

European Open Science Cloud (EOSC)

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President of the EOSC Association

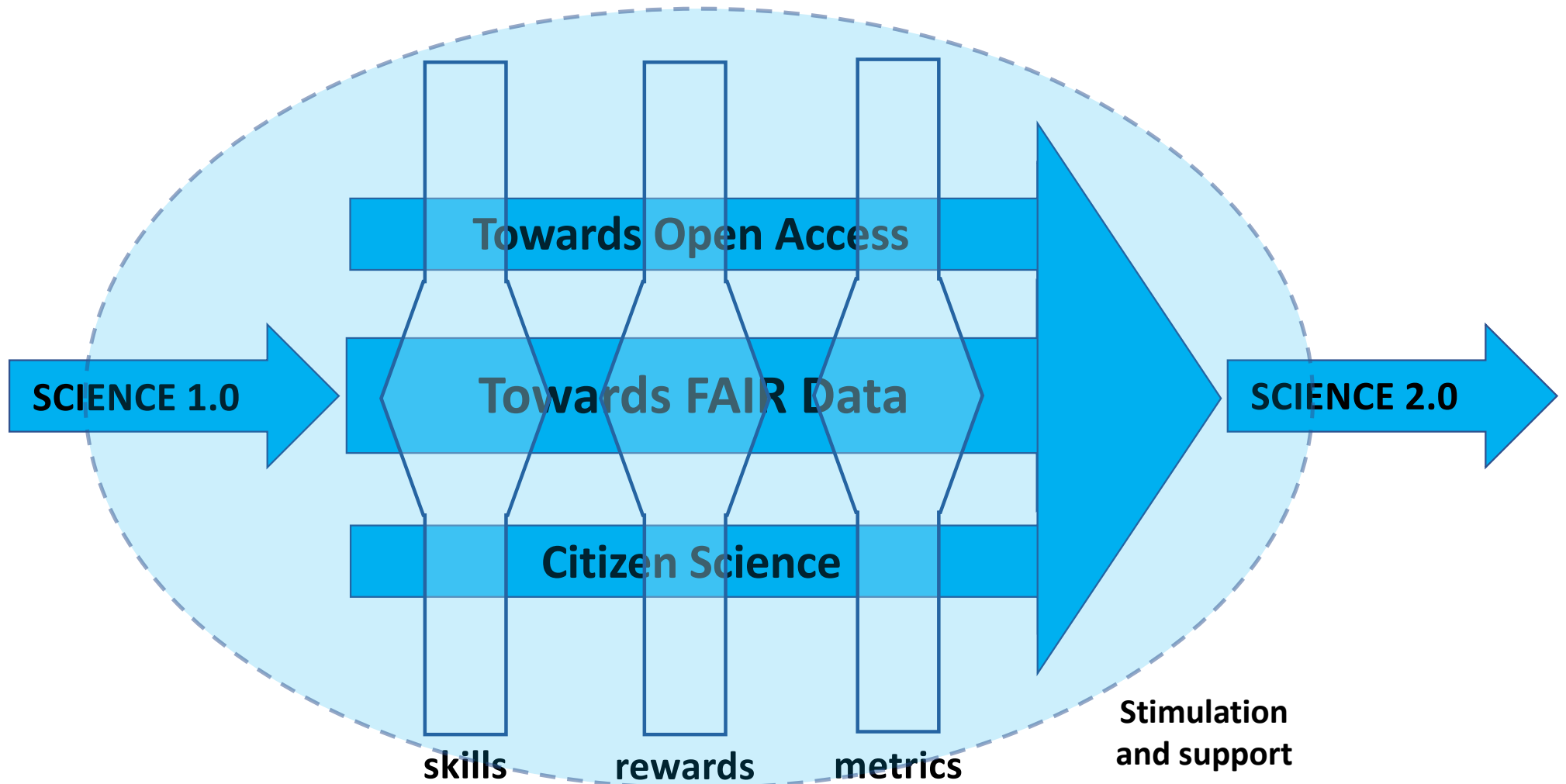
June 30, 2021

EOSC meeting, Hungary

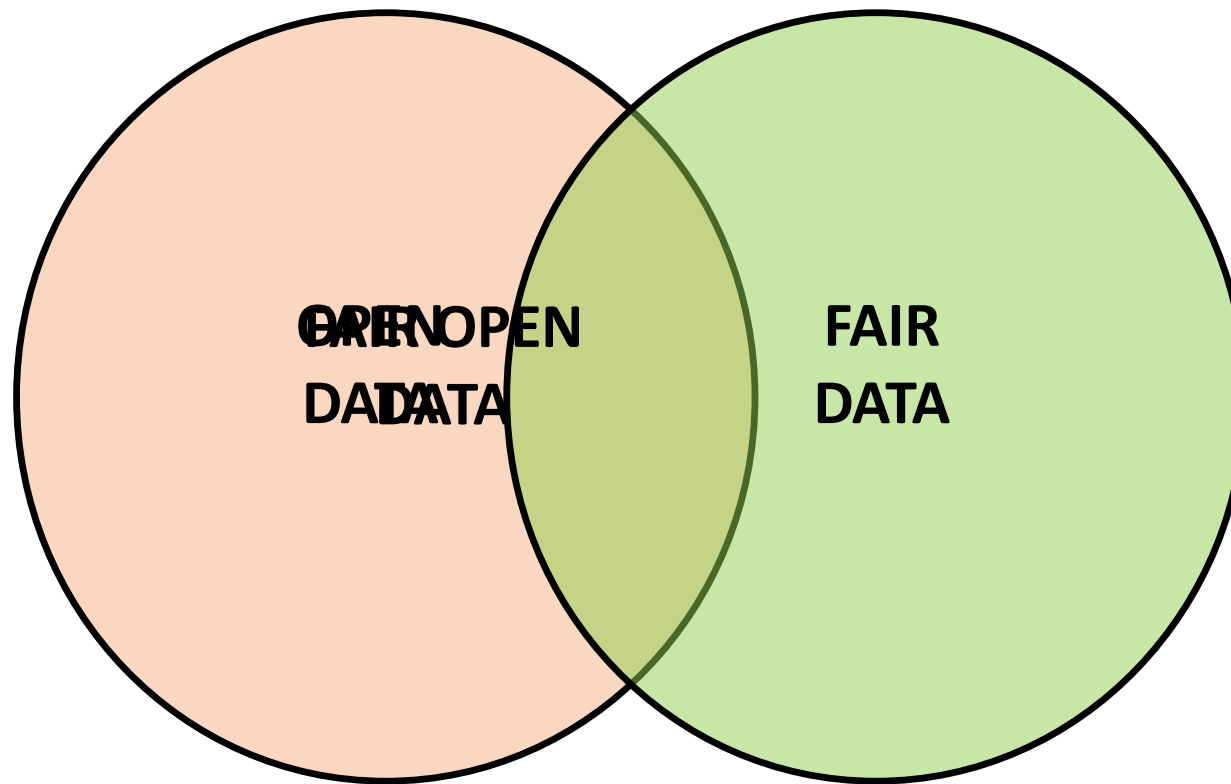


**EUROPEAN OPEN
SCIENCE CLOUD**

OPEN SCIENCE

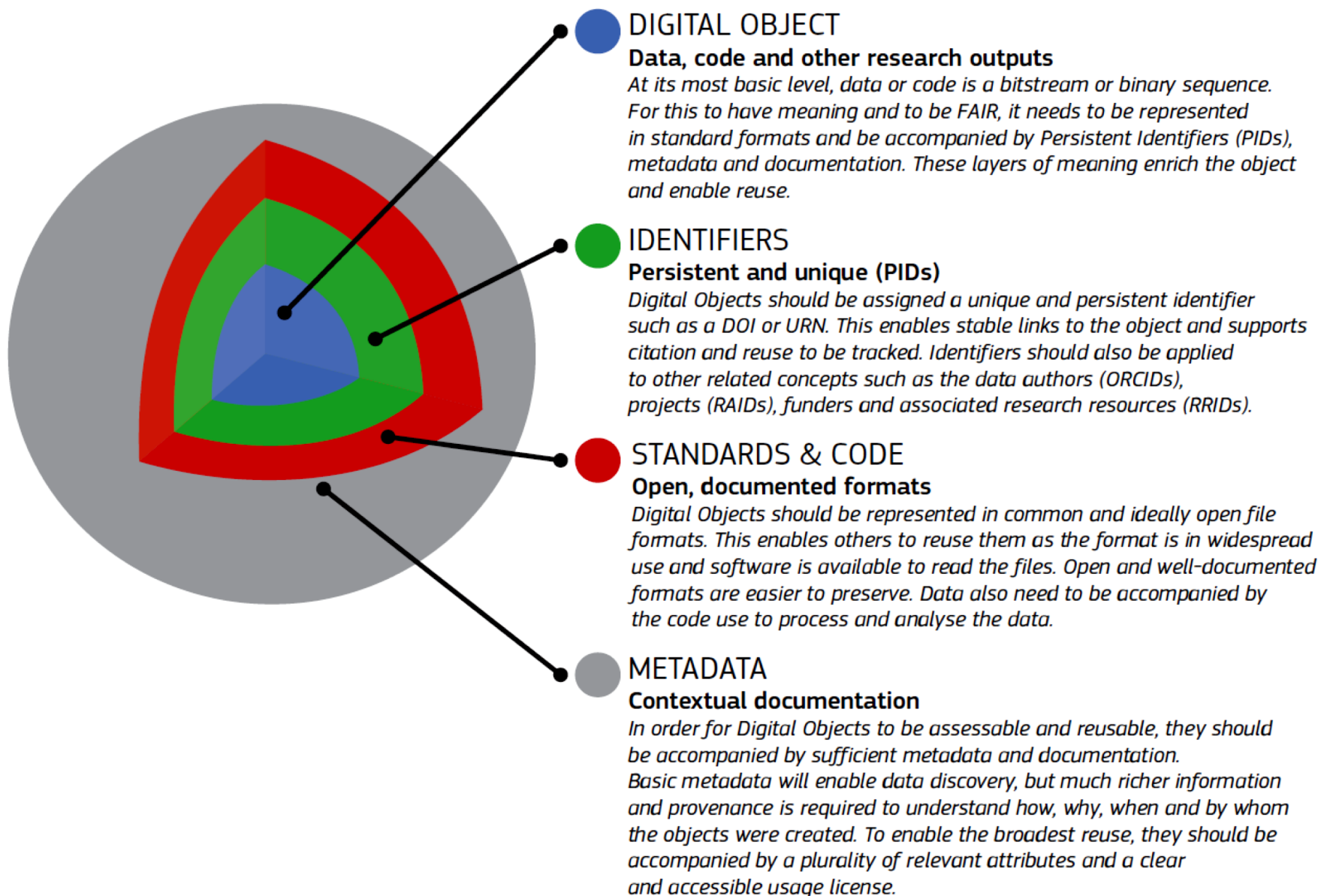


OPEN DATA and/or FAIR DATA



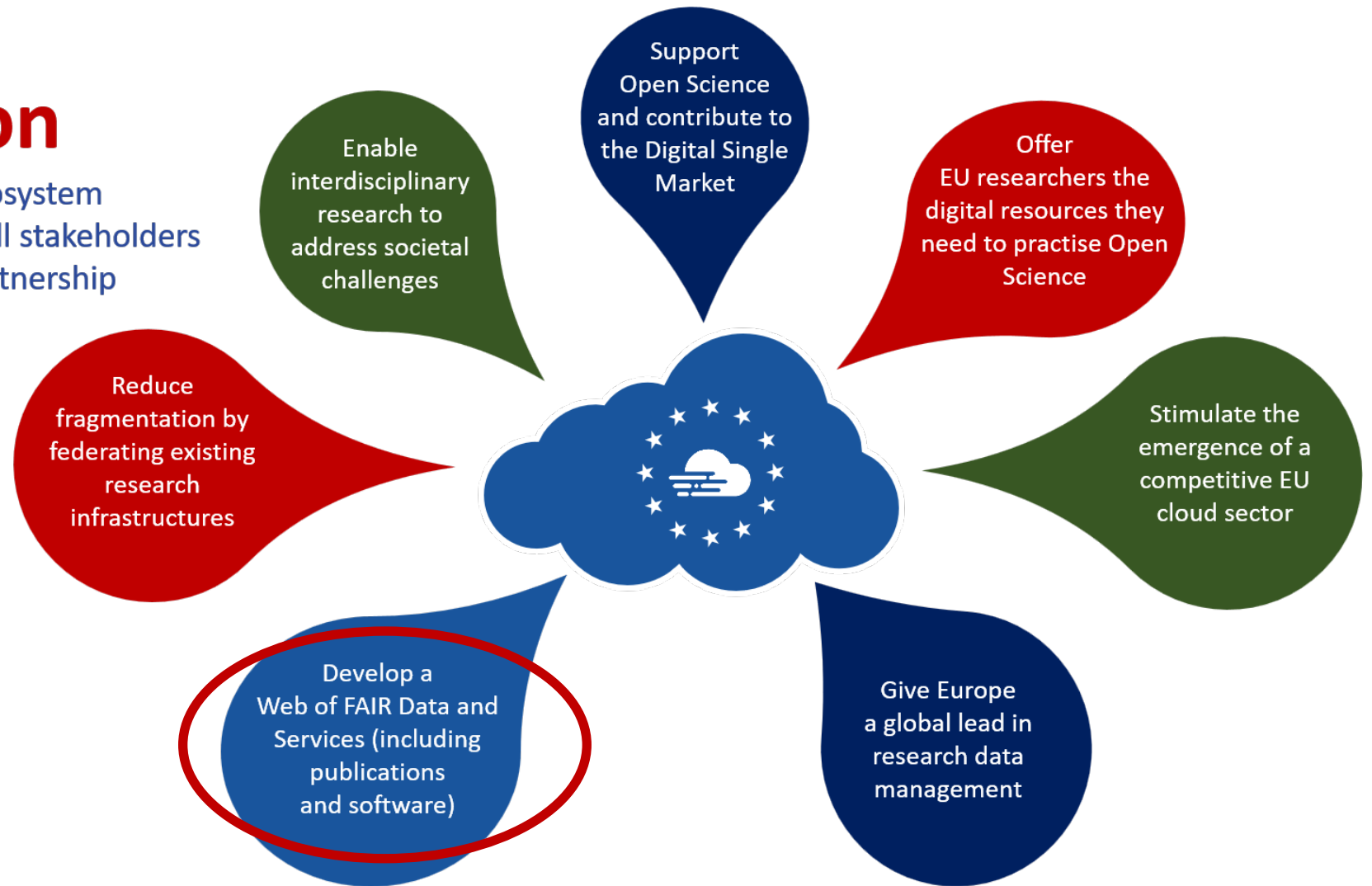
FAIR \equiv
Findable
Accessible
Interoperable
Reusable

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



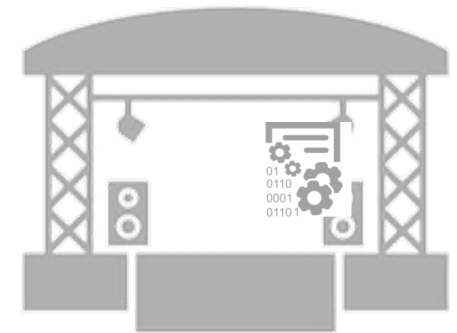
The Vision

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



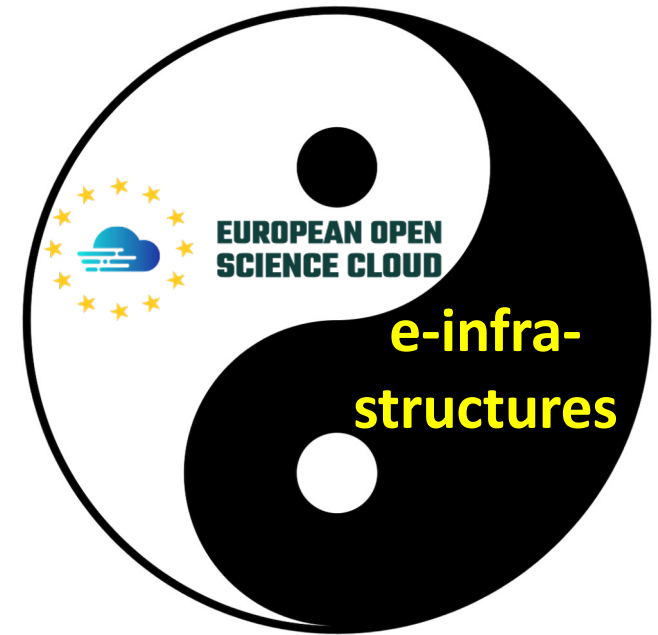
"A web of scientific insight"

- **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**



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-infra-structure organisations (yin/yang). 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



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.



EOSC Association

An Excting Journey



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

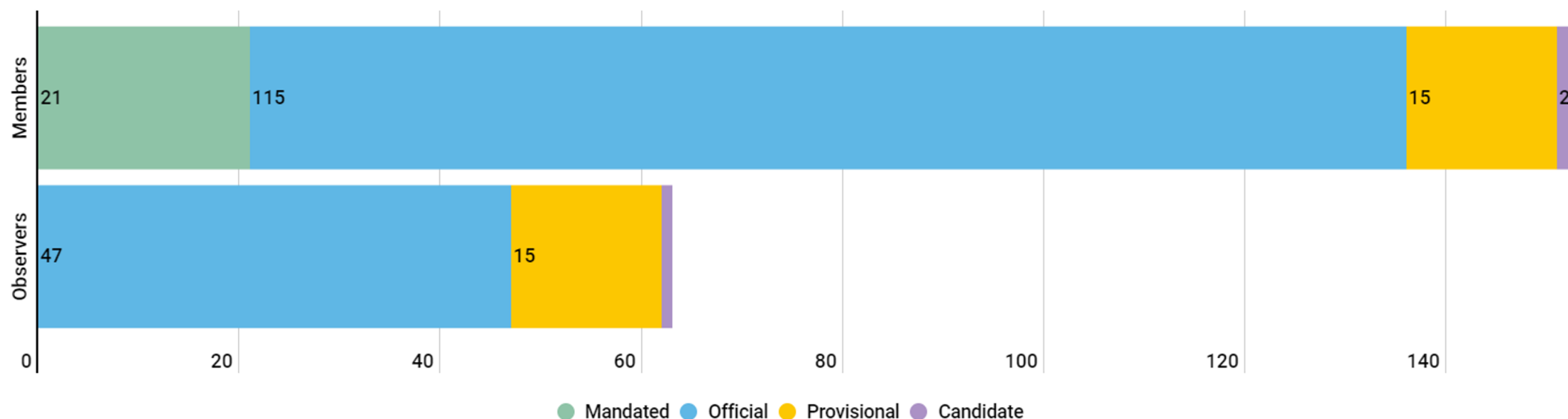




EOSC Association: Milestones

- Four founding members (CESAER, GEANT, GARR, CSIC)
- Was incorporated as AISBL on Wednesday 29th July 2020
- Obtained Royal Decree on Friday 11th September 2020
- First General Assembly on 17-12-2020 elected President and Board
- Research Performing; Research Funding and Service Providing organisations
- Now ~ 150 members and ~ 60 observers (62% - 8% - 30%) (May 2021)
- A European Co-programmed Partnership, between the EC and the EOSC Association, MoU to be signed 23 June 2021
- Joining the EOSC Association = Joining the EOSC Partnership!

EOSC Association: Membership



As of the May 2021

Members: 153

Observers: 63

Ute Gunsenheimer, Designated Secretary General



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





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

What are the EOSC Advisory Groups / Task Forces?

- A structure to allow Association members and others to help steer the implementation of EOSC
- Groups should liaise with EOSC projects and offer feedback and advice
- Identify strategic gaps and areas for investment to input to SRIA
- EOSC Association members can propose and lead groups. External members can also be members

Task Force topics within Advisory Groups



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

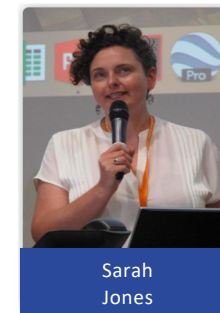
- Semantic interoperability
- FAIR metrics and data quality

Research careers and curricula

- Data stewardship curricula and career paths
- Research careers, recognition and credit
- Upskilling countries to engage in EOSC

Sustaining EOSC

- Defining funding models for EOSC
- Long-term data preservation

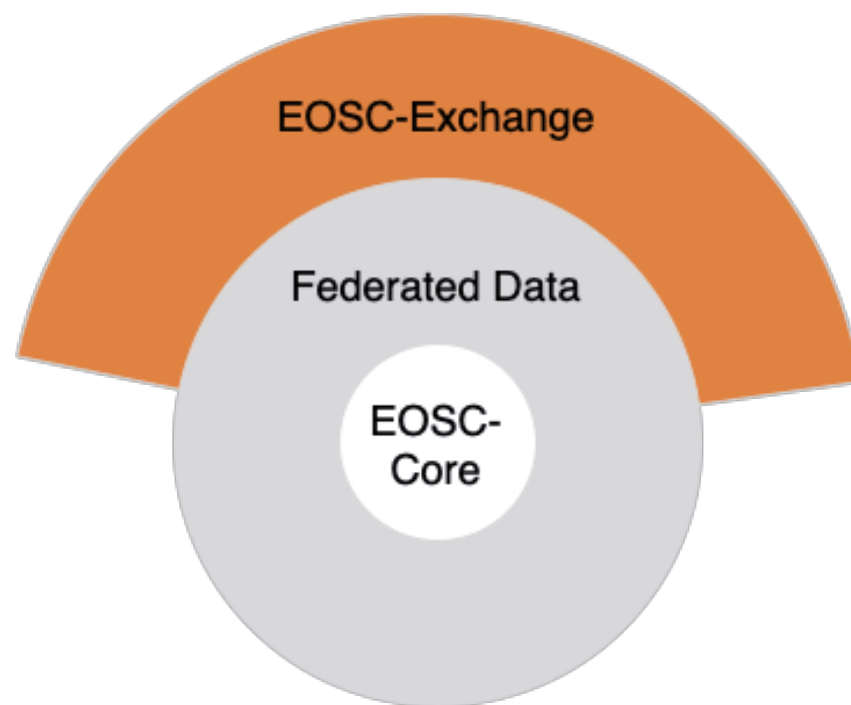


Rules of Participation (RoP)

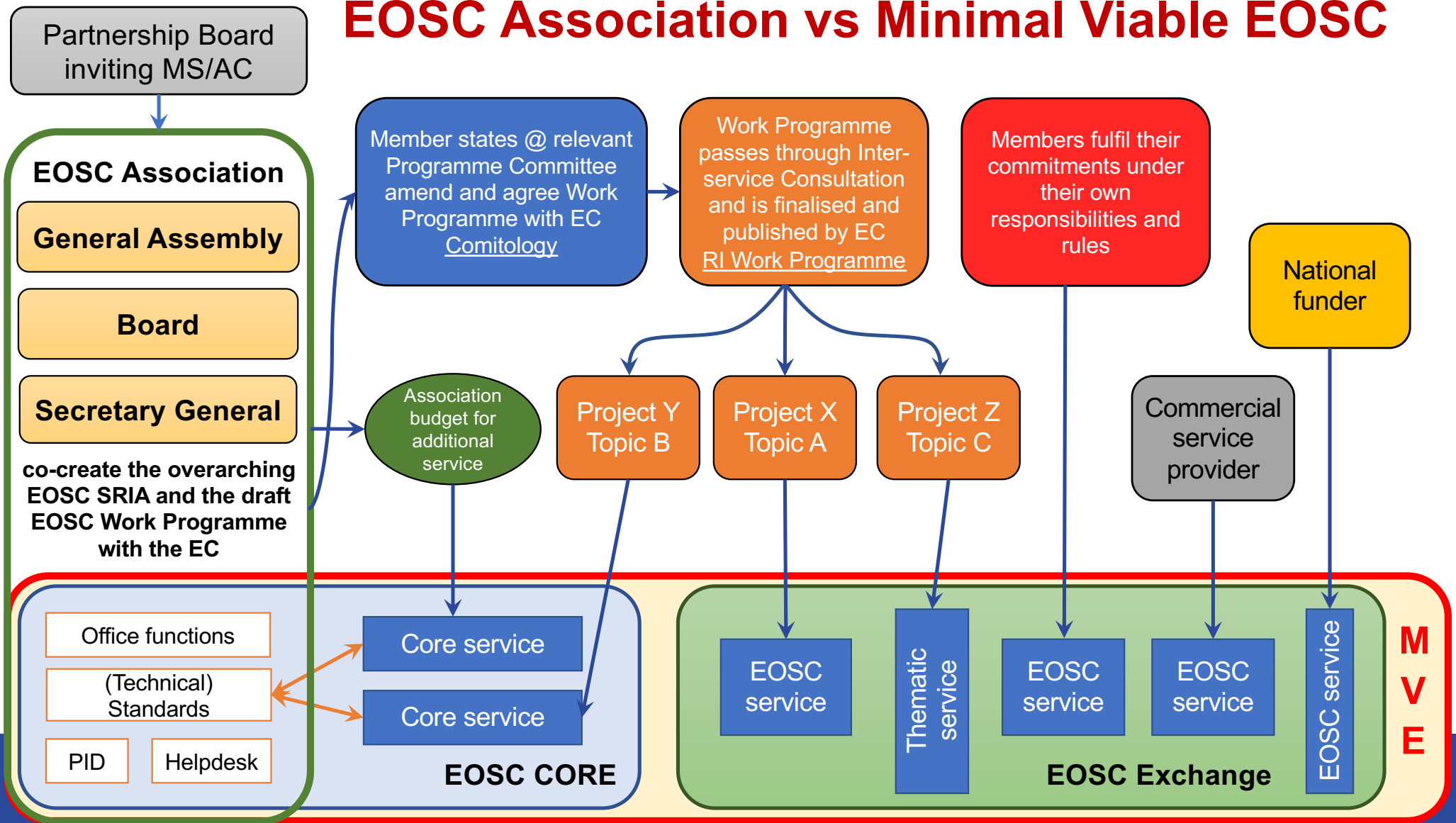
- Minimal set of rules that specify the rights, obligations and accountability governing EOSC activities
- RoP are set at a level to encourage wide participation, including from less advanced research communities
- Many of the Rules will need to provide encouragement rather than impose strict requirements, 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

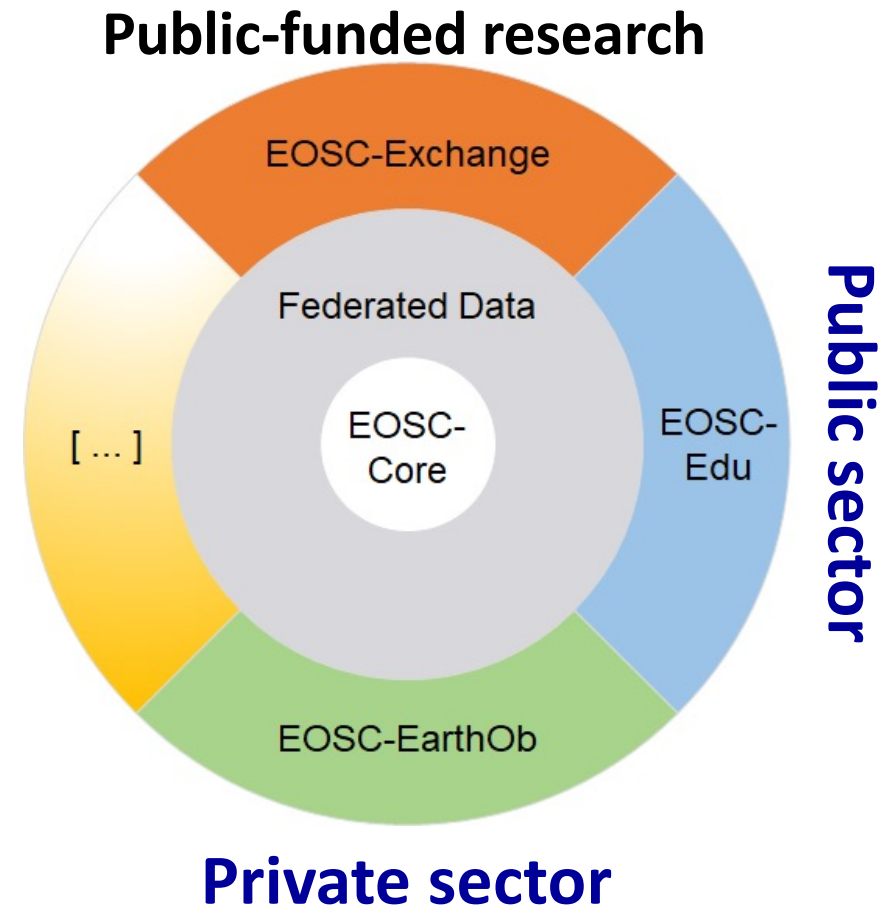


EOSC Association vs Minimal Viable EOSC



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 be involved in MVE
- Would ideally be one 'marketplace' but differing requirements and legislation may require linked but alternately governed spaces



EOSC on a global stage

- Service providers from third countries can participate in EOSC but have 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



THANK YOU



**EUROPEAN OPEN
SCIENCE CLOUD**



Let's co-create EOSC

How are we convening groups?

- We proposed a set of topics based on outcomes of previous governance
- Ran a community consultation on topics and revised these
- Opened a call for applications to draft charters
 - Over 255 applications received!
 - Have identified a small team of coordinators per topic to steer drafting
 - Managed numbers by applying rule that any individual is only involved in drafting charter for one Task Force
 - Net result is that c.10-25 people assigned to draft each charter
 - Will issue a secondary call for membership in June/July

Who will be the Task Force members?

- To be defined!
- Each charter will have a statement on membership noting required skills and suggested group size
- If necessary, a selection will be made applying balancing criteria
- Second call for members will be out in June. Hope to have membership defined before summerbreak

Potential selection criteria

- Focus on relevant skills for delivering Task Force remit
- Prioritise Association Members & Observers
- Prioritise people who add value to EOSC
- Ensure research community inputs
- Include key project representatives responsible for implementation
- Ensure diversity and balance in terms of:
 - Gender
 - Country
 - Career stage
 - Stakeholder category
 - Organisation / member
 -

Who will chair the Task Forces?

- We will ask each Task Force to make a suggestion on chairs
- Any member can volunteer to be chair and be proposed by the group
- The Board appoints all members, including the Chairs
- Board asks for two chairs: one male and one female
- Intend to bring balance across all Task Force chairs in terms of stakeholders and countries represented

How will charters be drafted?

- **Coordinators to discuss plans and reach out to volunteers**
 - **Small(ish) groups per Task Force**
 - Half around 10 people
 - Half around 20 people
 - **Hope to complete drafting process in 3 weeks...**
- Rules of Participation – 9 people
 - Persistent Identifiers – 8 people
 - Researcher engagement – 24 people
 - Technical interoperability – 15 people
 - Infrastructure for software – 21 people
 - AAI Architecture – 19 people
 - Semantic interoperability – 9 people
 - FAIR metrics – 21 people
 - Data stewardship curricula – 10 people
 - Research careers – 11 people
 - Upskilling countries – 10 people
 - Funding models – 21 people
 - Long-term preservation – 17 people

Proposed charter template

Main aims - *Encapsulate the main aims of the Task Force in a few sentences*

Core activities - *Specify a basic workplan and set of activities which the group will address, highlighting key outputs / outcomes expected and a timeline for these*

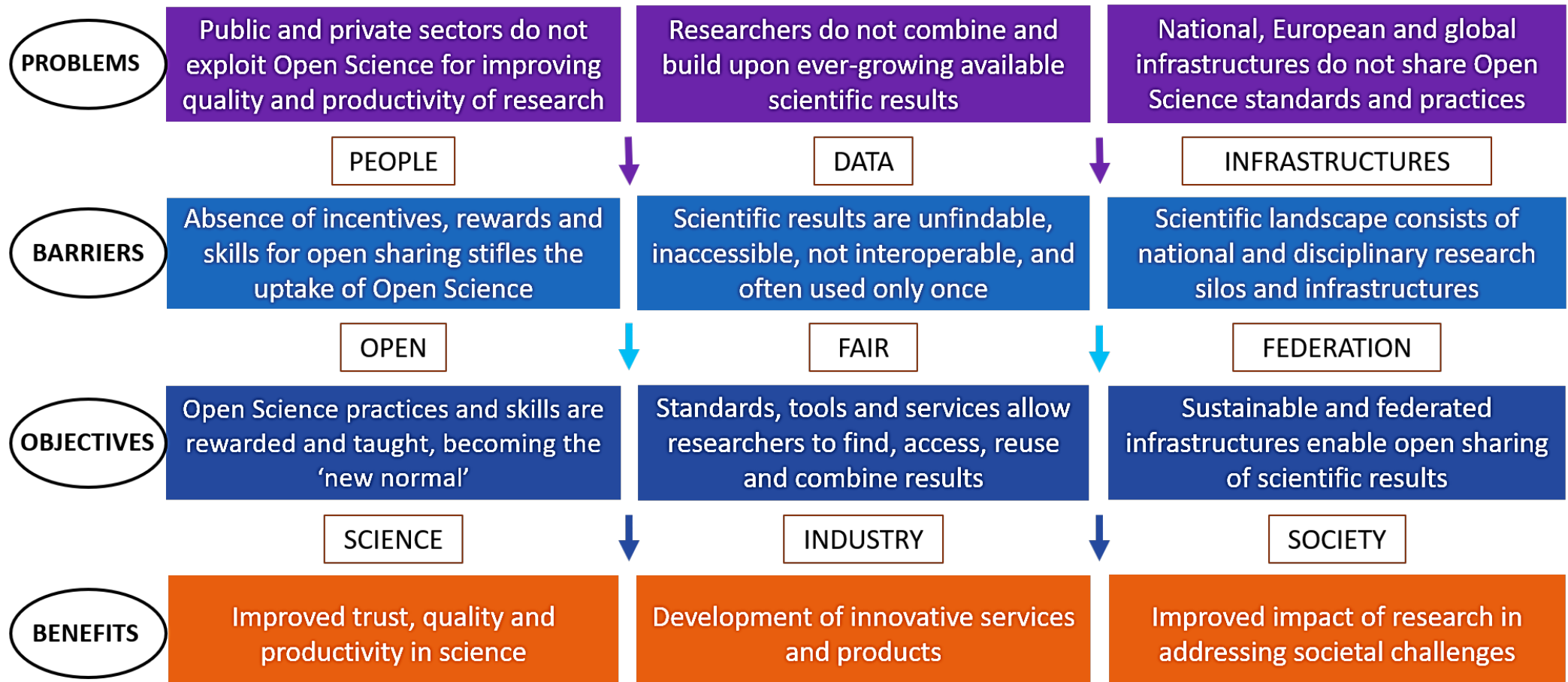
Planned duration - *Specify how long you expect the group to run. 12-24 months is anticipated as a typical length*

Working methodology - *Describe how the Task Force will approach its work and engage with stakeholders. Are focus groups, workshops or other forms of interaction envisaged to solicit feedback and test implementation? Also consider how the community at large will be kept informed*

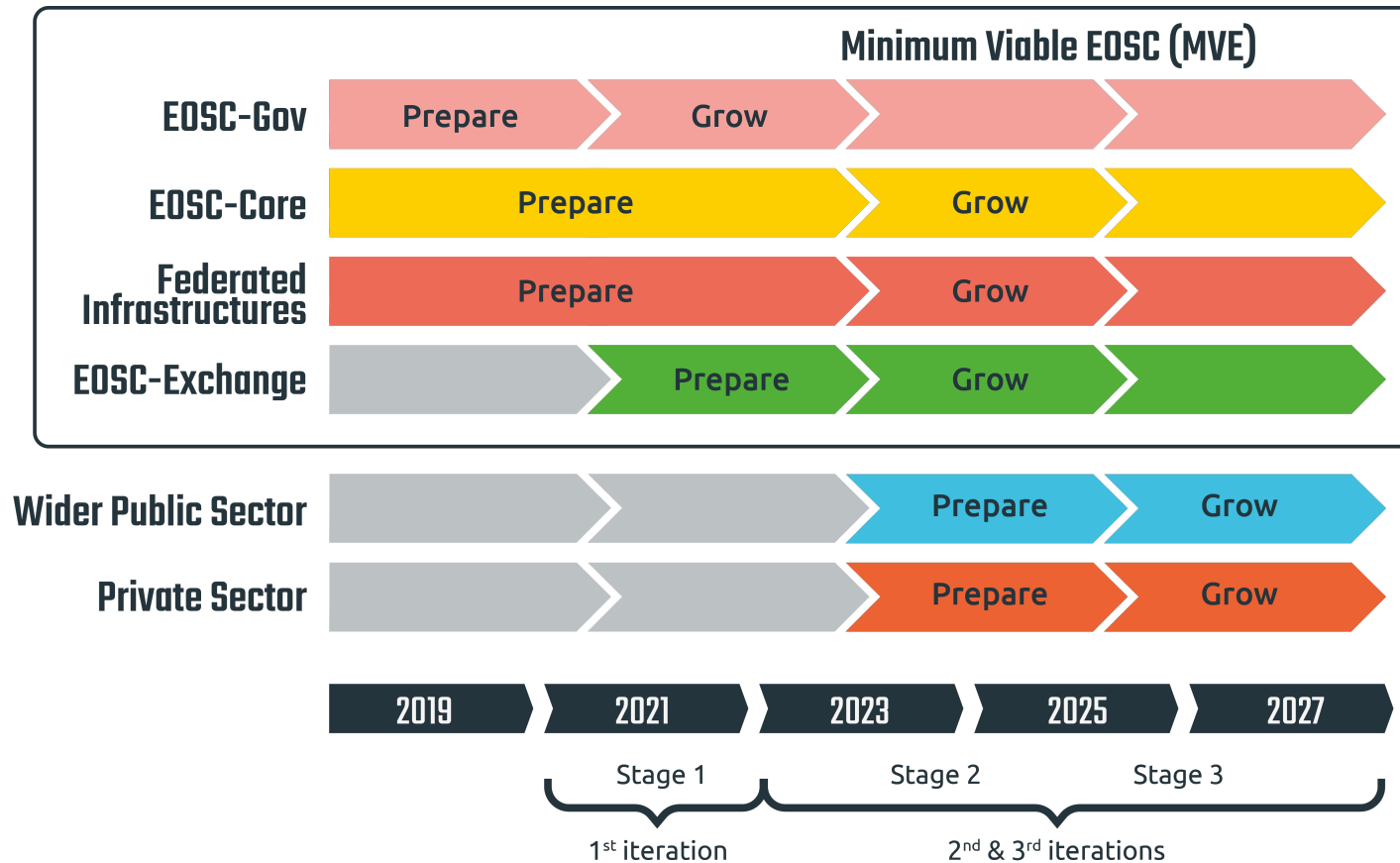
Dependencies - *Identify key dependencies that will affect work, such as overlap with other Task Forces, inputs required from projects or engagement from certain communities*

Membership - *Describe the proposed membership composition and size, denoting the competencies needed within the group and how balance should be achieved to represent different stakeholders such as research communities, implementers, funders and research performing organisations*

EOSC-ecosystem objectives tree



Timeline



(EOSC Strategic Research
Innovation Agenda v1)
<https://eosc.eu/documents>

Content of the draft MoU (I)

- ☐ 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
 - ✓ Expected financial and in-kind commitments by the partners
 - ✓ KPI’s
- ☐ Governance: Partnership Board
 - ✓ Composition: Representatives appointed by the Partners other than the Union, Commission officials and Representatives of the Steering Board
 - ✓ Rules of Procedure of the Partnership Board to be drafted based on a proposal by the Commission
- ☐ Duration: from signature date until 31.12.2030

Content of the draft MoU (II)

- ☐ Activities and commitments of the Commission
 - ✓ Take into account the input and advice from the Partners other than the Union when identifying & defining call topics for R&I activities to be included in the Work Programmes
 - ✓ Contribute through the Work Programmes
- ☐ Activities and commitments of the Partners other than the Union
 - ✓ Provide input and advice to the Commission
 - ✓ In-kind contributions in Horizon Europe actions
 - ✓ In-kind contributions in additional activities
 - ✓ Investments in operational activities
- ☐ Openness and Transparency, Dissemination, Coordination
- ☐ Monitoring and reporting
 - ✓ The partners will set up and implement an effective reporting and monitoring system, using
 - ✓ A list of Key Performance Indicators