# **European Open Science Cloud (EOSC)**

**Karel Luyben**President of the EOSC Association

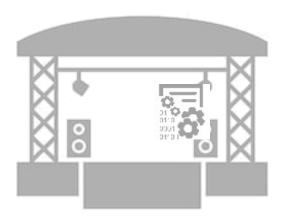
April 23, 2021

RDA 17<sup>th</sup> plenary Co-located event on EOSC



# "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 requirments
- In interaction with other regions of the world





# Twinning the data- to the e-infrastructure

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 of servicing data and creating interoperability.



**EOSC-ecosystem** 





## The Vision

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

Enable interdisciplinary research to address societal challenges

Develop a

publications

and software)

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

> Web of FAIR Data and Services (including

**Give Europe** 

a global lead in research data management



Stimulate the

emergence of a

competitive EU

cloud sector

## **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 closed 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.



## The EOSC Association

**Mission:** Advancing the European Open Science Cloud to accelerate the creation of new knowledge, inspire education, spur innovation and promote accessibility and transparency

- To provide a single voice for advocacy and representation for the broader EOSC stakeholder community in Europe
- To promote the alignment of European Union research policy and priorities with activities coordinated by the Association (SRIA)
- To ultimately enable seamless access to data through interoperable services that address the entire research data life cycle, from discovery to storage, management, analysis and re-use across borders and scientific disciplines

#### Status: AISBL\*

- Formed in July 2020 by founding members CESAER, GÉANT, CSIC and GARR
- Members are relevant national, regional and European stakeholders in the EOSC ecosystem: Research performing organisations; Research funding organisations; Research service providing organisations
- A European Co-programmed Partnership, between the EC and the EOSC Association, is set to begin
   from early 2021
   \*international non-profit association under Belgian law



## **Board of Directors**

Karel Luyben, CESAER (President)

Klaus Tochtermann, ZBW; 3-year

Marialuisa Lavitrano, University Milano – Bicocca; 3-year

Suzanne Dumouchel, CNRS; 3-year

Sarah Jones, GÉANT; 2-year

Ignacio Blanquer, UPV; 2-year

Ronan Byrne, HEAnet; 1-year

Bob Jones, CERN; 1-year

Wilhelm Widmark, University of Stockholm; 1-year











Director, three year mandate

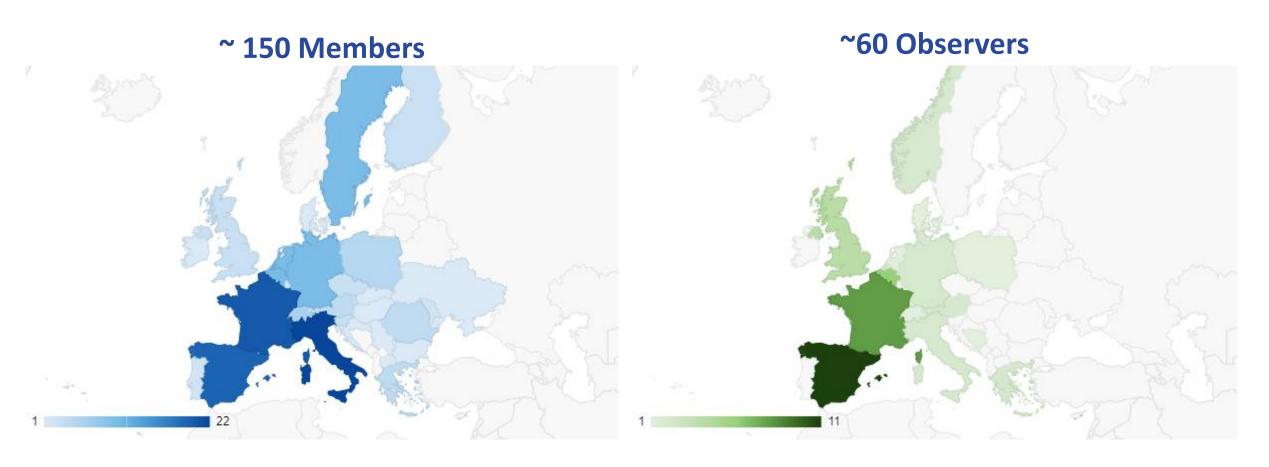








# **EOSC** membership by geographical spread



How to join the Association: <a href="https://www.eosc.eu/join-association">https://www.eosc.eu/join-association</a>



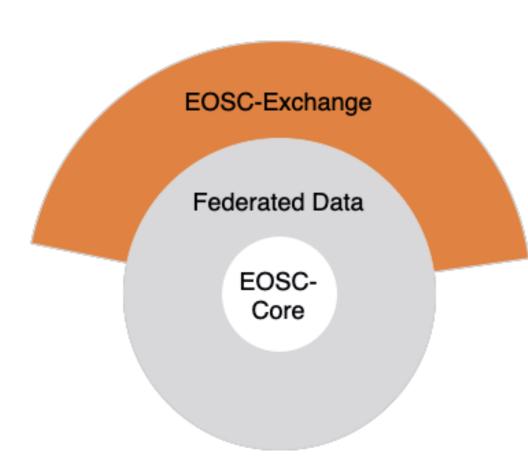
## Rules of Participation (RoP)

- Minimal set of rules that specify the rights, obligations and accountability governing EOSC activities
- RoP are set at a level to encourage wide participation, including from less advanced research communities
- Many of the Rules will need to provide encouragement rather than impose strict requirements, but can develop over time to include more stringent conditions
- The EOSC Association will be responsible for the RoP
  - Guidelines on ownership and evolution of RoP: https://doi.org/10.2777/67118



# First iteration-minimum viable EOSC (MVE)

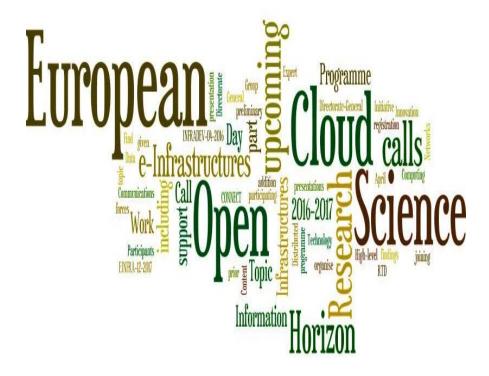
- The MVE includes EOSC-Core and EOSC-Exchange which work with federated FAIR datasets
- MVE must enable the federation of existing and planned research data infrastructures
- Begin with simple use cases FAIR open data not sensitive or closed







### Functions for EOSC Association 2020+



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





# Dutch COVID-19 Data Support Programme

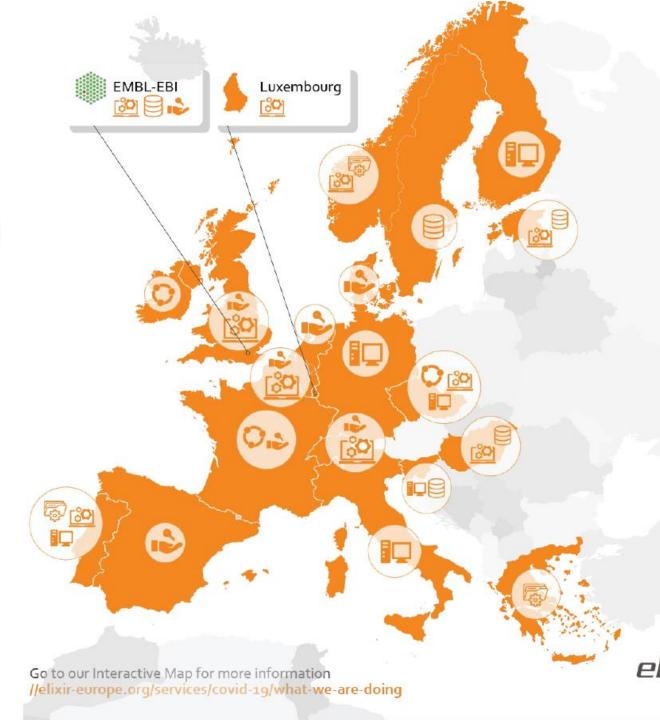
Health-RI launched the Dutch COVID-19 Data
Support Programme. To support investigators and health care professionals with tools and services in their search for ways to overcome the pandemic and its health consequences.



- The outcome of tomorrow's COVID-19 patient is strongly determined by having access to the data of today's patient
- To collect and find the right data, to make them accessible, and to reuse them is non-trivial
- Currently many data collection initiatives worldwide
- Health-RI provides overview of initiatives and provides services & tools
- Health-RI works towards national portal for observational Covid-19 studies



- Open and rapid access to data, tools and workflows
- build on open standards
- alignment of national infrastructures and European research infrastructures
- aligned with developing EOSC



## **EOSC** on a global stage

- All countries have access to the EOSC Association as observers
- Service providers from third countries can already participate in EOSC, but (of course) have to adhere to 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
- The Global Open Commons Interest Group could be helpful in building the right network













# THANK YOU

