EOSC (European Open Science Cloud)

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Chair of Executive Board of EOSC

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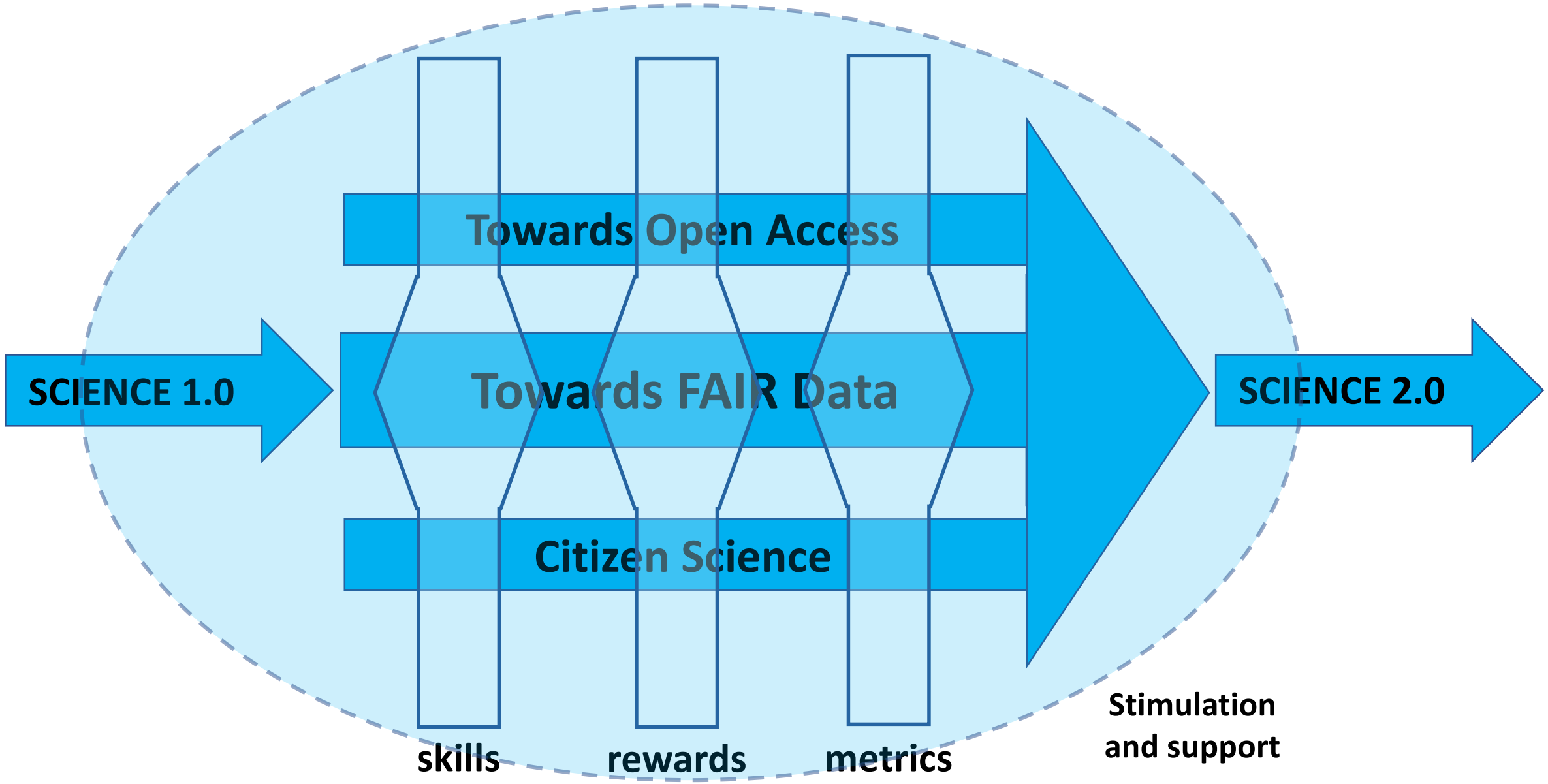
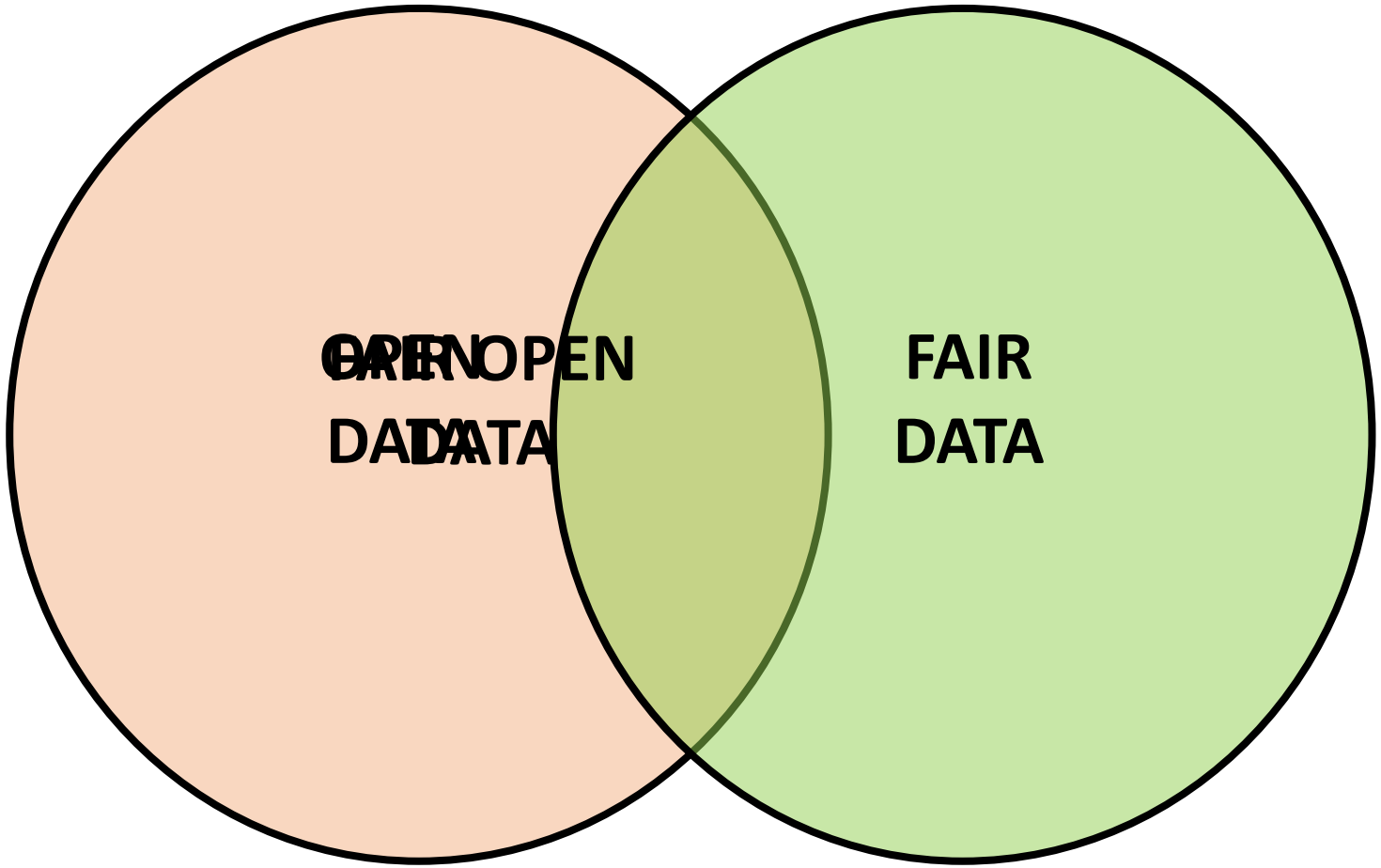
NL-Dataprijs 2020

OPEN SCIENCE

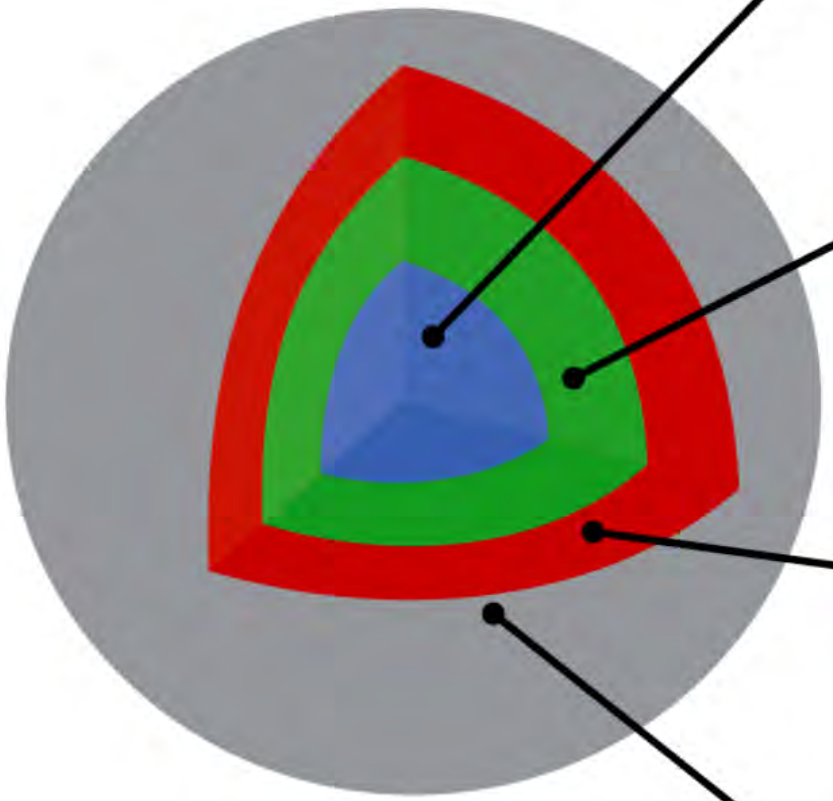


OPEN DATA and/or FAIR DATA



FAIR ≡
Findable
Accessible
Interoperable
Reusable

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



DIGITAL OBJECT

Data, code and other research outputs

At its most basic level, data or code is a bitstream or binary sequence. For this to have meaning and to be FAIR, it needs to be represented in standard formats and be accompanied by Persistent Identifiers (PIDs), metadata and documentation. These layers of meaning enrich the object and enable reuse.

IDENTIFIERS

Persistent and unique (PIDs)

Digital Objects should be assigned a unique and persistent identifier such as a DOI or URN. This enables stable links to the object and supports citation and reuse to be tracked. Identifiers should also be applied to other related concepts such as the data authors (ORCIDs), projects (RAIDs), funders and associated research resources (RRIDs).

STANDARDS & CODE

Open, documented formats

Digital Objects should be represented in common and ideally open file formats. This enables others to reuse them as the format is in widespread use and software is available to read the files. Open and well-documented formats are easier to preserve. Data also need to be accompanied by the code use to process and analyse the data.

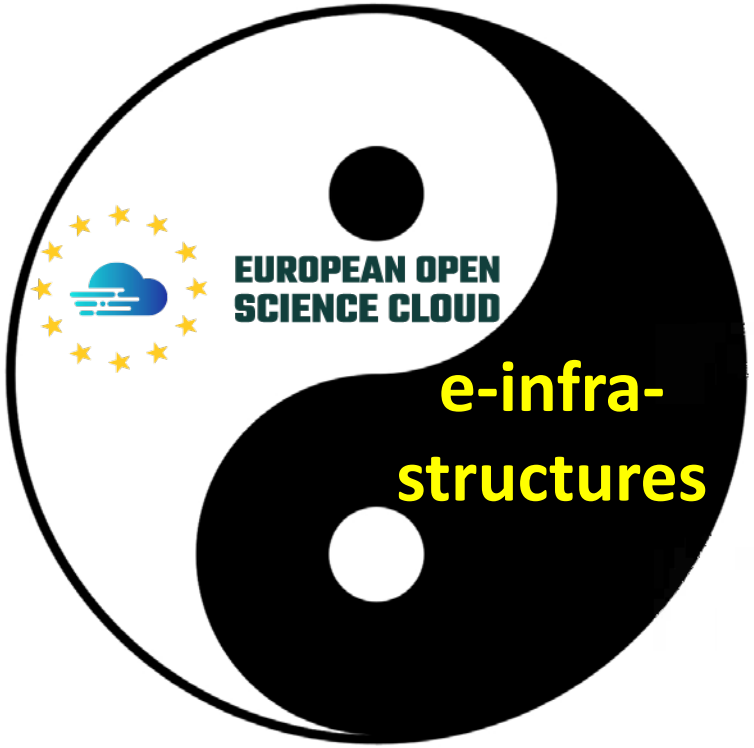
METADATA

Contextual documentation

In order for Digital Objects to be assessable and reusable, they should be accompanied by sufficient metadata and documentation. Basic metadata will enable data discovery, but much richer information and provenance is required to understand how, why, when and by whom the objects were created. To enable the broadest reuse, they should be accompanied by a plurality of relevant attributes and a clear and accessible usage license.

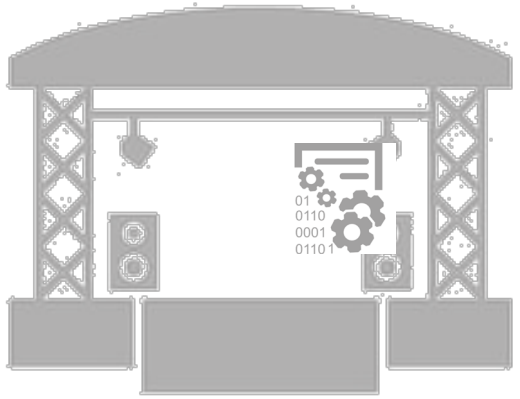
Twinning the data- to the e-infrastructure

EOSC could be seen as a twin sister (or brother) of the e-infra-structure organisations. One offering the store, compute and connect services and the other servicing the data and the interoperability.



“A web of scientific insight”

- Web of FAIR research data (and services)
- Federation of existing services
- Virtual space where science producers and consumers come together
- An open-ended range of content and services
- Quality mark « Data made in Europe »



Boundary Conditions for EOSC

- Core funding for EOSC from EU
- Inclusiveness of all stakeholders
- Core follows subsidiarity principle
- Providers with a shared purpose
- Countries have different structures
- Self-inclusivity as much as possible
- Hardware agnostic infrastructure
- Focus on FAIR data and related services

Some of things worked on in 2020

- EOSC Strategic Implementation plan
- Landscape analysis report and consultation
- Rules of Paticipation Consultation
- PID policy + Interoperability framework drafts
- EOSC Partnership Proposal
- EOSC Strategic Research and Innovation Agenda
  - Consultation on the draft SRIA over summer
- EOSC Association

EOSC Association

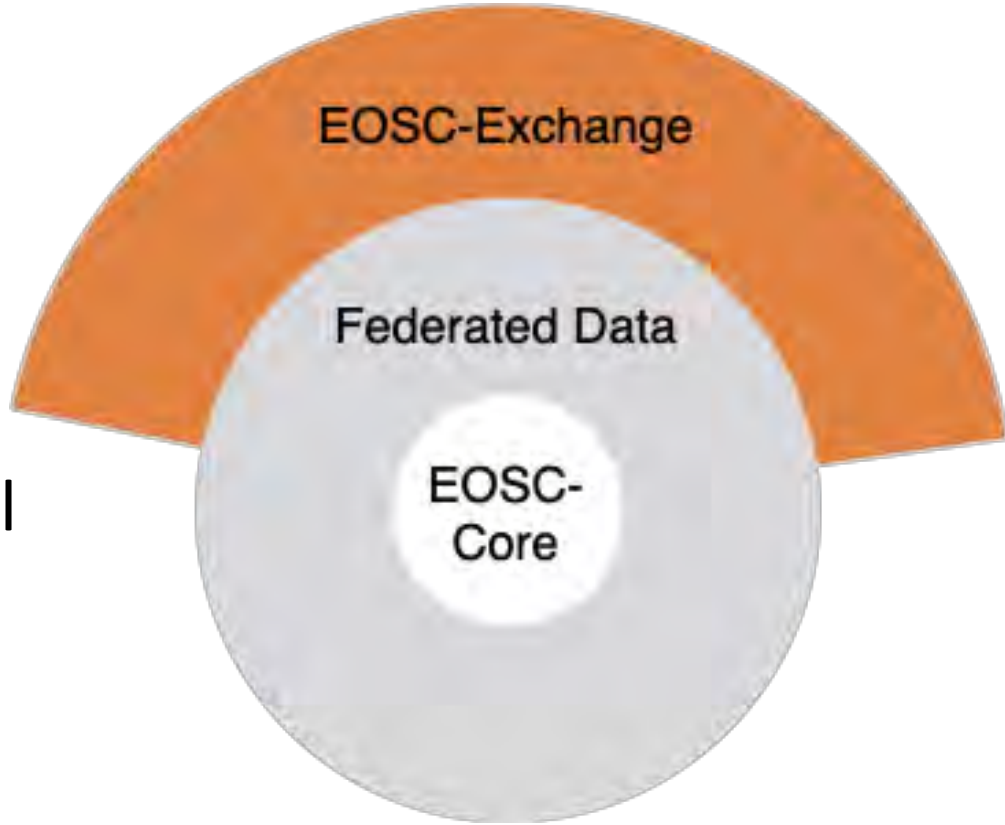
- EOSC Governance created an EOSC Association (AISBL)
- Membership aims at Research Performing; Research Funding and Service Proving organisations
- A European **Partnership** Agreement, between the EC and said Association, is set to begin from the beginning of 2021
  - After December 2020, the Governance and Executive Boards, along with the EOSC Working Groups, will cease to exist
- Joining the EOSC Association = Joining the EOSC Partnership!

Core functions for EOSC Association 2020+

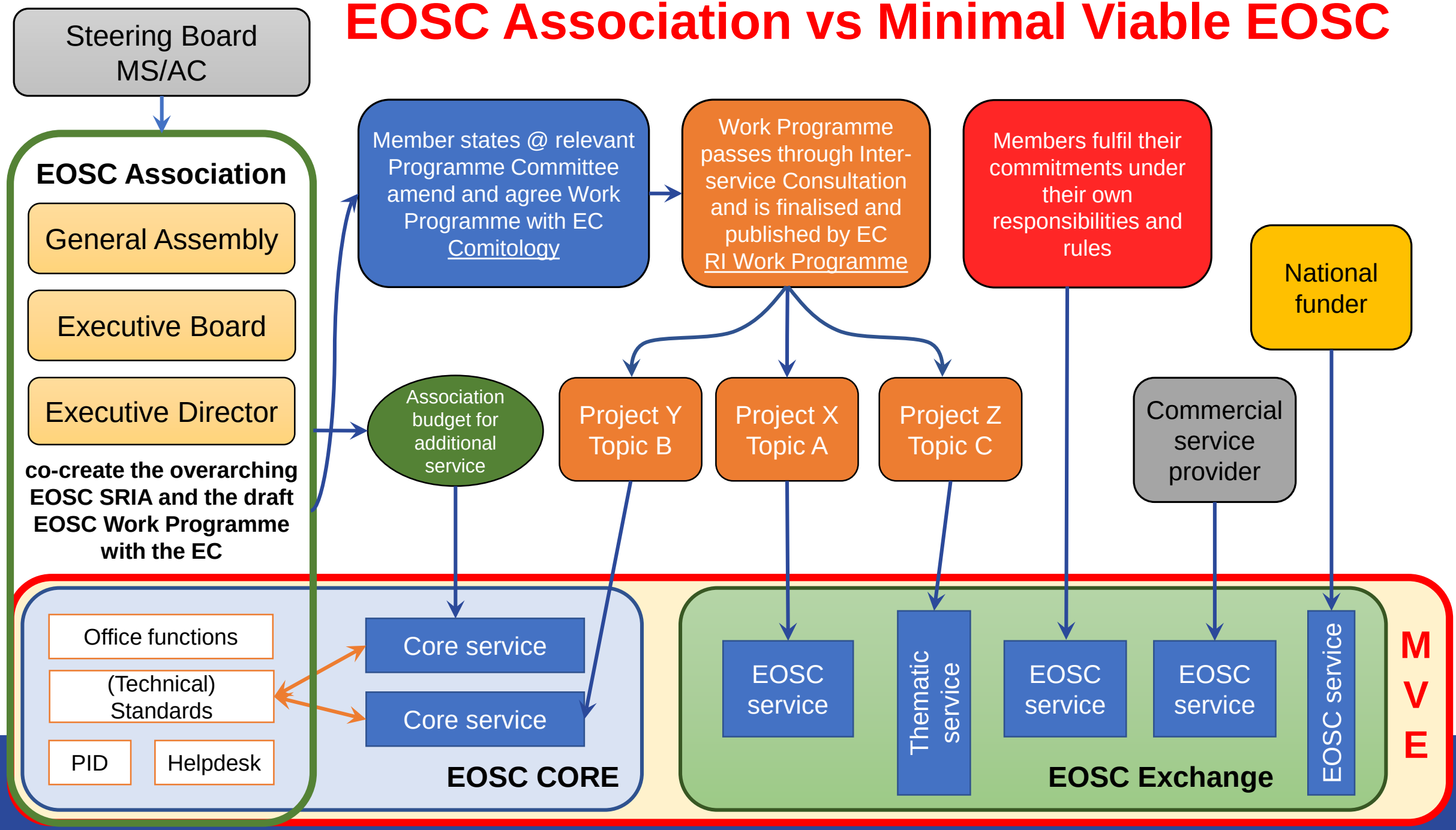
- Develop and govern federating core
- Manage compliance framework
- Manage trusted certification
- Manage the AAI
- Manage PID policies
- Outreach to stakeholders
- Monitor services and transactions
- Manage ‘EOSC’ trademark(s)
- Contribute to Horizon EU policy

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
- Federate the disciplinary cluster and regional projects as a critical first step
- Begin with simple use cases – open data not sensitive or closed

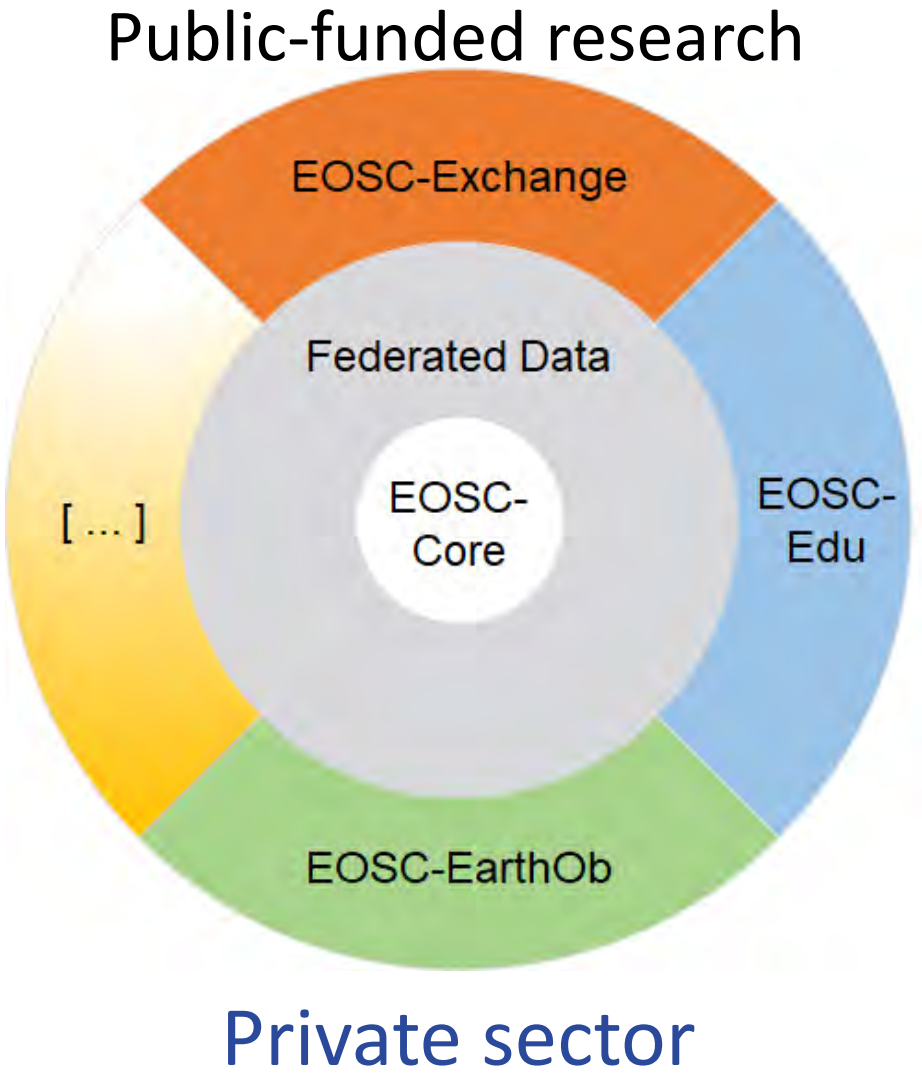


EOSC Association vs Minimal Viable EOSC



Proposed second and third iterations

- Extensions to serve public sector and industry
- These are not completely new users as some public sector and industrial partners will already use MValE
- Would ideally be one ‘marketplace’ but differing requirements and legislation may require linked but alternately governed spaces



THANK YOU