

EOSC as a web of FAIR data and services

**Karel Luyben,
President EOSC Association**



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** ...



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

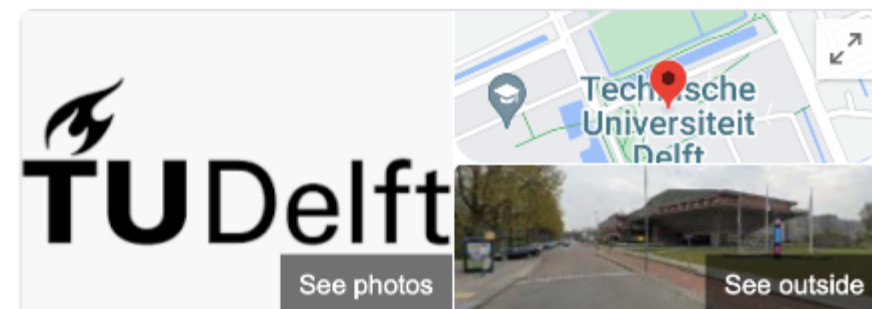
Faculteiten - Zoek medewerkers - Onze campus - ...

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](tel:+31152789111)

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

Total enrollment: 24,703 (2018)

Nordic Hotel Forum, Viru Square



€107
Oct 9 – 10

Nordic Hotel Forum

4.5 ★★★★★ 2,407 reviews ⓘ · 4-star hotel

Directions

Save

Nearby

Send to phone

Share

CHECK AVAILABILITY

Compare prices

Free cancellation only ☐

Check in / Check out

Sun, Oct 9

Mon, Oct 10

2

All options

Agoda

Free cancellation until Oct 8

€114 >

Reserving.com

Free cancellation until Oct 9

€114 >

More options

from €103

A map of the Viru Square area in Tallinn, Estonia. The Nordic Hotel Forum is circled in red. The map shows various landmarks, including the Viru Väravad (Vest 14th-century defensive structure), Tammsaare Park, and the Viru väljak. Other points of interest include the Metro Plaza, Manna La Roosa restaurant, and the Adelle Apartments OÜ. The map also displays the surrounding streets, including Hobujaama and Gonsiori, and the nearby bus and tram stops.

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.

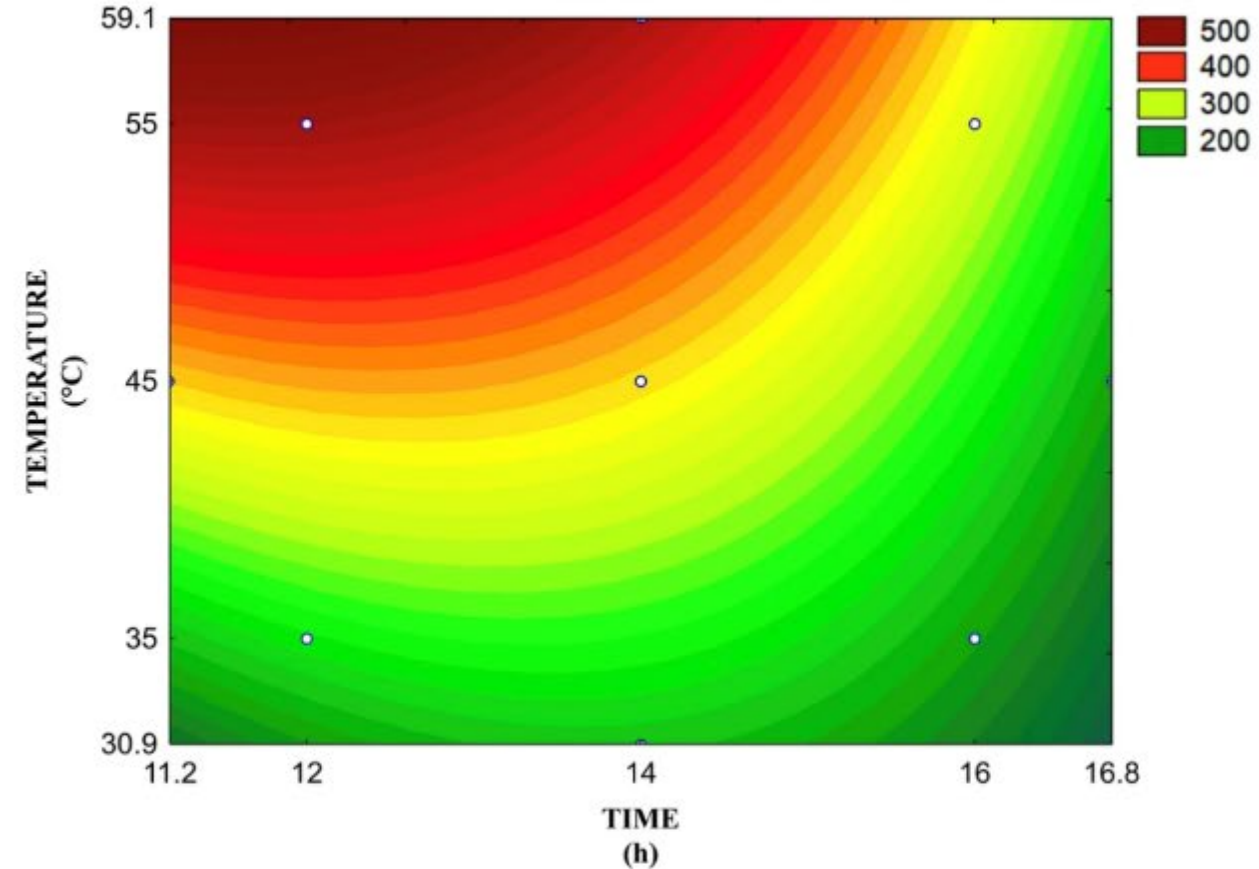
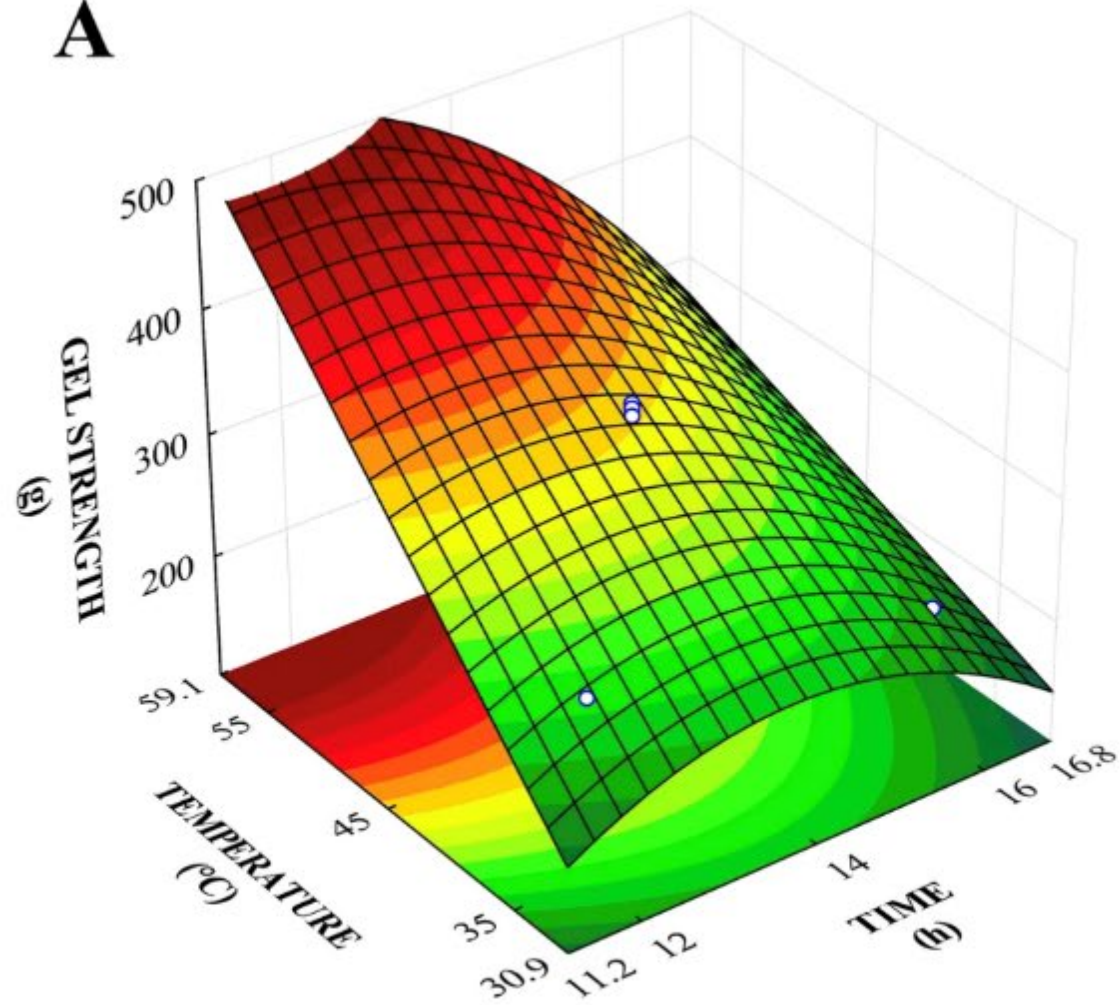
To request permission for a type of use not listed, please contact [Springer Nature](#)

Supplementary Information

[Supplementary Tables.](#)

Wordfile: 41598_2021_99085_MOESM1_ESM.docx

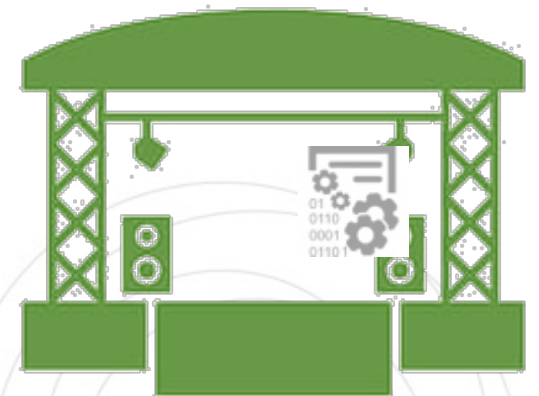
Independent variables			Experimental results			Predicted results		
Assays	Time (h)	Temperature (°C)	Gel strength (g)	Moisture (%)	Water activity	Gel strength (g)	Moisture (%)	Water activity
1	-1 (12)	-1 (35)	247.0	10.45	0.376	247.2	10.73	0.380
2	1 (16)	-1 (35)	203.0	10.33	0.370	2026	10.44	0.377
3	-1 (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-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.

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
-



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

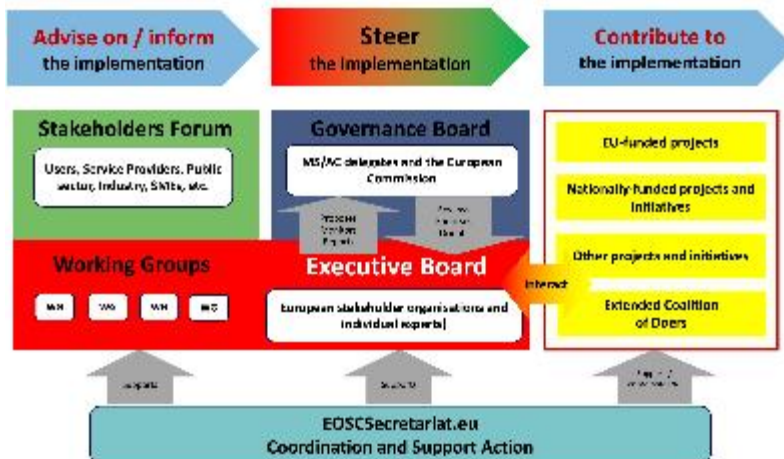
- Create in the long run truly broad multidisciplinary interoperability
- For the short term this means: optimal Authentication and Authorisation Infrastructure (AAI); stepwise growing interoperability

Social

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

History of a partnership

Governance of EOSC 2019-2020



**Initial
EOSC Governance**

2019-2020

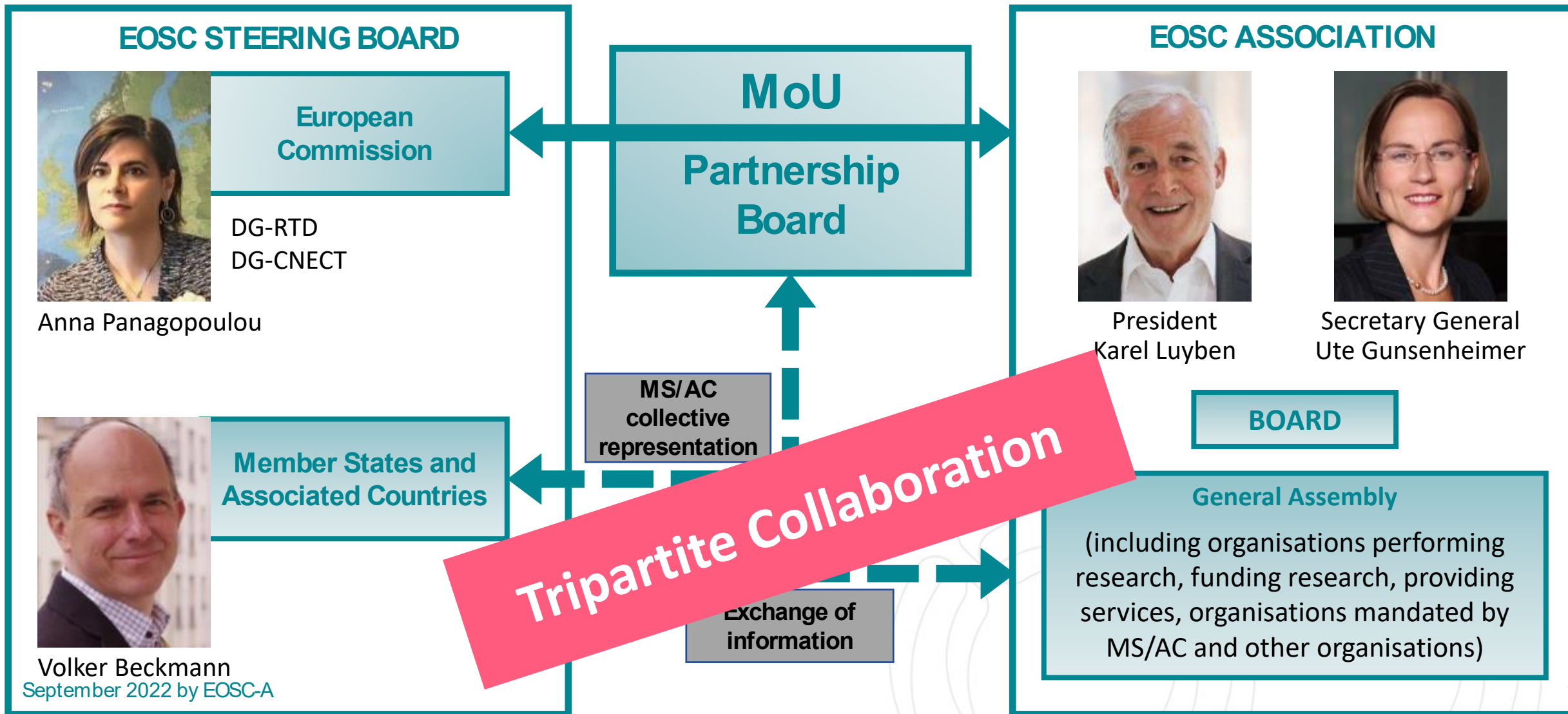
**EOSC
Association AISBL**

29-07-2020

**Co-programmed
EOSC Partnership**

23-06-2021

EOSC Partnership



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

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

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

EOSC Association



- (1) to provide a single voice for the advocacy 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.

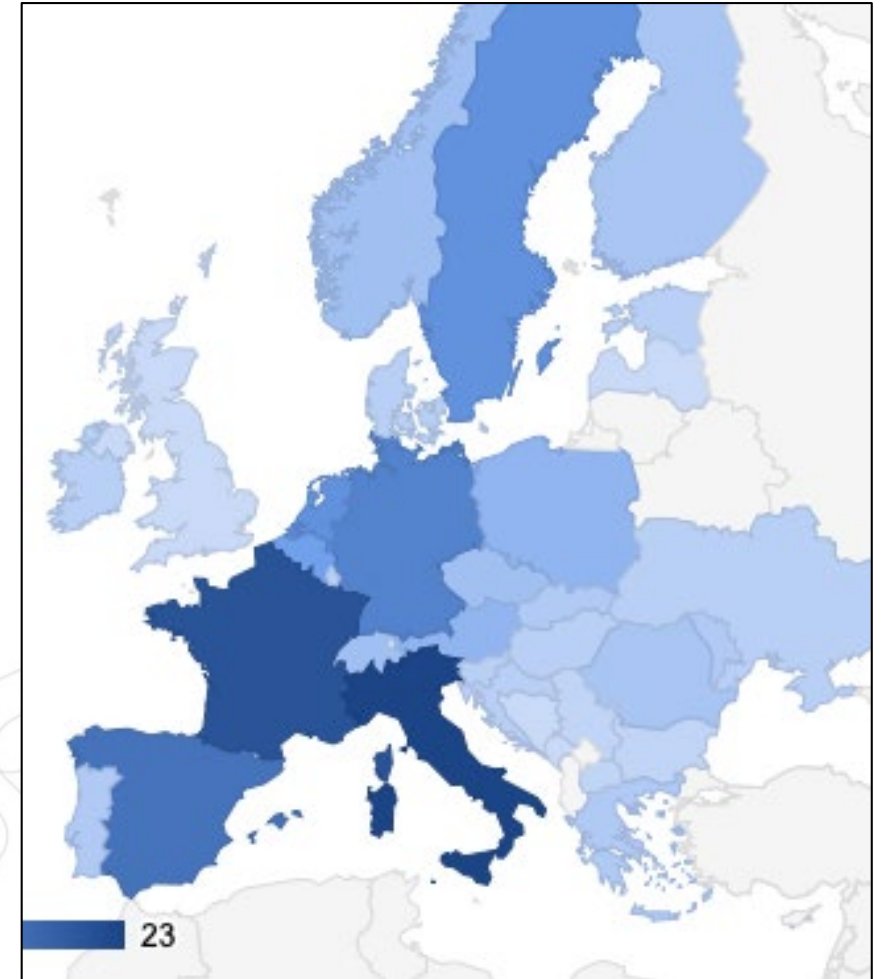
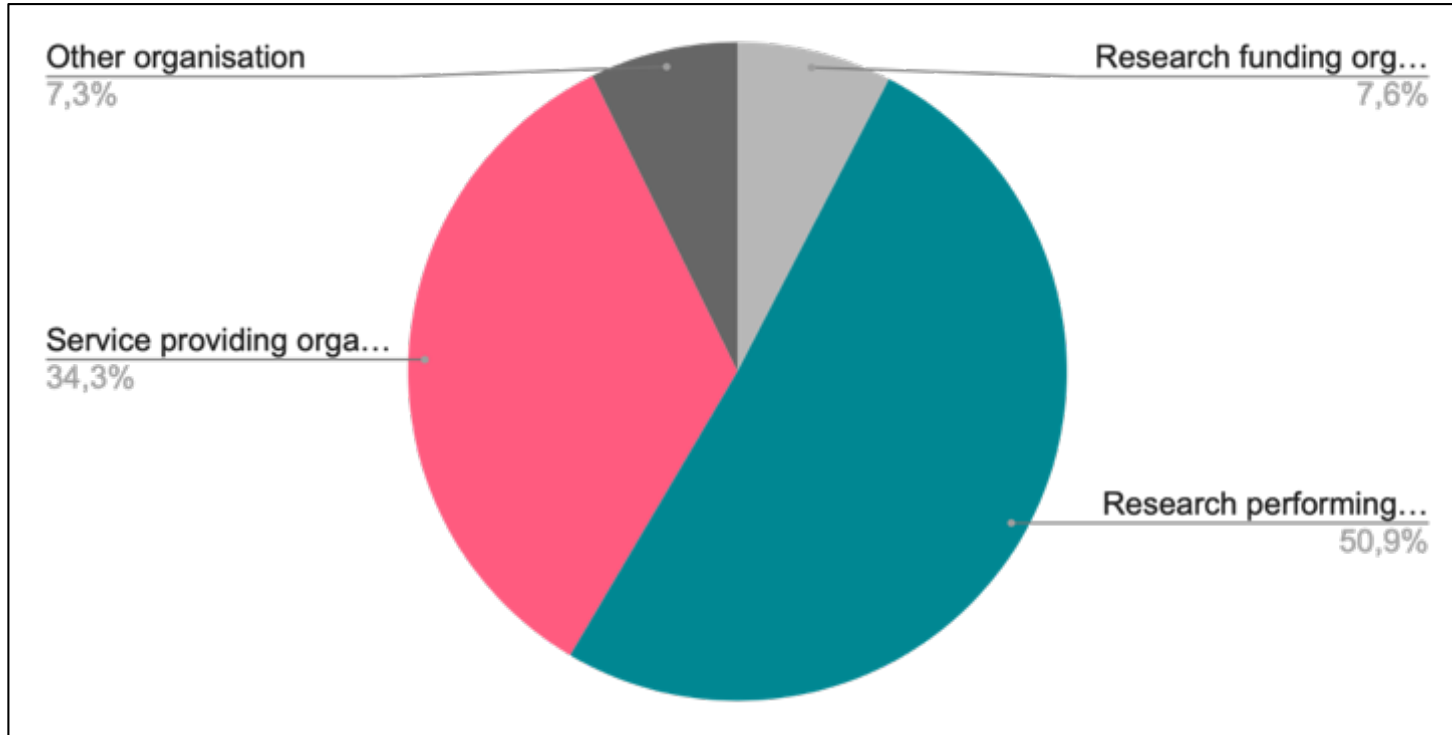


Tasks for EOSC Association to see to:

- 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 'EOSC' trademark(s)
- Contribute to Horizon EU policy

eosc 163 Members and 78 Observers

A strong memberbase



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

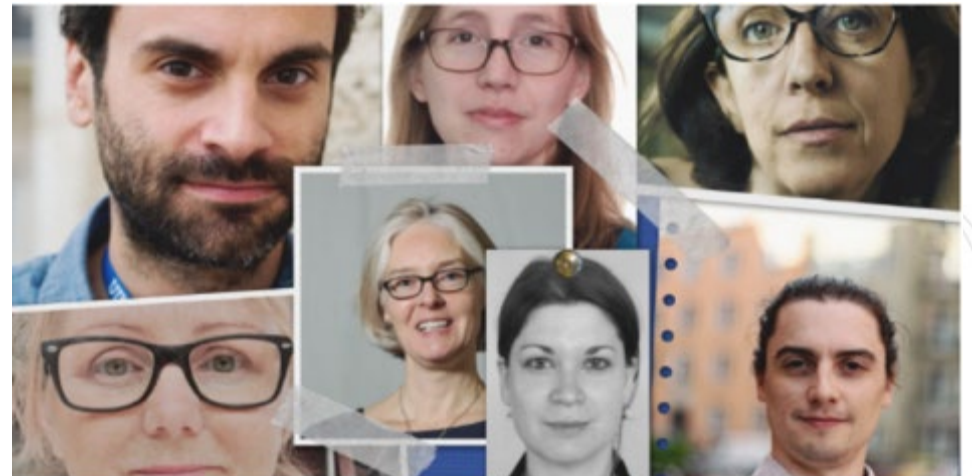
- Semantic interoperability
- FAIR metrics and data quality

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

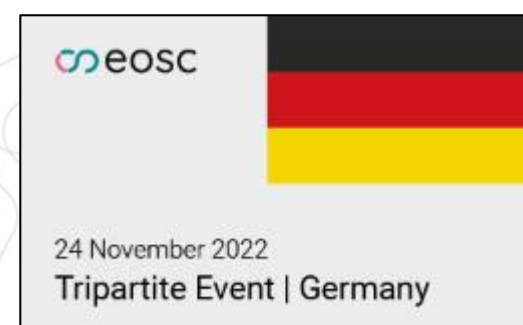
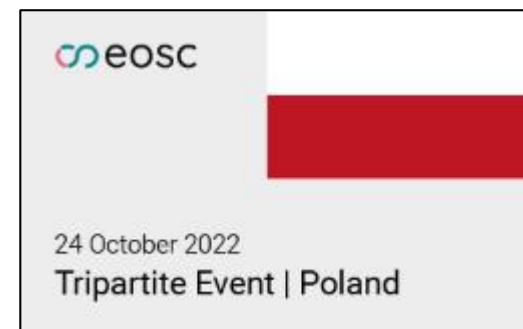


The EOSC Association Today

General Assembly #4, 24-25 May 2022



eosc Tripartite Events



EOSC interactions

- Members and Observers (161 + 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 HE-projects (9 >> 50?)
- Research Infrastructures and ESFRI
- Data Spaces in conception
- European Partnerships (5 >> 49)
- EUA, CESAER, LERU, ALLEA, LIBER, etcetera
- Cluster projects; regional projects

neosc



Establishing the
EOSC Brand



 eosC

Family

AI4

 eossc

 eossc

Focus

 eossc

cancer

 eossc

FAIR-EASE

 eossc

FAIR-IMPACT

 eossc

FAIRCORE4EOSC

 eossc

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 the water concentration for the compositions of gelatine, then I will be able to predict the drying behaviour of the material under different conditions in different scales of different drying equipment, using the computerprogram developed. Thus saving a whole lot of time in the development and less 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

THANKS

