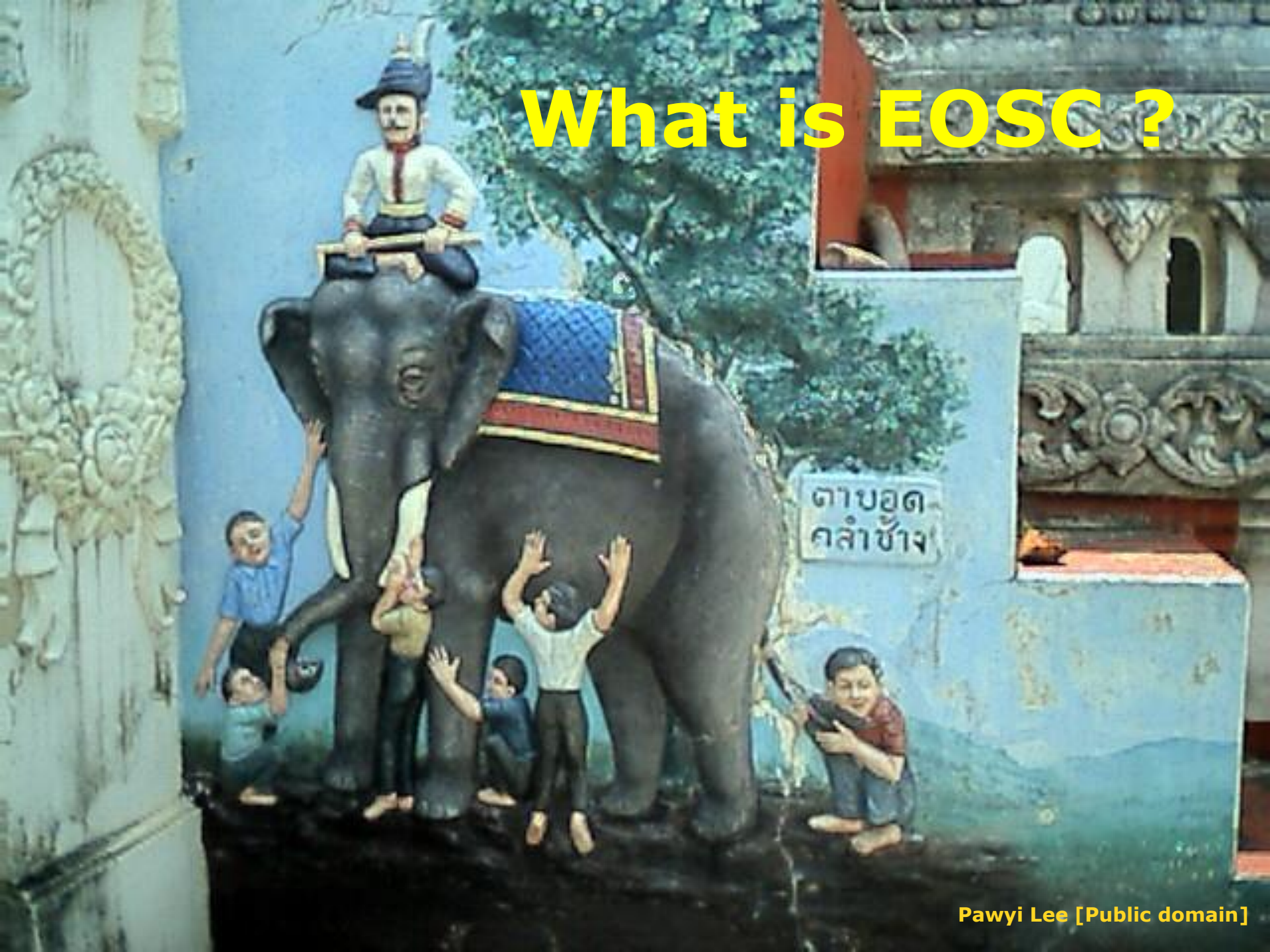




# **Building EOSC - Current state of play and future considerations**

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# What is EOSC ?



# What is EOSC?

- ✓ **Trusted and open virtual environment with seamless access to services (with highest TRLs) addressing the whole research data life cycle:**
  - ✓ Federate and connect existing or planned RIs
  - ✓ Make data FAIR, store them, ensure long-term preservation
  - ✓ Services to find, access, combine, analyse and process data
  - ✓ Protected, personalized work environment
- ✓ **Multi-layered federation** (federating core, rest of the ecosystem), bringing together supply and demand in a trusted environment
- ✓ **Open, transparent, rule of law based:** no lock-in by individual service providers, data portability, IPR, cloud security...
- ✓ **Adaptively user-oriented and inclusive** (across borders and disciplines)
- ✓ **Accessible through a non-exclusive, simple, universal access point**
- ✓ **Governed by clear and unambiguous Rules of Participation**
- ✓ **Steered by an inclusive governance structure**

# Why EOSC?

The role of the EOSC is to ensure that **European scientists reap the full benefits of data-driven science**, by offering:

*“1.7 million European researchers and 70 million professionals in science and technology a virtual environment with free at the point of use, open and seamless services for storage, management, analysis and re-use of research data, across borders and scientific disciplines”*



2016 Communication on the “European Cloud Initiative”

# Why EOSC?

- ✓ **Vehicle for Open Science and the Digital Single Market**
- ✓ Offer researchers **anywhere** in the EU the resources they need
- ✓ Build an **open and inclusive data commons** in Europe and develop a system of **FAIR digital objects**
- ✓ Facilitate **interdisciplinarity and research to applications**
- ✓ Reduce **fragmentation and costs** through increased resource sharing and federating existing infrastructures
- ✓ Enabler of an **open, transparent, rule-of-law-based, federated ecosystem**, providing access to core digital infrastructure and service resources with the objective of:
  - ✓ **Maximising digital capacities** available to researchers
  - ✓ **Supporting public authorities** in informed policy development and implementation, including for key societal challenges
  - ✓ Enable the Digital Single Market, help stimulate the emergence of a **competitive EU cloud sector**



# Setting the scene: Reference documents on the EOSC

2015

Council conclusions on open, data-intensive and networked research as a driver for faster and wider innovation

[ST 9360 2015 INIT](#)

A Digital Single Market Strategy for Europe  
[COM\(2015\) 192 final](#)

2016

Council Conclusions on the transition towards an open science system  
[ST 9526 2016 INIT](#)

Realising the European Open Science Cloud

European Cloud Initiative  
[COM\(2016\) 178 final](#)

2017

EP resolution on the European Cloud initiative supporting EOSC  
[P8\\_TA\(2017\)0052](#)

EOSC Declaration

OSPP – Report on the governance and financial schemes for the European Open Science Cloud

2018

Council Conclusions Accelerating knowledge circulation in the EU  
[ST 9291 2018 INIT](#)

The European open science cloud governance model

Cost-benefit analysis for FAIR research data. Policy recommendations

Implementation roadmap for the EOSC  
[SWD\(2018\) 83 final](#)

Horizon 2020 Work Programme 2018–2020 on European research infrastructures  
[C\(2018\) 7238](#)

Council Conclusions on EOSC  
[ST 9291 2018 INIT](#)

Prompting an EOSC in practice

Turning FAIR into reality

OSPP recommendations

Set up the EB Expert Group  
[C\(2018\) 5552 final](#)

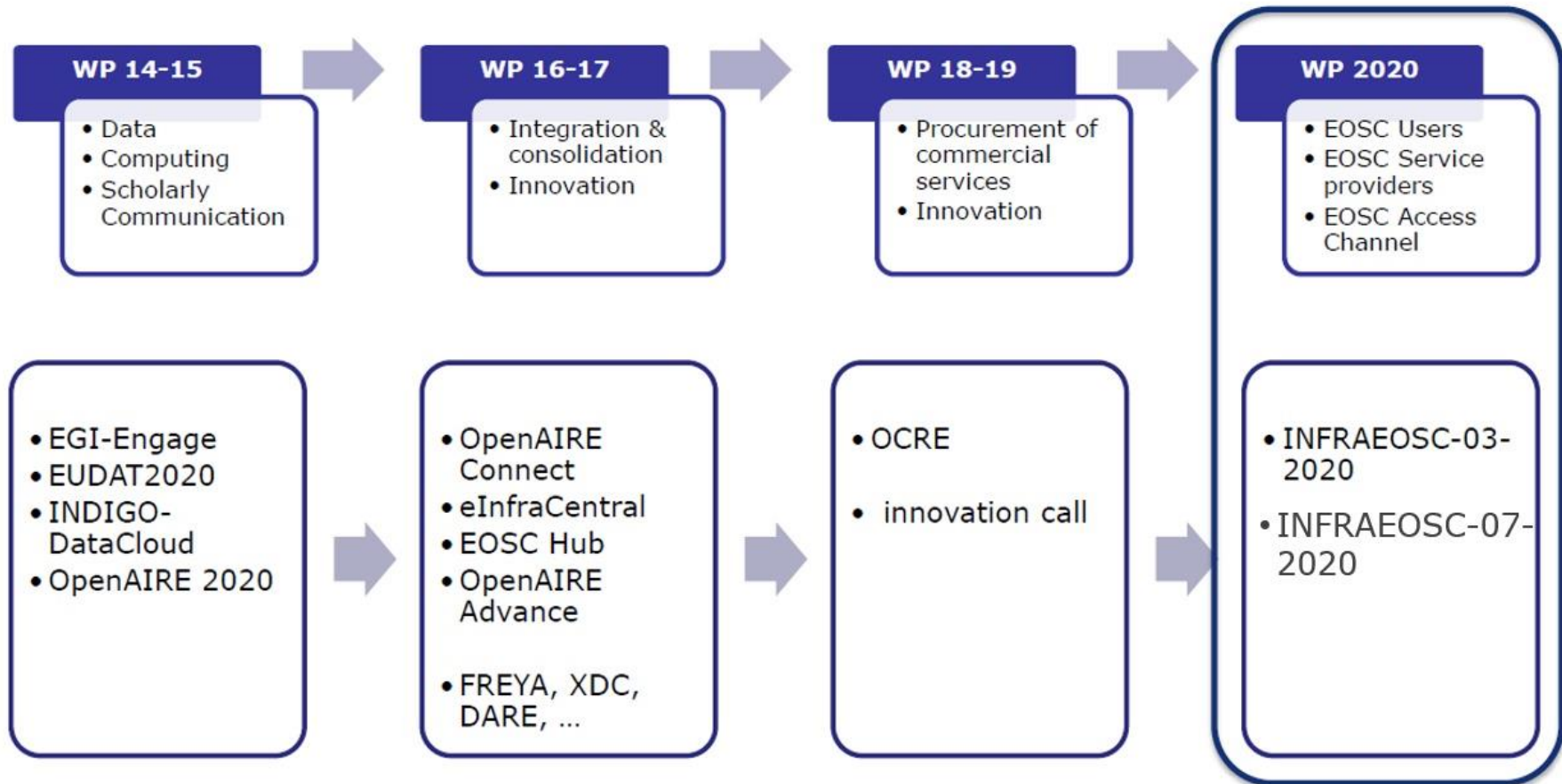
EC Recommendation on access to and preservation of scientific information  
[L 134/12 2018](#)

Council & EP

Experts

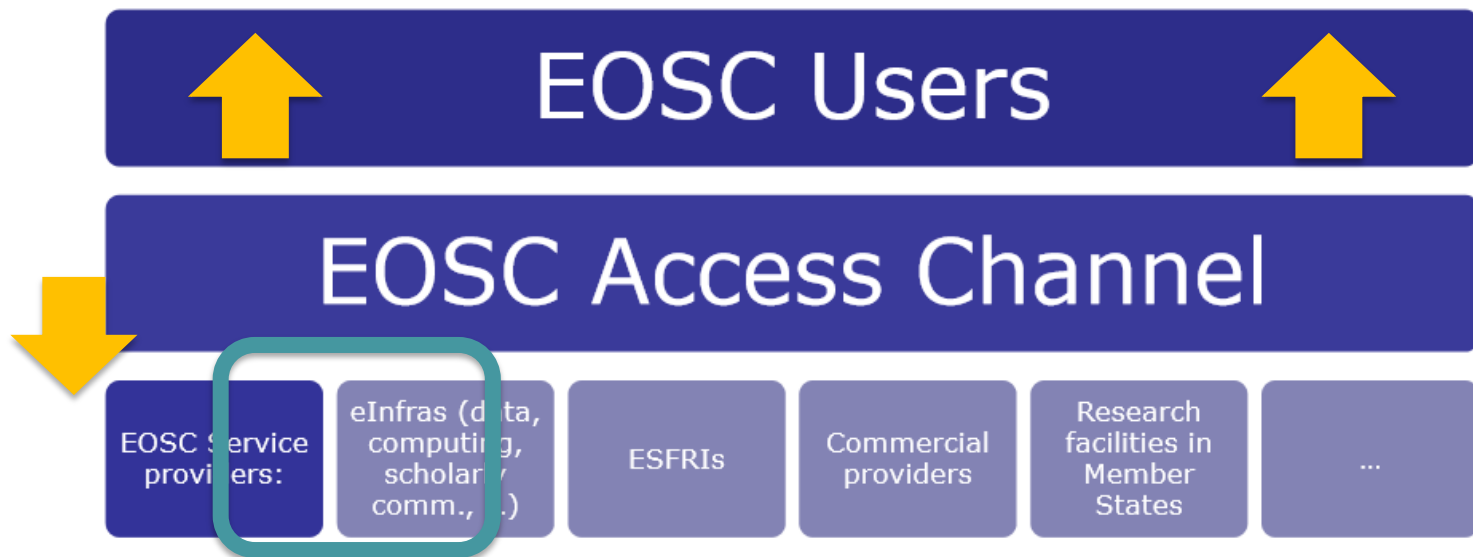
Commission

# eInfrastructure funding in Horizon 2020 (excl. Network and HPC)



➤ **INFRAEOSC-03-2020:**

Integration and consolidation of the **pan-European access mechanism** to public research infrastructures and commercial services through the EOSC Portal



➤ **INFRAEOSC-07-2020:**

Increasing the EOSC portal **service offer**



# INFRAEOSC-03-2020: the challenge

**Consolidate and scale up the EOSC Portal and its underlying service platform to:**

- Strengthen the EOSC Portal
- Reinforce the role of the marketplace as the access channel to integrated, composable and reliable services
- Attract more users within the research community and beyond
- Ensure its long-term sustainability taking into account all the relevant governance and business frameworks.

Budget: 40,9n Mio €

One single proposal to be funded

## **INFRAEOSC-07-2020: the challenge**

**Coordinate, through the EOSC Portal, the provision of state-of-the-art research enabling services from national, regional and institutional public infrastructures in Europe, covering diverse thematic domains, and further non-research resources to**

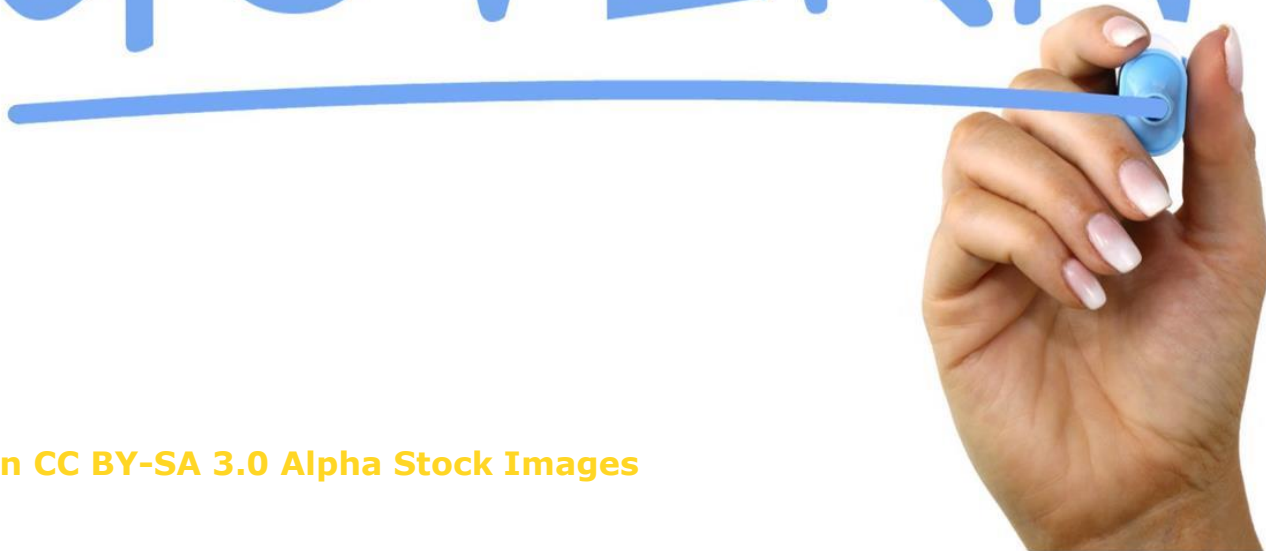
- Scale up the EOSC Portal
- Set-up a model for interaction between service providers and the EOSC Portal operators through pan-European e-infrastructure entities, based on transparency and effectiveness of cost compensation.

Budget: 24 Mio €

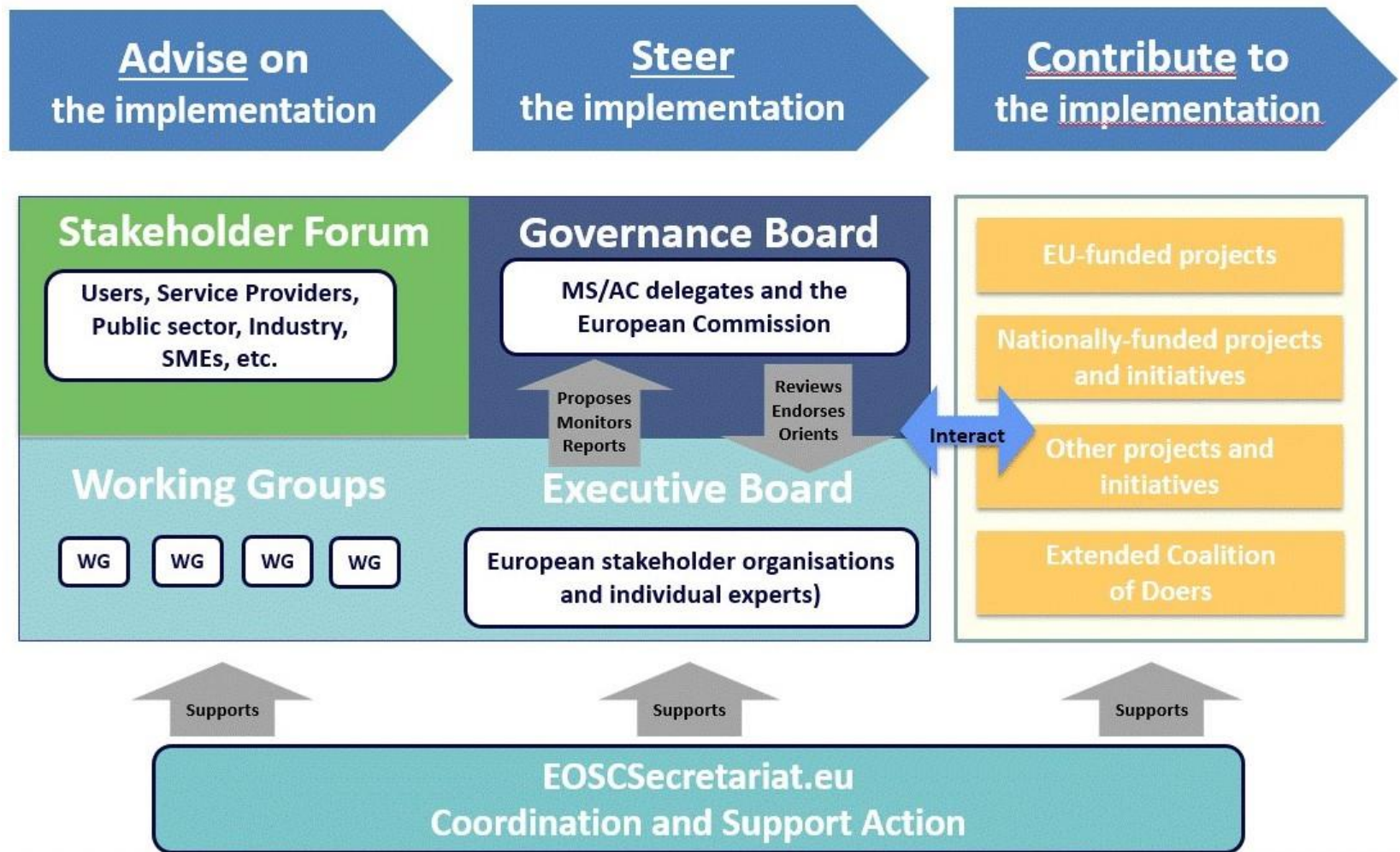
Six areas, one proposal per area to be funded

# Who has the say?

GOVERN



## Governance structure



# Key questions to address:

- ✓ EOSC role in overall EU Digital Infrastructures?
- ✓ EOSC architecture (technical federation, role of the federating core, associated infrastructures/ services)?
- ✓ EOSC, Connectivity and High Performance Computing?
- ✓ Role of Regulation, Standardisation, Certification?
- ✓ Public sector use and demand on EOSC?
- ✓ EOSC for priority societal domains and societal challenges?
- ✓ EOSC and commercial clouds / services?
- ✓ Data (technical, legal, sharing incentivisation)?
- ✓ User involvement and user needs?
- ✓ Funding (variety of sources, operational vs. projects)?
- ✓ Legal vehicles, Governance and oversight?

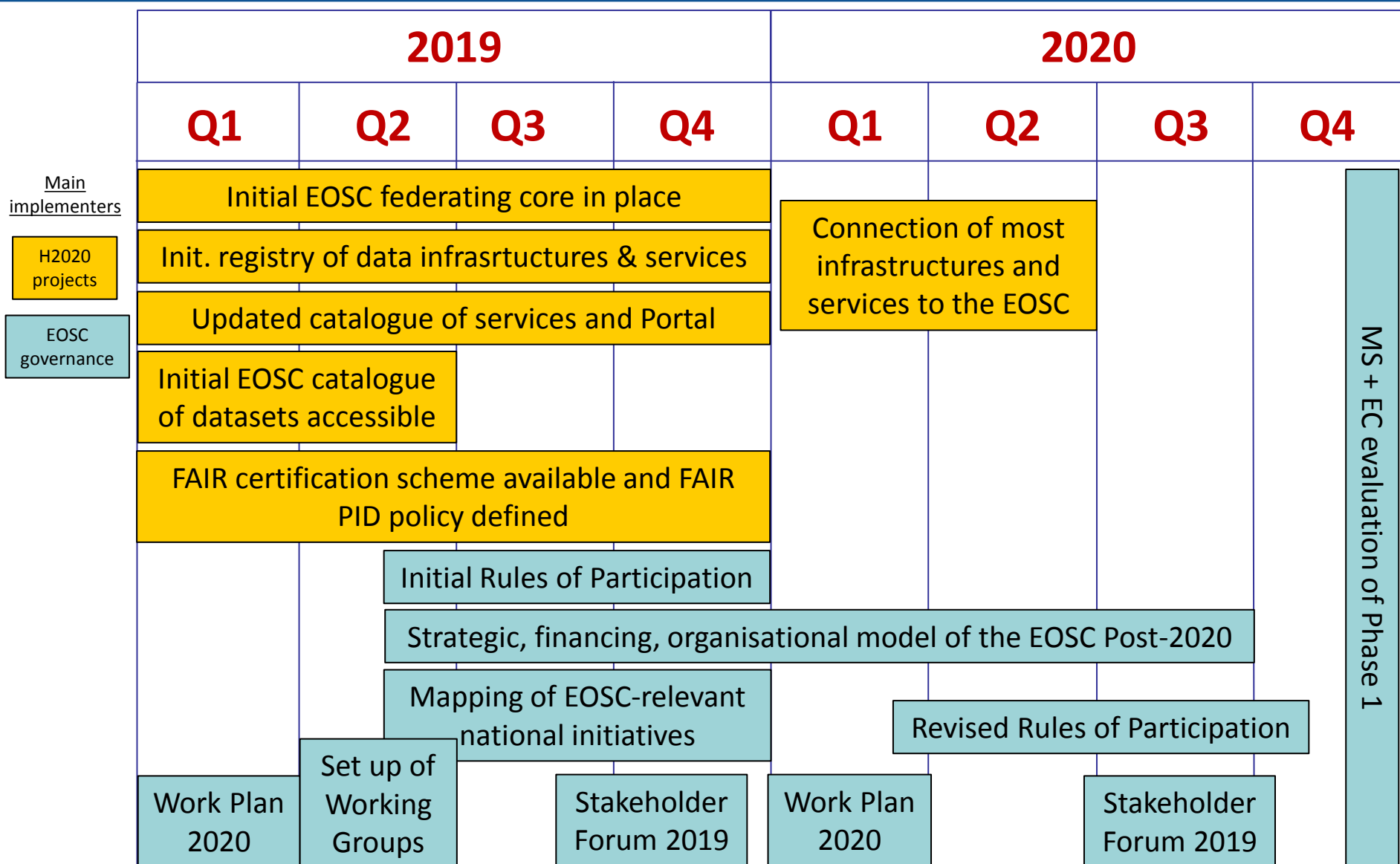
# Implementing the future EOSC

By end 2020:

- ✓ Governance model and best-fit legal vehicle for post-2020
- ✓ Financing model(s) and sources for post-2020
- ✓ Rules of participation to govern the future EOSC
- ✓ Coordination of EOSC-relevant H2020 projects
- ✓ FAIR digital objects: turning principles into practice
- ✓ Expansion of the EOSC service offering to the researchers
- ✓ Evolution of the EOSC Platform and its interfaces
- ✓ Widening of the EOSC user base and increasing demand
- ✓ Interaction between EOSC and EDI (cloud, HPC, network)
- ✓ **Review of Phase 1 by the Commission and the Member States**



# EOSC 2019-2020: timeline



**Tough nut to crack?**



**Thank you!**

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