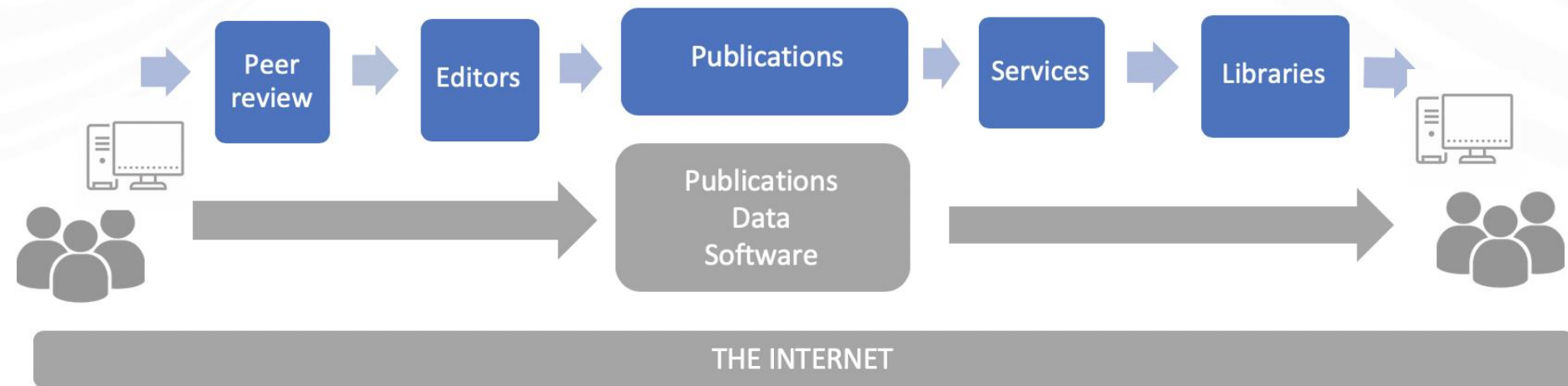


EOSCExecutiveBoard

EOSC: European Open Science Cloud

Jean-François Abramatic
Member of the EOSC Executive Board

The opportunity



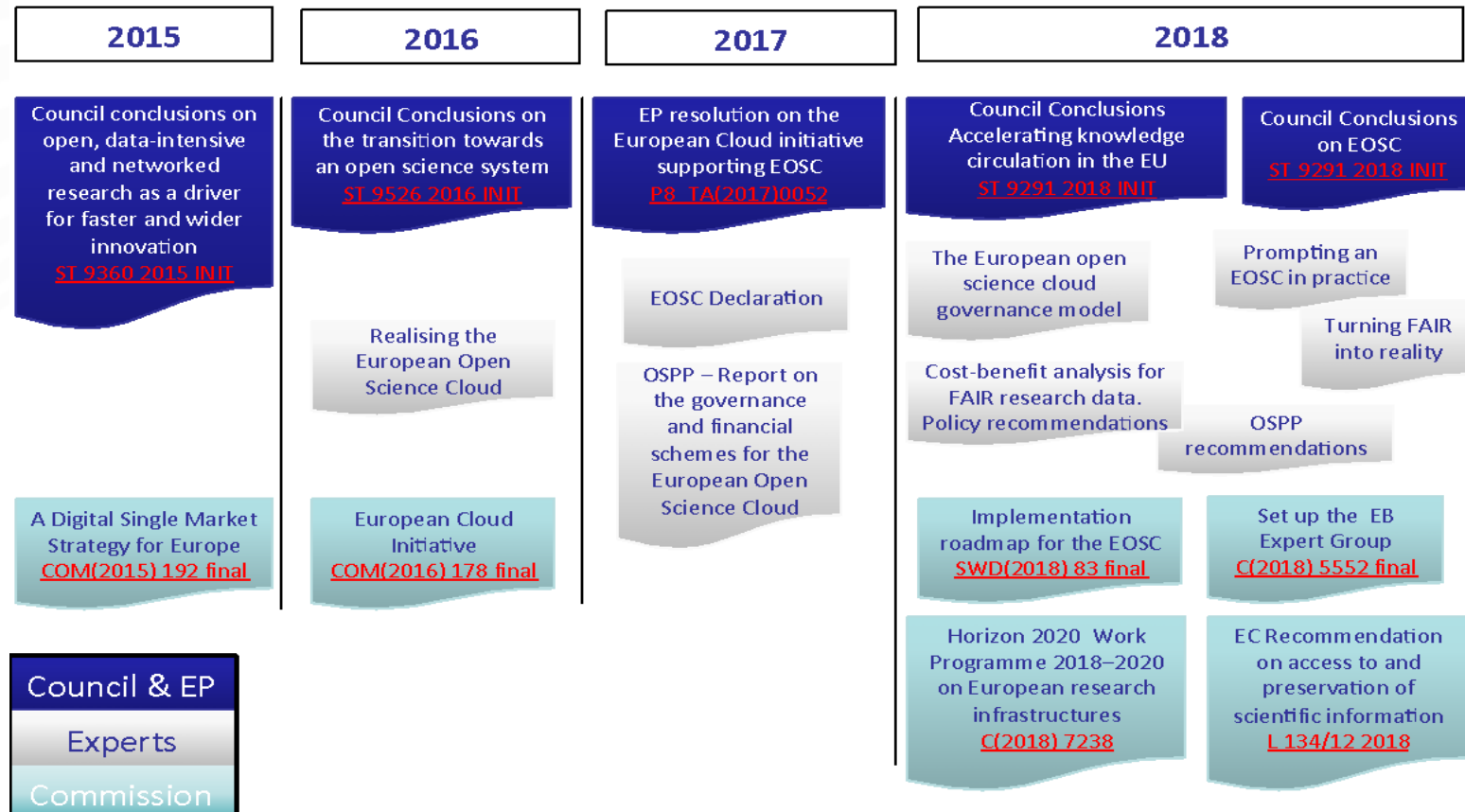
Gutenberg to Berners-Lee science

Why the EOSC?

- ✓ Enable Open Science and the digital transformation of science,
- ✓ Build an open research data commons inclusive of all disciplines and Member States,
- ✓ Enable multidisciplinary research to address societal challenges,
- ✓ Empower 1.7 million European researchers to reap the benefits of data-driven science,
- ✓ Give Europe a global lead in research data management.

Four years of EOSC in documents & projects

Setting the scene: Reference documents on the EOSC



Challenges in managing Data

- **Heterogeneity**
 - All disciplines
 - Levels of maturity
- **Scalability**
 - From large equipments to internet of things
- **Versioning**
 - Managing time
 - Preservation
- **Disambiguation**
 - One Identifier, Multiple Objects
- **Diffusion prevention**
 - One Object, Multiple Identifiers

Building the Web of FAIR Data

- **Findable**

- Discovery
- Metadata
- Unique Identifiers

- **Accessible**

- Licences, processes
- Authentication & Authorization
- Unique Identifiers

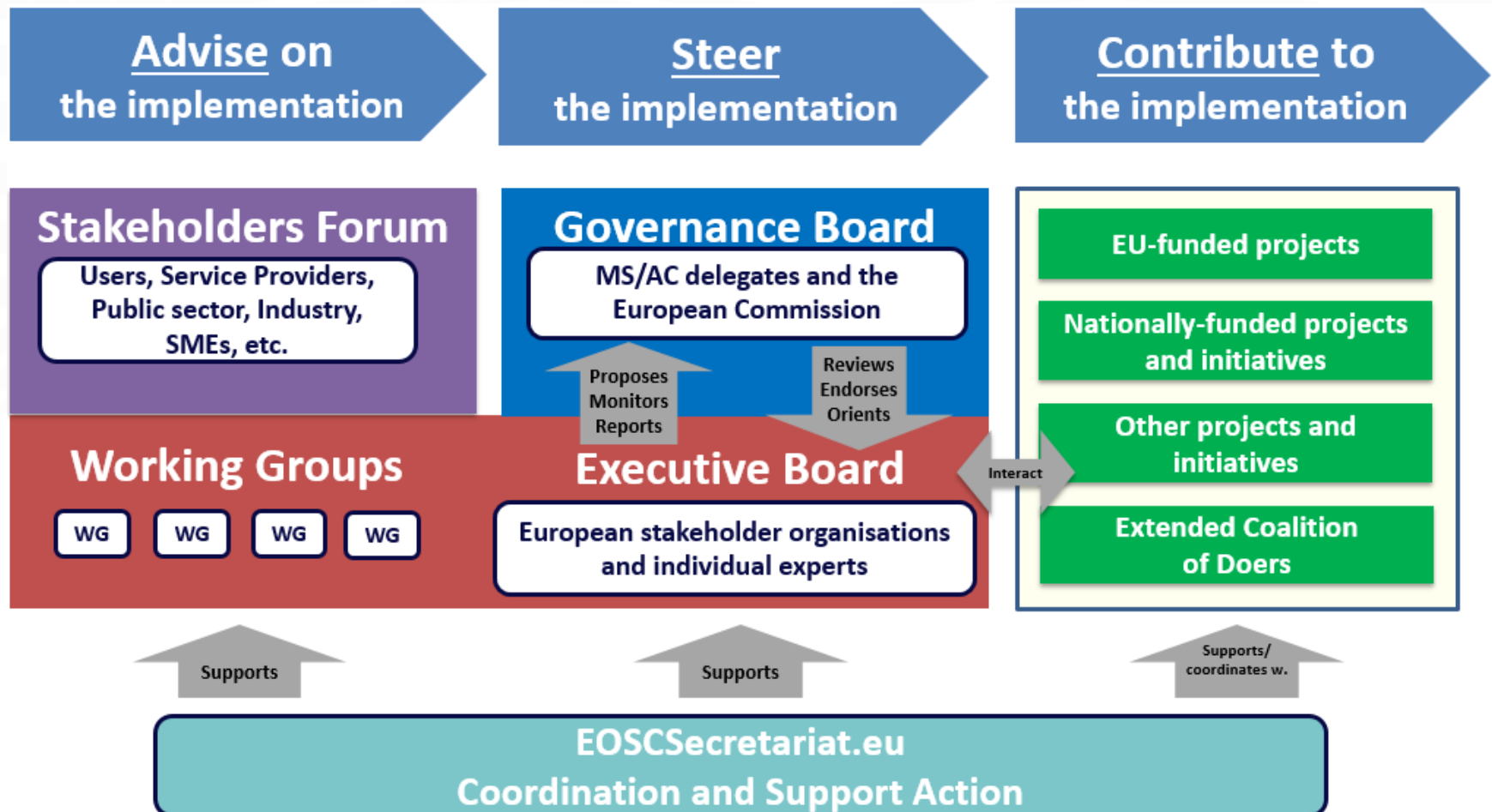
- **Interoperable**

- Metadata
- Ontologies
- Application Programming Interfaces

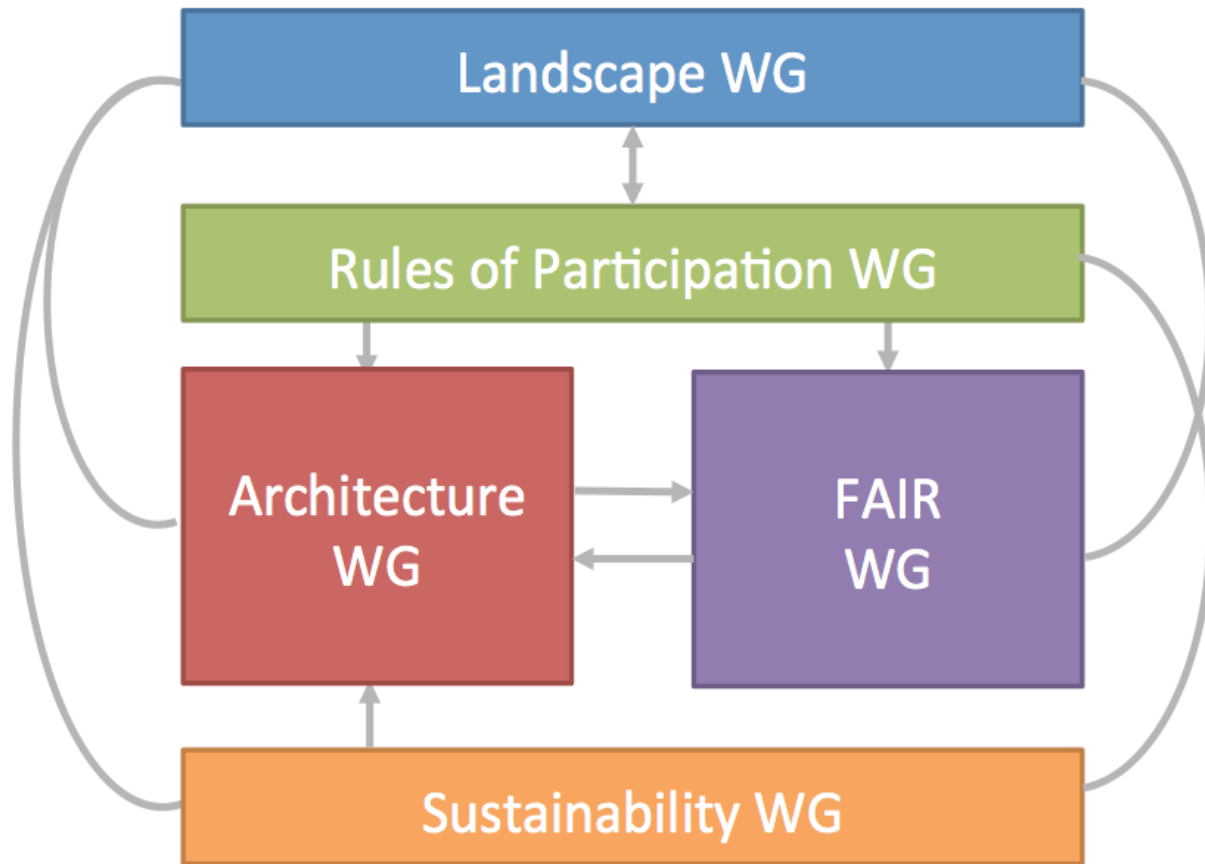
- **Reusable**

- Licences, processes
- Standards

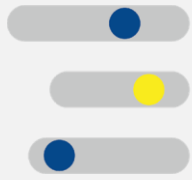
EOSC governance (2019-2020)



EOSC Exec Board Working Groups



<https://www.eoscsecretariat.eu/eosc-working-groups>



WHAT

Provide options for progressive convergence and alignment of structures and initiatives in Europe to facilitate the EOSC

HOW

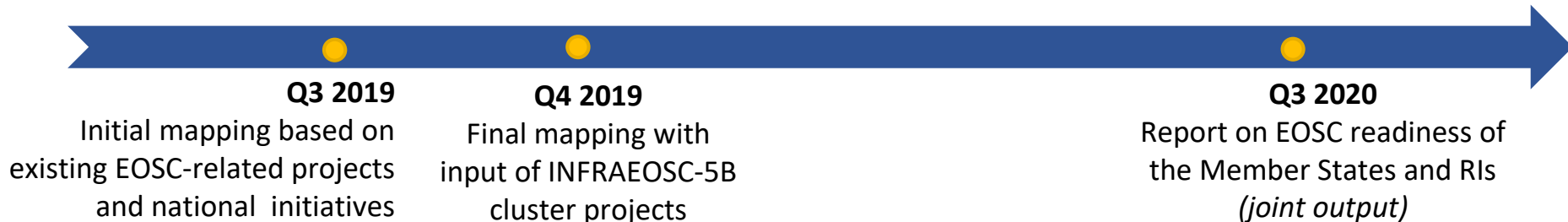
1. Build on outcomes of EOSC-related H2020 projects and input from member states
2. Map EOSC-relevant national infrastructures and spending
3. Take stock of federation constraints and opportunities at the various architectural levels

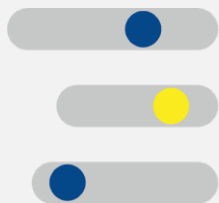
WHY

Consolidate the existing landscape

- National research infrastructures, e-Infrastructures and open science policies
- ESFRI RIs, cluster projects, thematic initiatives and clouds

4. Propose mechanisms and best practices for national and regional alignment
5. Analyse member state preparedness for financial resources, political stability and infrastructural planning





WHAT

Recommend rules of participation which define rights, obligations and accountability to govern EOSC users, providers and operators. Identify common requirements.

HOW

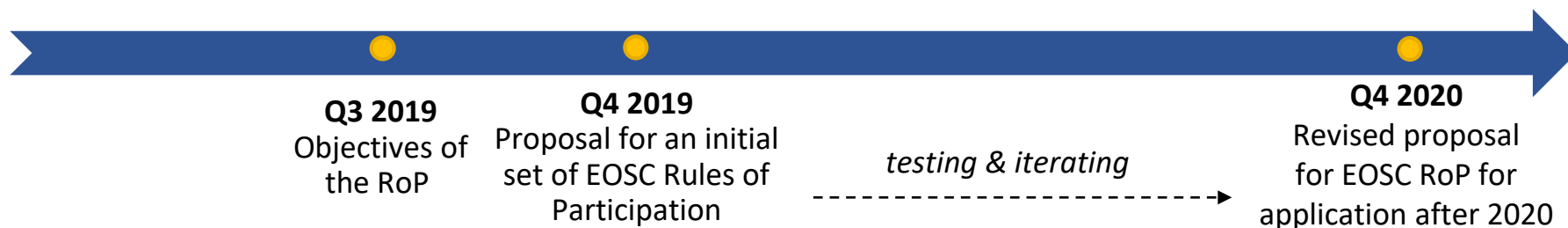
Identification of different rules taking into account:

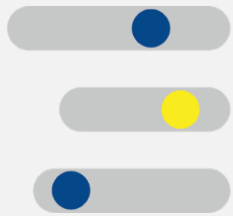
1. Differing roles and services
2. Scientific disciplines
3. Preparedness of infrastructures, services and member states
4. The growing range of EOSC users and providers
5. Changing needs and practices including regulations

WHY

Guarantee open, secure and cost-effective federated EOSC with services of documented quality

Assessable Quality





WHAT

Provide recommendations on the implementation of FAIR, including corresponding requirements for services, in order to foster cross-disciplinary interoperability

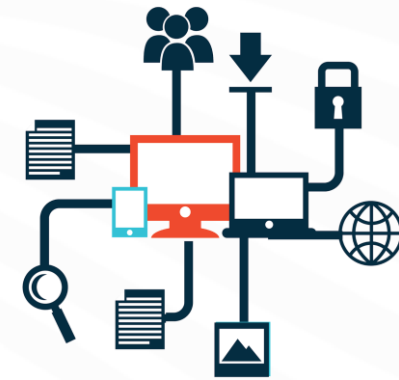
HOW

1. Data standards & sharing agreements
2. Upscale best-practice solutions
3. EOSC Interoperability Framework
4. Identify service requirements for FAIR
- 5.

WHY

Connect people,
data and service
via standards

Be the glue



6. Frameworks to assess FAIR data and certify services that enable FAIR
7. Converge towards globally-accepted frameworks

Q2 2019
2019 Annual
FAIR work plan

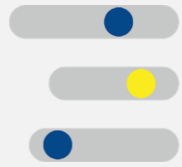
Q4 2019
PID policy defined
Outline metrics for
FAIR data & service
certification

Q1 2020
2020 Annual
FAIR work plan

Q3 2020
EOSC
Interoperability
Framework

Q4 2020
Updated PID policy
Updated FAIR metrics
& service certification

testing & iterating



WHAT

Propose a technical framework to enable and sustain an evolving EOSC, including an interoperability layer to build the federation of systems

HOW

Review current offerings and define

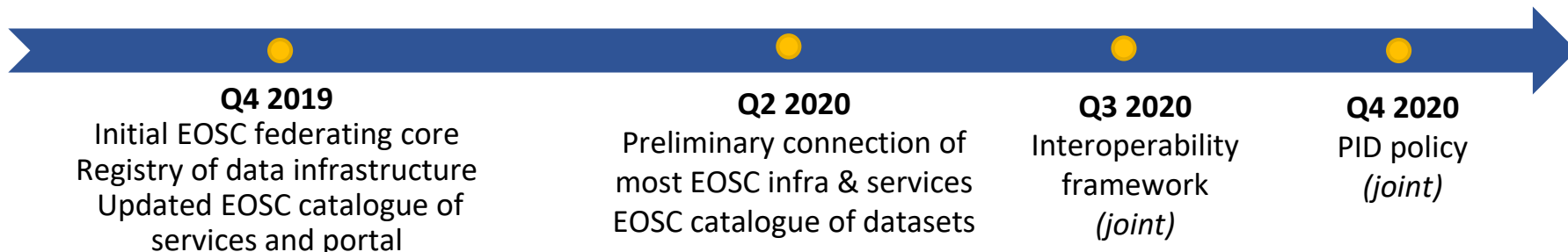
1. EOSC core services and their interfaces
2. EOSC OS APIs for reuse by thematic services
3. EOSC portal components and catalogues

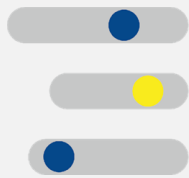
WHY

Define the interoperability layer necessary for seamless operation of the EOSC federation core

Identify the federated core of EOSC

4. EOSC data description standards
5. Other standards and best practices
6. Converge towards globally-accepted frameworks





WHAT

Provide strategic, legal and financing recommendations for an operational, scalable and sustainable EOSC federation after 2020

HOW

1. Analyse business models and implications on legal entity, costs, regulations, financial strategies, supporting NDI alignment
2. Map potential legal entities, taking into account national and European legislation

WHY

A clear understanding of key strategic, financial and legal aspects is essential for the second phase of the EOSC implementation

Towards a sustainable EOSC

3. Examine options for a governance framework to oversee EOSC operations and development
4. Analyse regulatory/policy environments and assess impact of proposed structures and funding streams at national & European level



Engage with us!



EOSC Symposium 2019

"Where the EOSC makers & shakers meet"

An integral part of the EOSC Stakeholder Forum

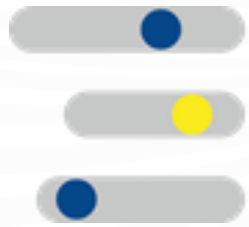
26-28 November 2019, Budapest, Hungary

Organised by [EOSCsecretariat.eu](https://eoscsecretariat.eu), EOSC-hub, GEANT, OpenAIRE and PRACE

In collaboration with: the EOSC Executive Board

Co-located with the EOSC Coordination Day (28-29 November 2019)

<https://www.eoscsecretariat.eu/events/eosc-symposium-2019>



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Thanks for listening!

Questions?

