



European Open Science Cloud: A single European market for research data and services

Bob Jones, CERN
EOSC Association Director

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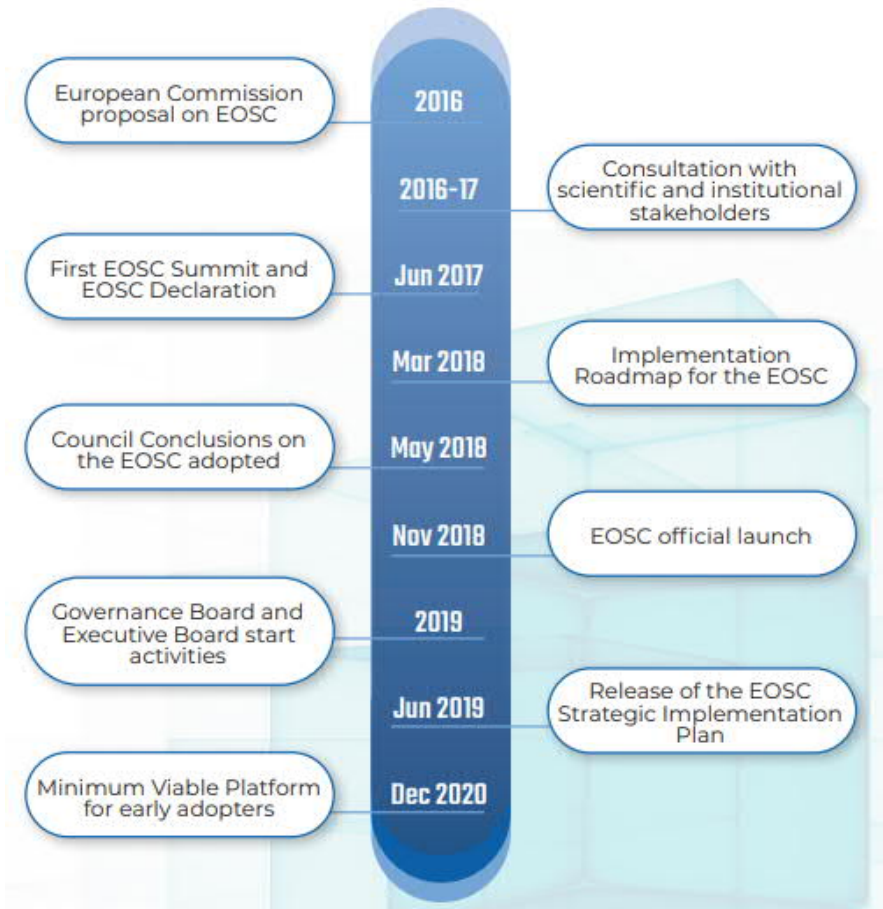


European Open Science Cloud

"We are creating a European Open Science Cloud now. It is a trusted space for researchers to store their data and to access data from researchers from all other disciplines. We will create a pool of interlinked information, a 'web of research data'. Every researcher will be able to better use not only their own data, but also those of others. They will thus come to new insights, new findings and new solutions."

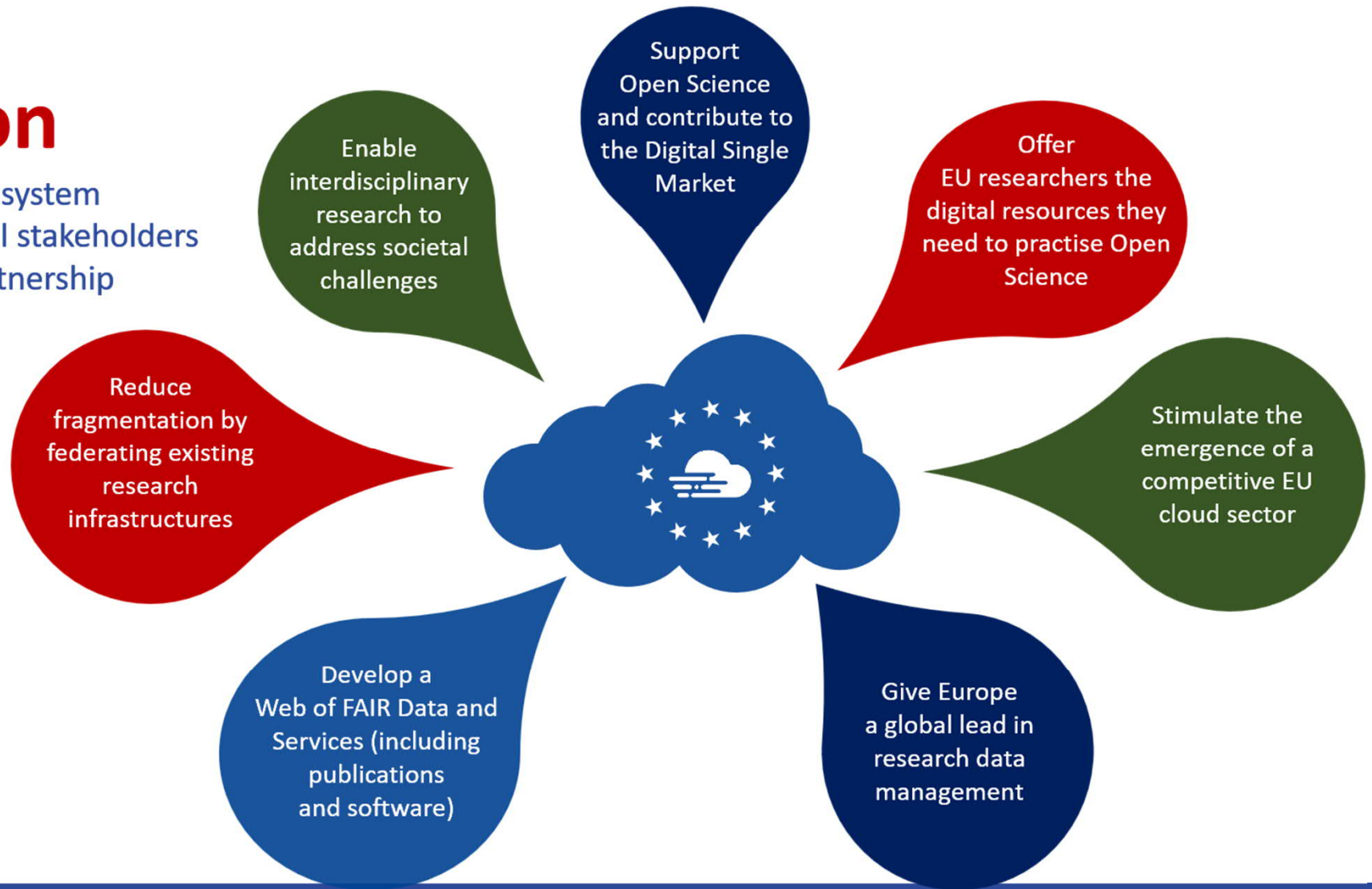


Ursula von der Leyen,
European Commission President
World Economic Forum in Davos,
January 2020



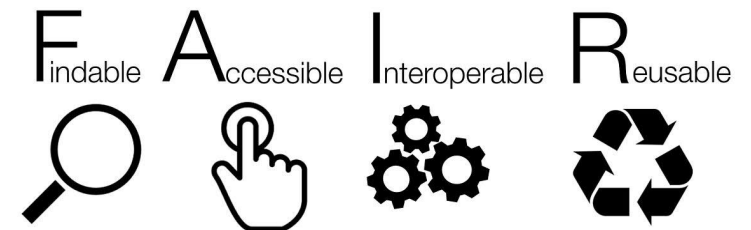
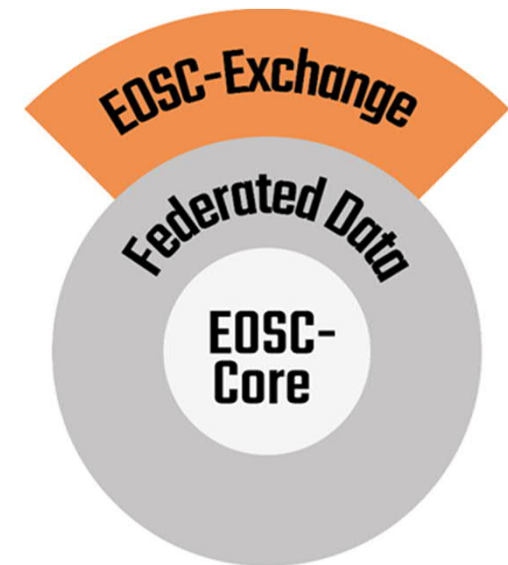
The Vision

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



First iteration – a Minimum Viable EOSC (MVE)

- ★ Establish an initial MVE that will enable the federation of existing and planned research data infrastructures
- ★ MVE includes EOSC-Core and EOSC-Exchange which work with federated FAIR datasets
- ★ Main focus and added value: connect disciplinary infrastructures and enable cross-disciplinary research

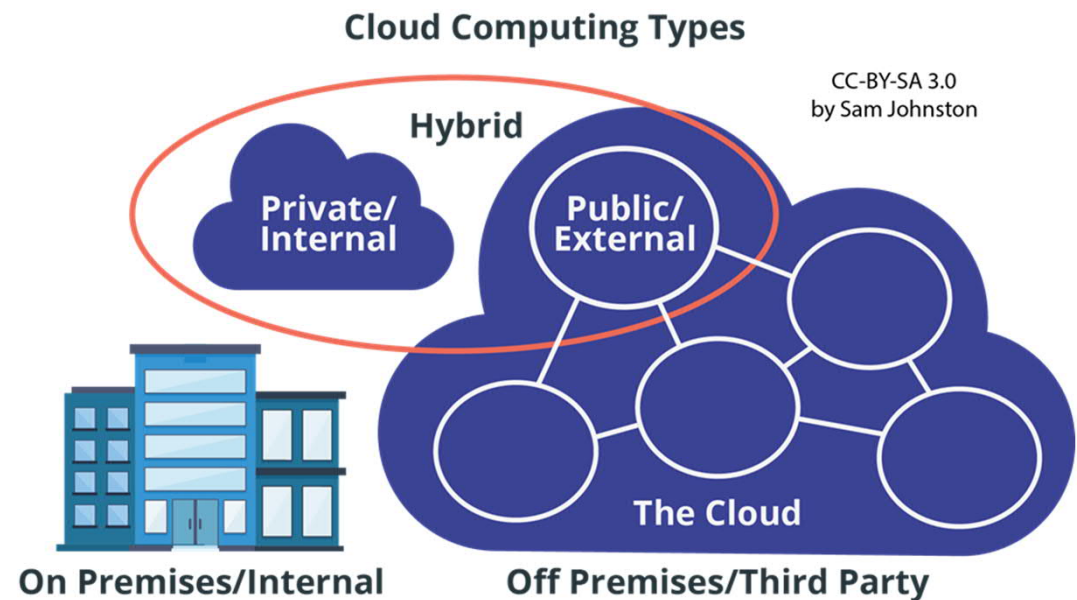


EOSC-Core

- ★ Shared open science policy framework
- ★ An instantiation of the EOSC interoperability Framework including
 - ★ Authentication and Authorization Interoperability (AAI)
 - ★ Persistent Identifiers
 - ★ Interoperable metadata
 - ★ Data access
 - ★ Service management and access
 - ★ Open metrics
- ★ Security policies and procedures to ensure consistent and coordinated security operations across the federated services
- ★ Operational support services for EOSC-Core and made available to those federating services connecting to the EOSC-Core.
- ★ Web-portal including web-content as well as supply and demand facing services providing for accessing the EOSC resources.

EOSC-Exchange

- ★ EOSC-Exchange builds on EOSC-Core
- ★ Providing rich set of services to exploit FAIR data and encouraging its reuse to publicly funded researchers
- ★ Rivalrous services (to transport, store and compute research data, etc.) will be made available via EOSC-Exchange
- ★ Participation as a service provider requires to conform to predefined Rules of Participation



RoP (v2.2) – The Rules (1 of 2)

Juan Bicarregui

UKRI-STFC Head of Data Division
Scientific Computing Department

EOSC Executive Board

RoP WG coordinator

- *EOSC is open to all*
 - As open as possible as closed as necessary
 - Resources and Participants
- *EOSC resources are registered in an EOSC recognised catalogue*
 - Really a definition, but important to include
 - Not a single catalogue, but a catalogue of catalogues (recursively)
- *EOSC participants adhere to principles of proper research conduct*
 - EOSC participants agree to adhere to the Rules of Participation
- *EOSC participants agree to their use of EOSC being monitored and analysed*
 - Quality through transparency
- *Participation in EOSC is subject to the policy and legislation of EU*

RoP (v2.2) – The Rules (2 of 2)

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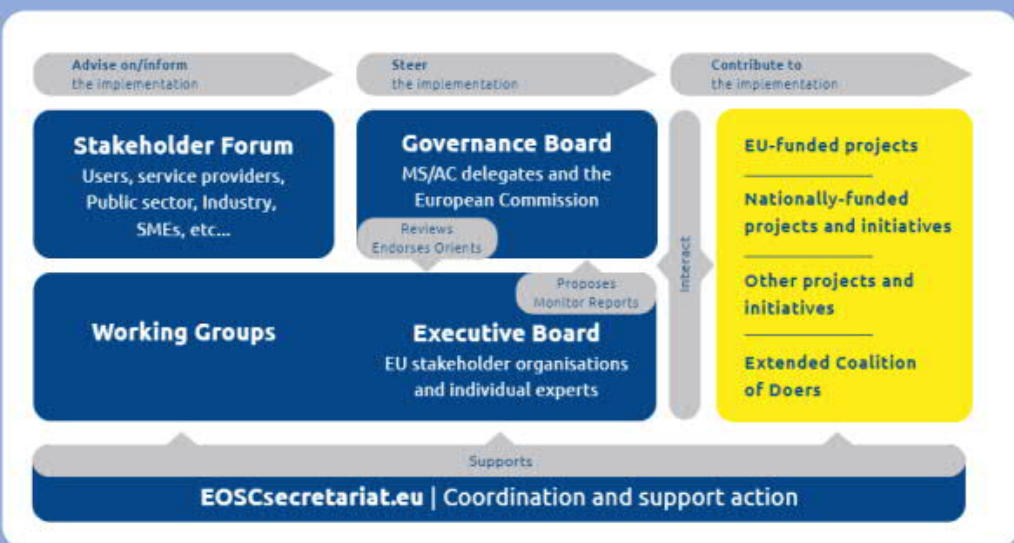
EOSC Executive Board

RoP WG coordinator

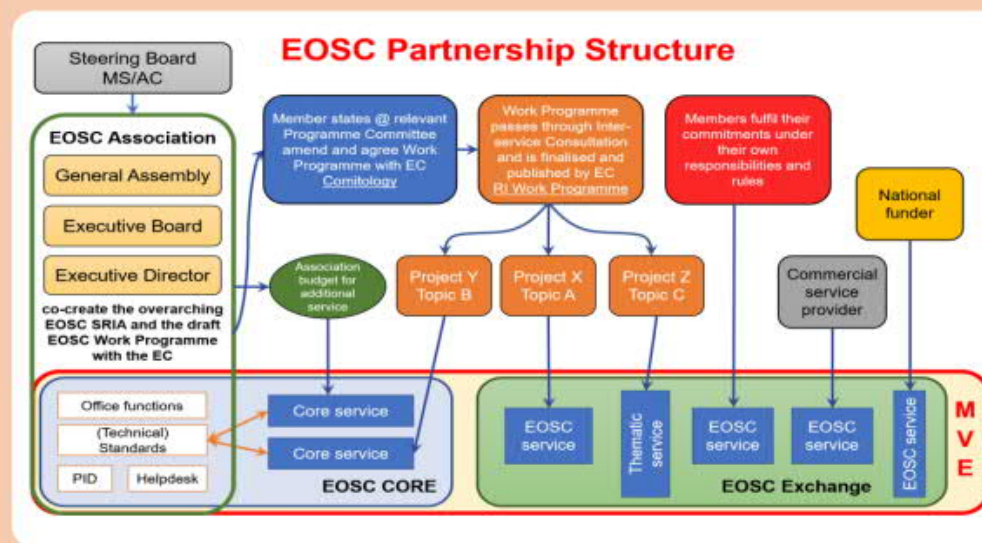
- *EOSC Users adhere to the terms of use of the resources they use*
- *EOSC Users reference the resources they use in their work*
- *EOSC Resources are freely discoverable*
 - *Ownership of resources does not change when they are made available via EOSC*
 - *Access to EOSC resources should be as simple as possible*
 - *Any charges which may apply are stated clearly*
- *EOSC Data align with FAIR principles*
- *EOSC Services align with EOSC architecture & interoperability guidelines*

EOSC governance is transitioning

Current governance structure until 31 December 2020



New EOSC European Partnership



Join the EOSC Association to influence <https://www.eosc.eu/> future directions

References (I/II)

- ★ Strategic Research and Innovation Agenda (SRIA) of the European Open Science Cloud (EOSC)
Draft 0.8 (v 1.0 to be published in Feb'01) <https://www.eoscsecretariat.eu/sites/default/files/eosc-sria-v08.pdf>
- ★ Solutions for a Sustainable EOSC: A FAIR Lady report from the EOSC Sustainability WG
<https://op.europa.eu/en/publication-detail/-/publication/581d82a4-2ed6-11eb-b27b-01aa75ed71a1/language-en/format-PDF/source-175468053>
- ★ EOSC Rules of Participation
<https://op.europa.eu/en/publication-detail/-/publication/a96d6233-554e-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-184432576>
- ★ Recommendations on certifying services required to enable FAIR research outputs within EOSC
<https://op.europa.eu/en/publication-detail/-/publication/70aa74b5-53bf-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-184009543>

References (II/II)



Defining the technical framework required to enable and sustain an evolving EOSC federation of systems

In this page are the outputs of the EOSC Executive Board [Architecture Working Group](#).

Outputs

-  **Scholarly Infrastructures for Research Software - Official publication**
-  **A Persistent Identifier (PID) policy for the European Open Science Cloud - Official publication (in collaboration with EOSC FAIR WG)**
-  **PID Architecture for the EOSC - Official publication**
-  EOSC AAI Architecture - Draft for consultation
-  EOSC Architecture WG PID Task Force: Charter
-  EOSC Architecture WG AAI Task Force: Charter
-  EOSC AAI First Principles
-  EOSC Architecture WG SIRS Task Force: Charter
-  In cooperation with EOSC FAIR WG - EOSC Interoperability Framework DRAFT

<https://eoscsecretariat.eu/eosc-architecture-wg-outputs>