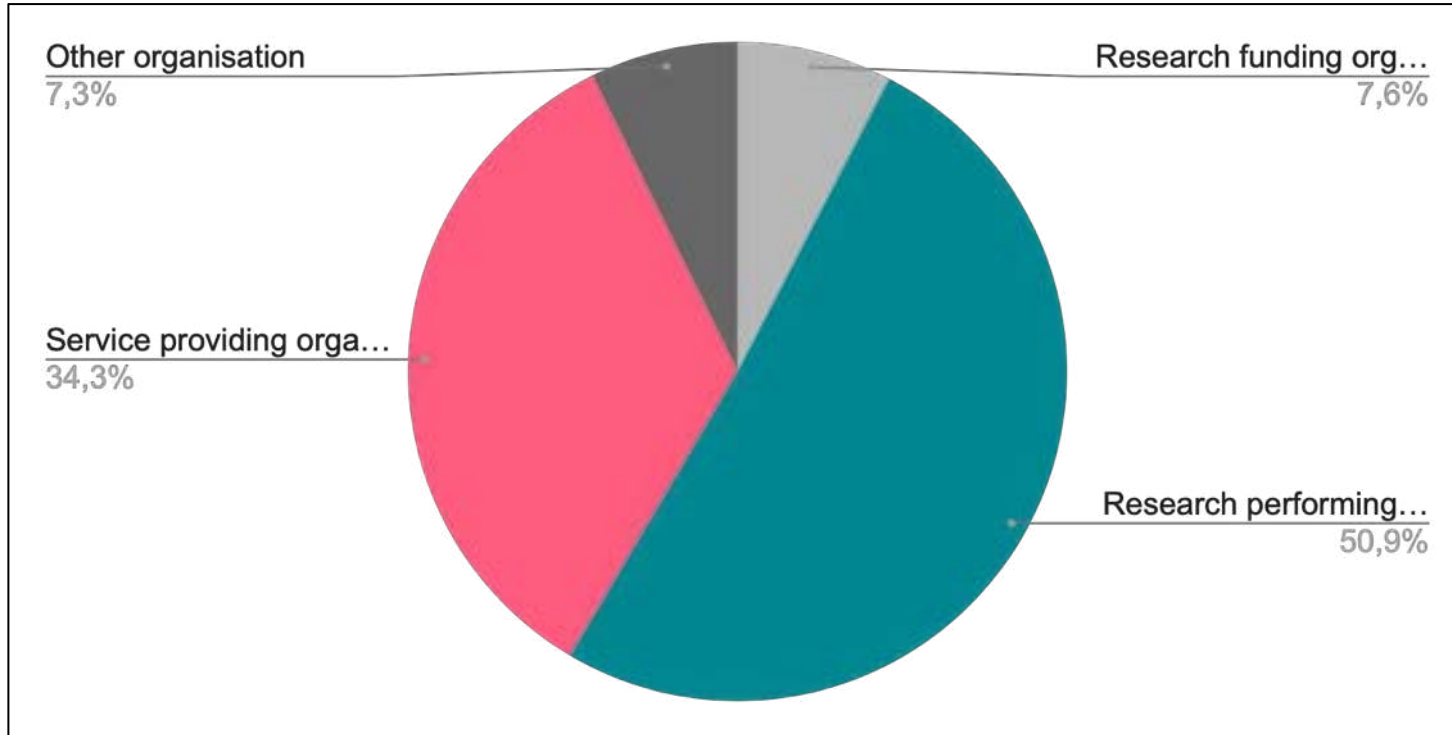






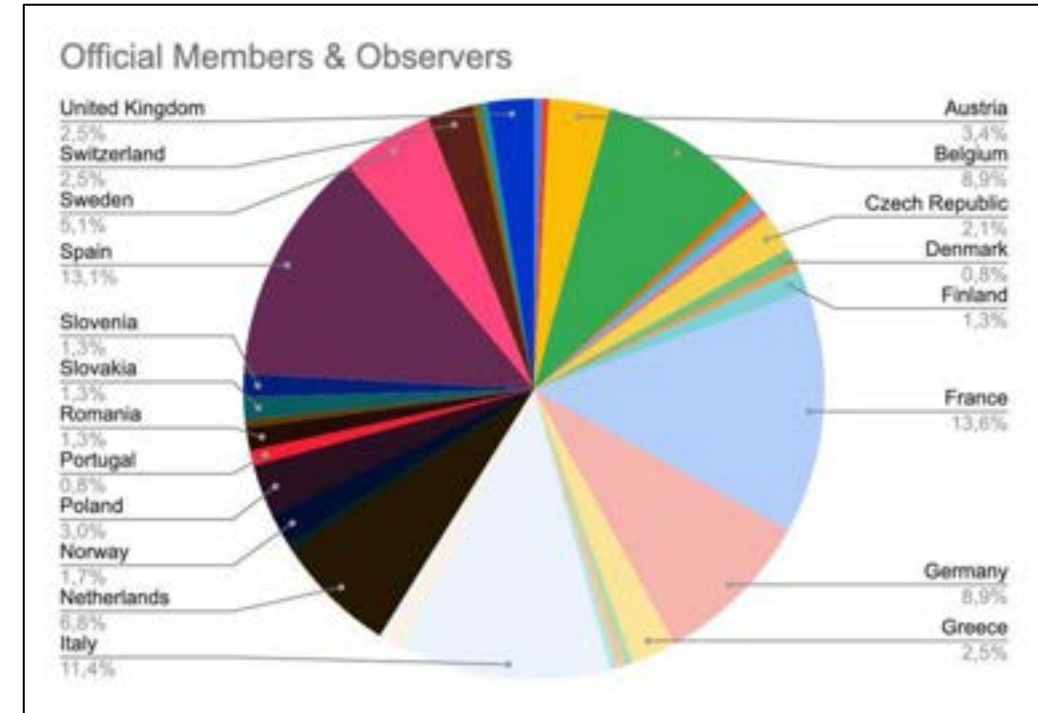
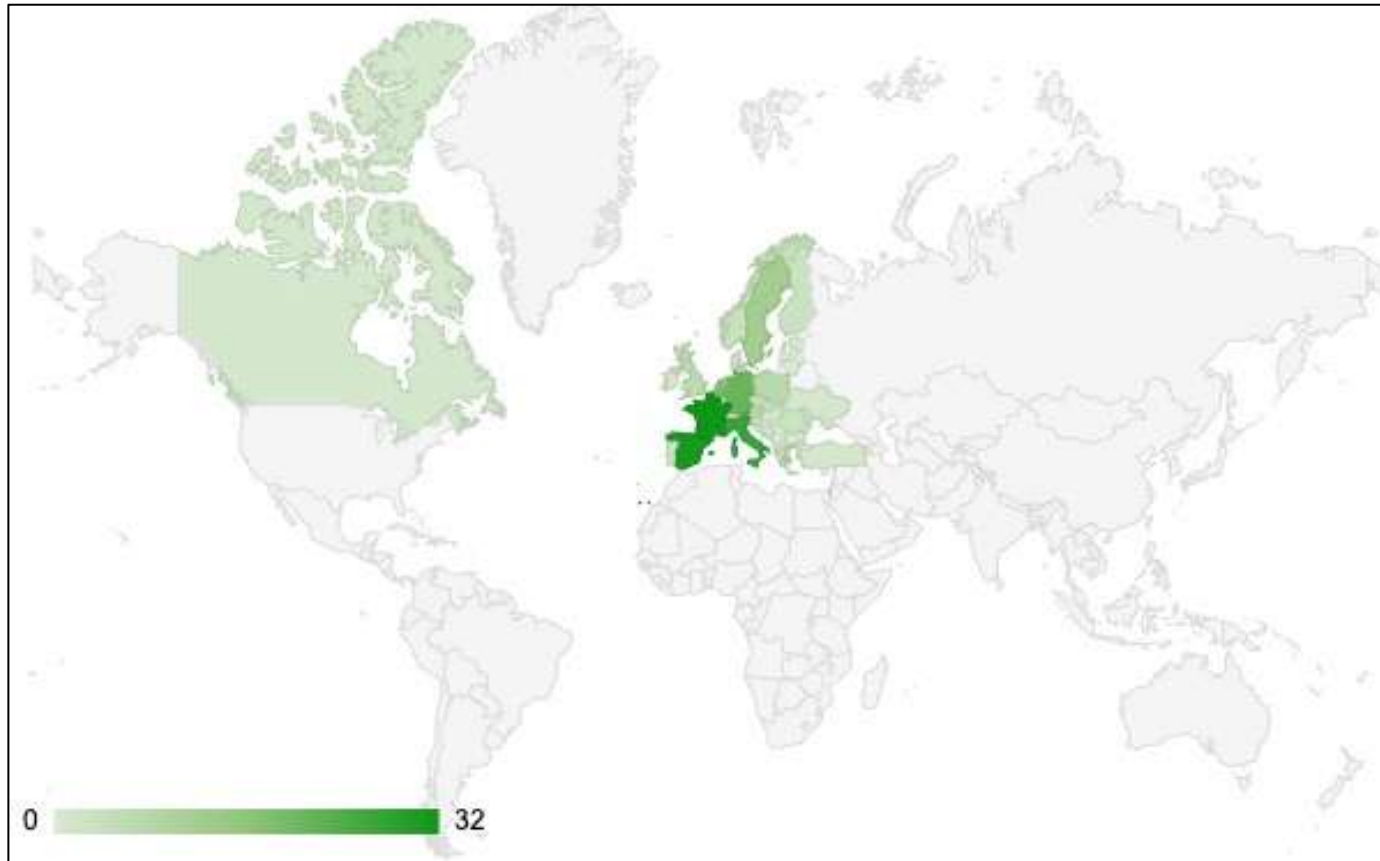
# eosc 163 Members and 78 Observers

A strong memberbase



# eosc Members & Observers

## Geographic Distribution



# eosc The Board of Directors

Nine Independent Individuals

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

# eosc EOOSC-A Brain-Pool: 13 Task Forces

Over 400 volunteers

## ***Implementation of EOOSC***

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

## ***Technical challenges on EOOSC***

- 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 EOOSC

## ***Sustaining EOOSC***

- Financial sustainability
- Long-term data preservation





# eosc The EOSC Association Today

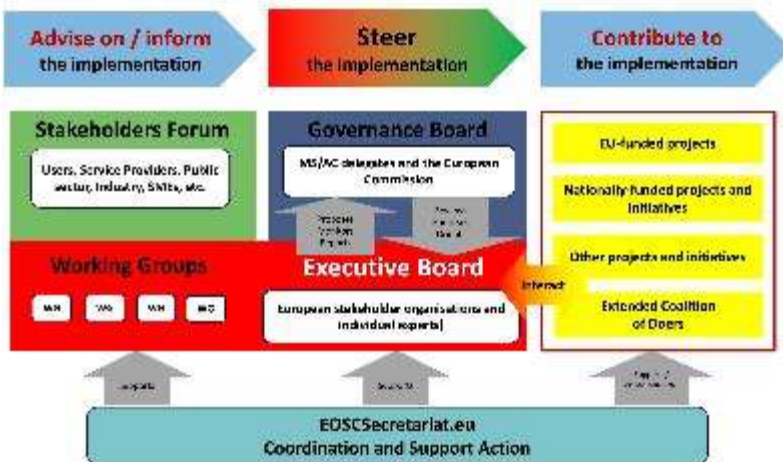
General Assembly #4, 24-25 May 2022





# History of a partnership

## Governance of EOSC 2019-2020



**Initial EOSC Governance**

**EOSC Association AISBL**

**Co-programmed EOSC Partnership**

**2019-2020**

**29-07-2020**

**23-06-2021**

# eosc Content of the MoU (2021 – 2030)

- ***The MoU is established between the Partners***
  - The EU represented by the Commission
  - The EOOSC 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 EOOSC-A when defining call topics relative to the scope and objectives of the SRIA
- ***Commitments of EOOSC-A***
  - In-kind contributions
  - Monitoring and Reporting

## Strategic Research and Innovation Agenda



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





# Monitoring & Reporting

Provision of Monitoring data

Development of KPIs

Promotion of Monitoring activities

## **Examples:**

- Full integration with the Monitoring Framework (MF) of the EOSC Partnership
- Support for evolving the MF
- Promotion of monitoring activities to broader audiences

eoosc

eoosc

# Establishing the EOOSC Brand



EOSC





Family

AI4

eosc

eosc

Focus

eosc

cancer

eosc

FAIR-EASE

eosc

FAIR-IMPACT

eosc

FAIRCORE4EOSC

eosc

EuroScienceGateway

# Keep on dreaming

***If in 2040 50% of the **relevant** research data (data, publications and software) would be as FAIR as possible, my dream would come true! (world-wide 😊)***

*In other words: When I will be able to find **the diffusion coefficient of water as function of temperature and water concentration for the compositions of gelatine** I will be able to predict the drying behaviour of **different conditions in different scales of different equipment, using the computerprogram**. Thus saving a whole lot of time in the development and **energy in the application.***

**Thanks EOSC!**



**Let's co-create EOSC**





**EOSC Association AISBL**

Rue du Luxembourg 3  
BE-1000 Brussels, Belgium  
+32 2 537 73 18  
info@eosc.eu | www.eosc.eu  
Reg. number: 0755 723 931  
VAT number: BE0755 723 931

# ***Back-up***





# What is FAIR?

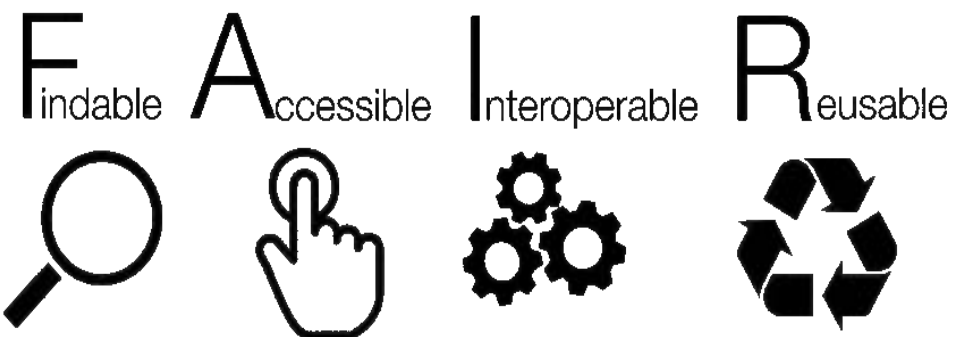


Image CC-BY-SA by [SangyaPundir](#)

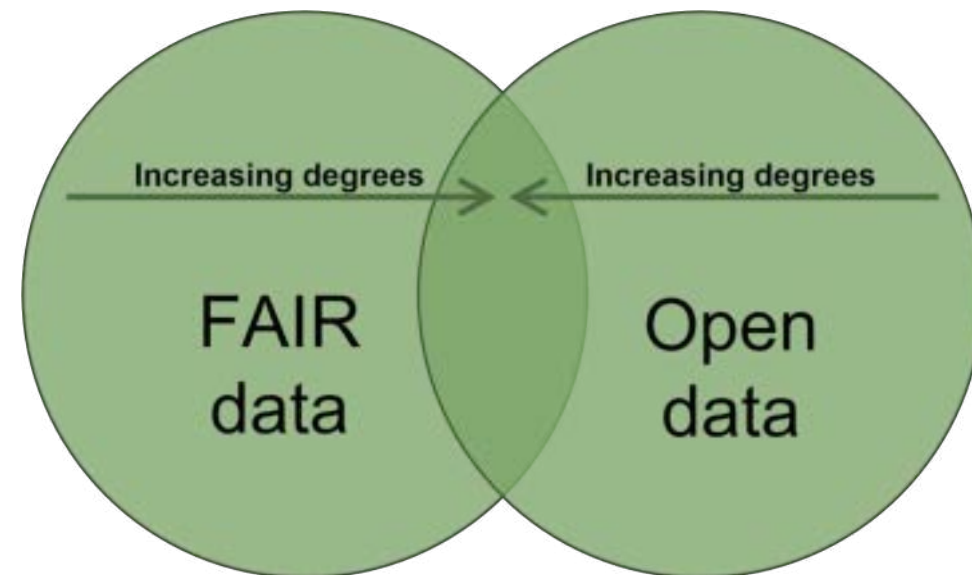
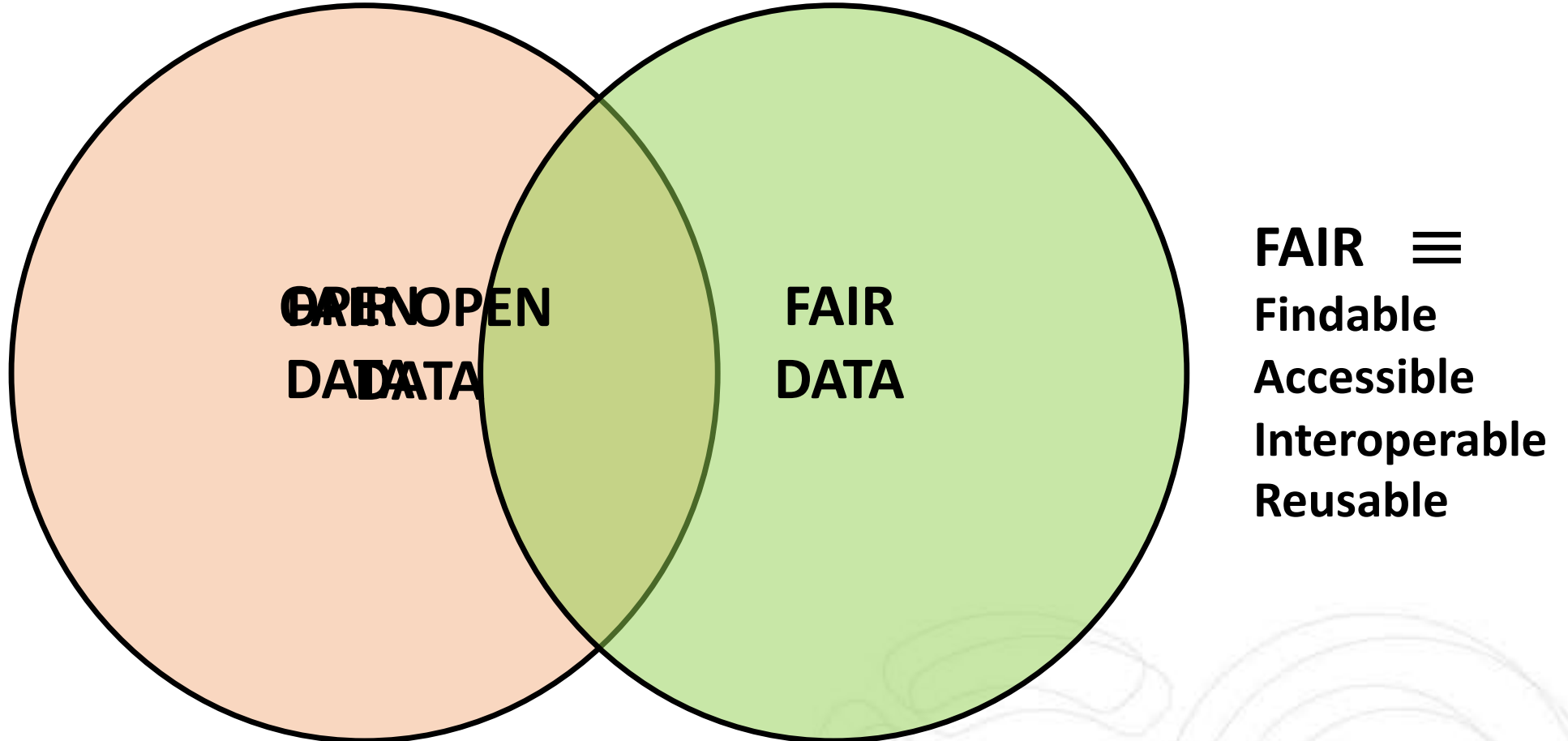


Image CC-BY by European Commission FAIR data expert group

- **FAIR ≠ Open**
- **FAIR ensures data can be found, understood and reused**
- **Data can be shared under restrictions & still be FAIR**

**"As open as possible, as restricted as necessary"**

# OPEN DATA and/or FAIR DATA



Towards “as FAIR as possible” and “as open as possible”

# Twinning the data- to the e-infrastructures

***EOSC is a data-infrastructure and could be seen as a twin sister (or brother) of the European e-infrastructure organisations.***

***The last offering the store, compute and connect services used by EOSC to offer the servicing of data and creating interoperability. The combination forms the EOSC-ecosystem (yin / yang).***





## ***Tasks for EOOSC Association to see to:***

- ***Develop and govern federating core***
- ***Manage the AAI***
- ***Manage PID policies***
- ***Manage compliance framework***
- ***Manage trusted certification***
- ***Outreach to stakeholders***
- ***Monitor services and transactions***
- ***Manage the 'EOOSC' trademark(s)***
- ***Contribute to Horizon EU policy***



## *Important requirements for EOSC to deliver*

- Relevant data
- Sufficiently rich metadata
- Search mechanism
- Software (often self made)
- Compute power (usually available)
- Storage (usually available)
- Access
- Automatic referencing
- .....



# Implementation steps of EOSC

- ***EOSC interoperability framework is premised on FAIR principles***
- ***Currently defining a minimum metadata model (and crosswalks) to ease discovery over existing federated research data and metadata***
- ***Need clear, publicly-available definitions for all concepts, metadata and data schemas → challenge is that not all communities apply standards***
- ***Need repositories of semantic artefacts and mapping across these***
- ***Aim for all metadata and measurements to be machine-readable***
- ***Sufficient local compute capacity to handle the request***

# Agreed priorities for 2023 - 2024

## *Technical*

- *EOSC-Core creation and onboarding procedures*
- *Interoperability and data search*
- *Data quality*

## *Involvement*

- *Member State engagement*
- *Funding / resourcing models*
- *Skills and the recognition and rewards*

# EOSC interactions

- Members and Observers (163 + 78)
- Mandated Organisations (27)
- Task forces of ESOC Association (13)
- European Commission (490 M€ cash + 500 M€ in-kind)
- Member States and Associate Countries (EOSC Steering Board)
- INFRAEOSC projects (9 >> 50?)
- Research Infrastructures and ESFRI
- Data Spaces in conception
- European Partnerships (5 >> 49)
- EUA, CESAER, LERU, ALLEA, LIBER, etcetera
- Cluster project