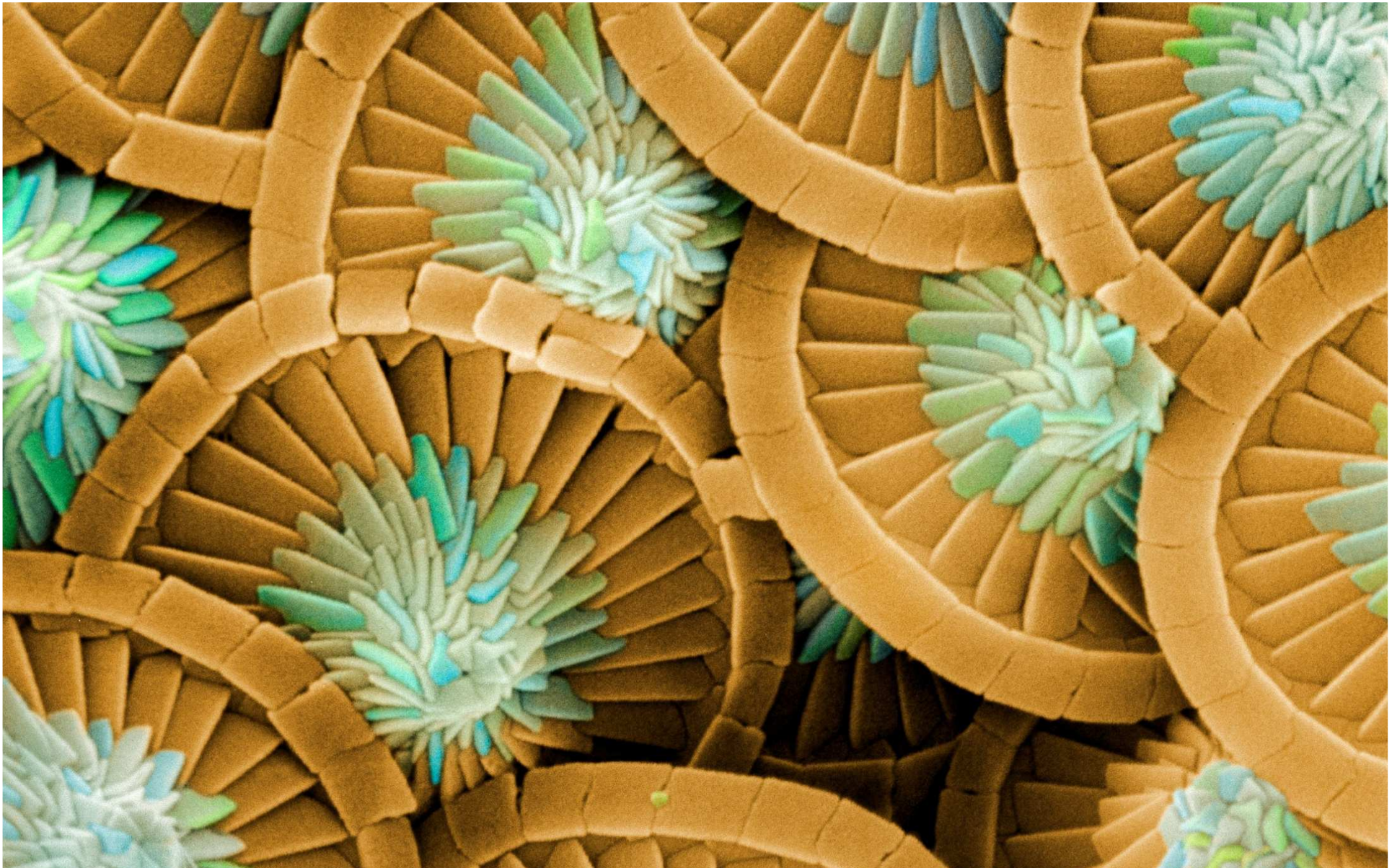




Distributed System of Scientific Collections DiSSCo Proposal – ESFRI ROADMAP 2018



Building the future of Natural History Collections

SSS Day, Fribourg 10 November 2017

Michelle Price (CJBG), CETAF Chair

Mission

Mobilise, unify and deliver bio- and geo-diversity information at the **scale, form and precision required** by scientific communities; transforming a fragmented landscape into a coherent and responsive, to changing needs, research infrastructure.

Vision

Unlock the full **potential** of natural science collection-derived information as a **pillar of scientific innovation and excellence** in climate change, food security, health, bio-economy and other key areas of societal interest.





111 Organizations

21 Countries

DiSSCo represents the **largest ever agreement** between European natural science collections related institutions



More than **150 individuals** involved in building DiSSCo proposal (incl. 30+ authors and 15 reviewers)



Letters of collaboration have been signed with BHL, Species2000, iDigBio, eLTER



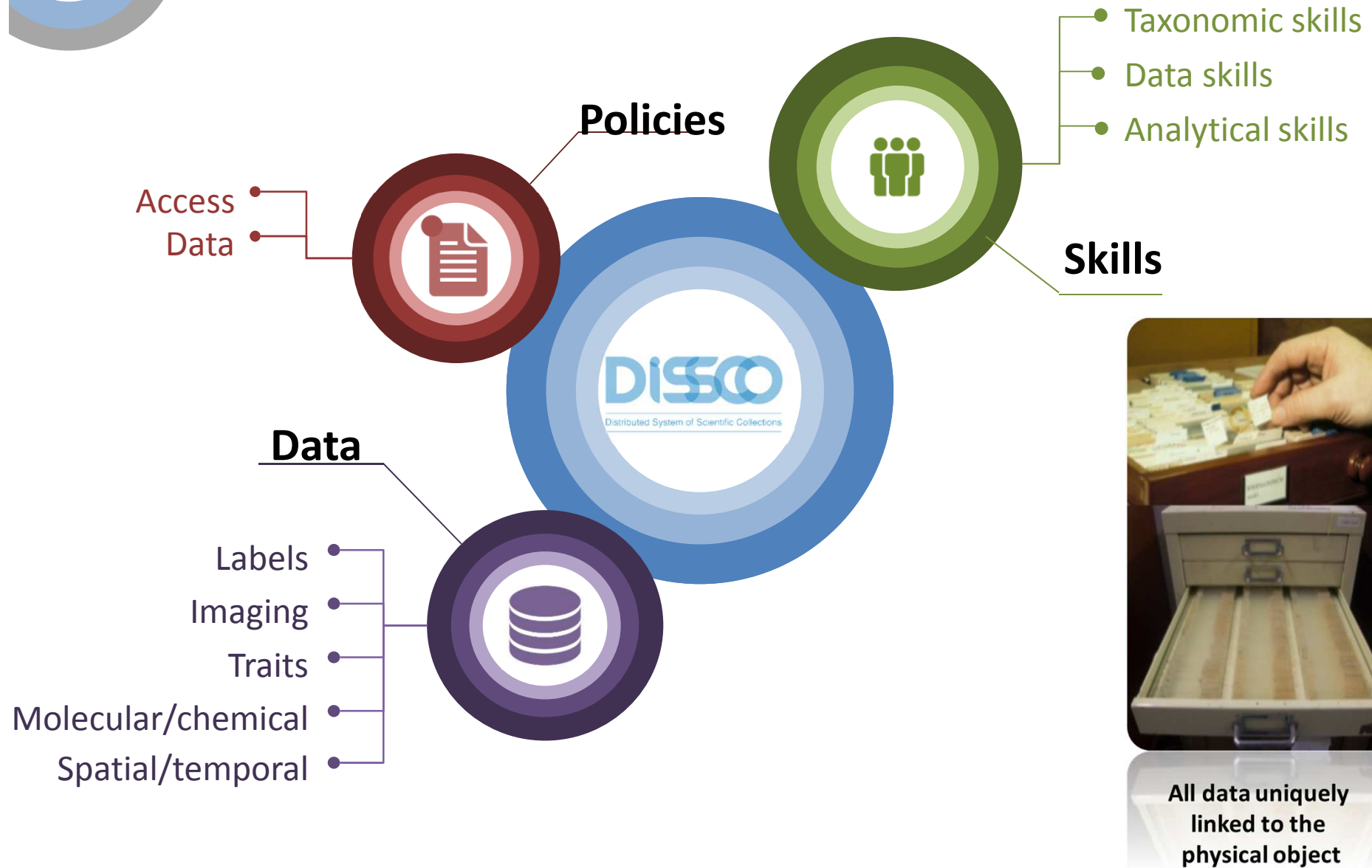
Governmental Support

11 Countries / 2 required



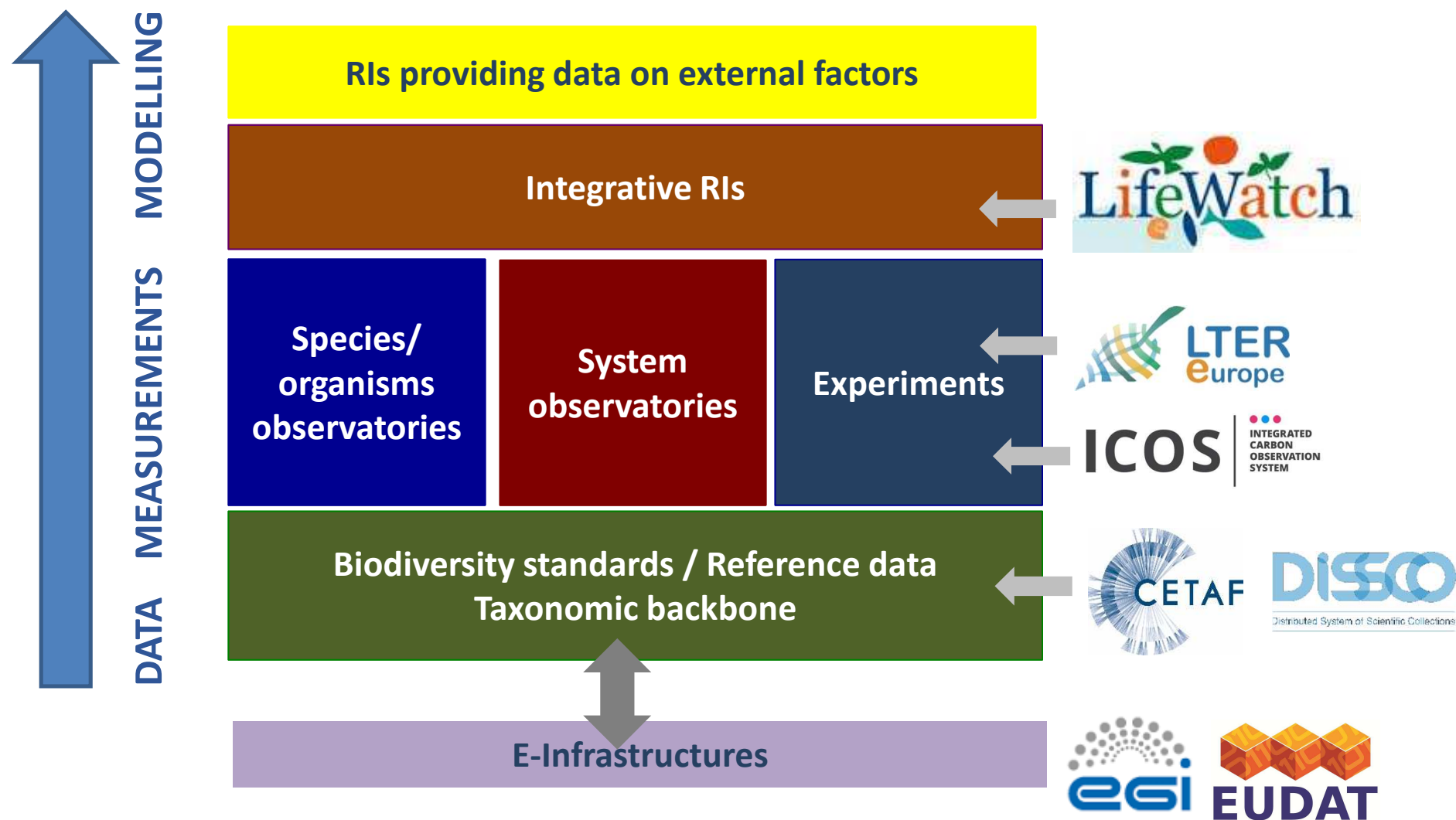
1

DiSSCo, a Gateway to Nature's data



2

DiSSCo in the environmental landscape



3

DiSSCo offer of services

1

Access to collections and data

Less than 10% widely available

2

Joint research programming

Data-driven innovations

3

Integration and interoperability

Standards, protocols, workflows

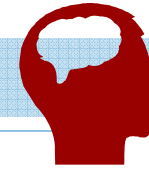
4

Digital skills and competencies

Training, support awareness

DiSSCO

Distributed System of Scientific Collections



1

Access to collections and data

No	Service class	Indicative services
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ACCESS: Mass digitization programmes		
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OPEN OUR DATA for its use by other science domains and users		
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1

Physical (transnational) and digital (virtual) access to collections

- European Collections Data Portal;
- Visualisation and analytics digital services;
- Standing and on-demand digitisation services;
- Transnational access to physical collections services;
- Co-design and co-creation platforms (incl. Virtual Research Environments and citizen science platforms).





2

Joint research programming

No Service class

Indicative services

Joint Research Programming

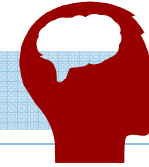
CONTRIBUTE TO FOSTER INNOVATION

2

Joint Research Programming for data-driven scientific innovation

- Landscape analysis and strategic steering;
- Design and implementation of Joint Research Programming (JRP) activities;
- Resourcing;
- Monitoring and impact assessment.





3

Integration and interoperability

No Service class

Indicative services

HARMONIZATION: Policies and procedures

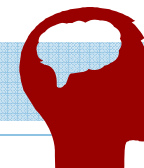
FACILITATE THE INTER-CONNECTIVITY for researchers worldwide

A Clearing House mechanisms for all specimen-related data types

3 Policy harmonisation

- International alignment;
- European policies synchronisation platform.





4

Digital skills and competencies

No	Service class	Indicative services
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Digital skills and competences

Community of data providers and a cluster of practitioners

4

Training, support and engagement

- Development and implementation of standardised training modules on digital skills and competencies;
- User support centres;
- Industrial engagement liaison office;
- Stakeholder engagement office;
- Public outreach and dissemination.



4

DiSSCo governing model

Hub and spoke model



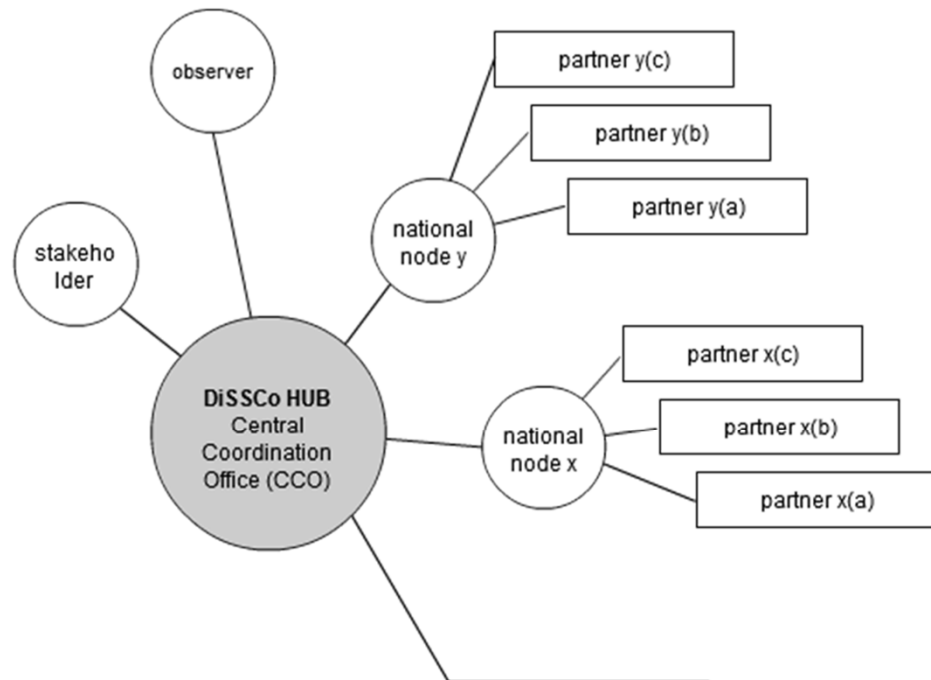
In this model **decisions** over the implementation and operation aspects of provisioned services are **taken centrally**. **Resources**, however, are handled by the national nodes (or facilities) in a **distributed manner**.

A central facility/headquarters retains part of the invested resources to support its coordination mission

In support of DiSSCo

ICEDIG
MOBILISE
SYNTHESYS

...



Decisions are taken centrally, implementation resources are handled in a distributed manner.



5

DiSSCo current status

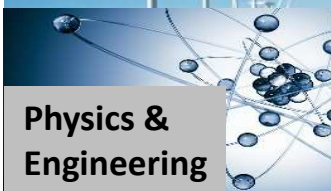
- ESFRI is **not a EU institution** but is run by the **member states**. Thus, one country needs to officially submit a proposal
- Following the leadership of NATURALIS and The Netherlands as leading country of the proposal, the **Dutch ESFRI Delegation was engaged to** submit the DiSSCo proposal to the ESFRI Forum
- DiSSCo was submitted on the 31 August 2017
- 2 proposals were submitted (DISSCo, eLTER) for 2 open spots in the environmental domain

The ESFRI logo consists of the letters "ESFRI" in a white, bold, sans-serif font, centered on a solid blue rectangular background.The image for the Environment domain shows a small green plant with three leaves growing out of a cracked, dry, greyish-brown soil surface.

ENVIRONMENT

The image for the Energy domain shows several white wind turbines with three blades each, set against a clear blue sky.

Energy

The image for the Physics & Engineering domain shows a complex network of blue spheres connected by thin, glowing lines, resembling a molecular structure or a network diagram.

Physics &
Engineering

The image for the Health & Food domain shows a variety of fresh produce, including yellow and red bell peppers, orange slices, cherry tomatoes, and a bowl of white yogurt.

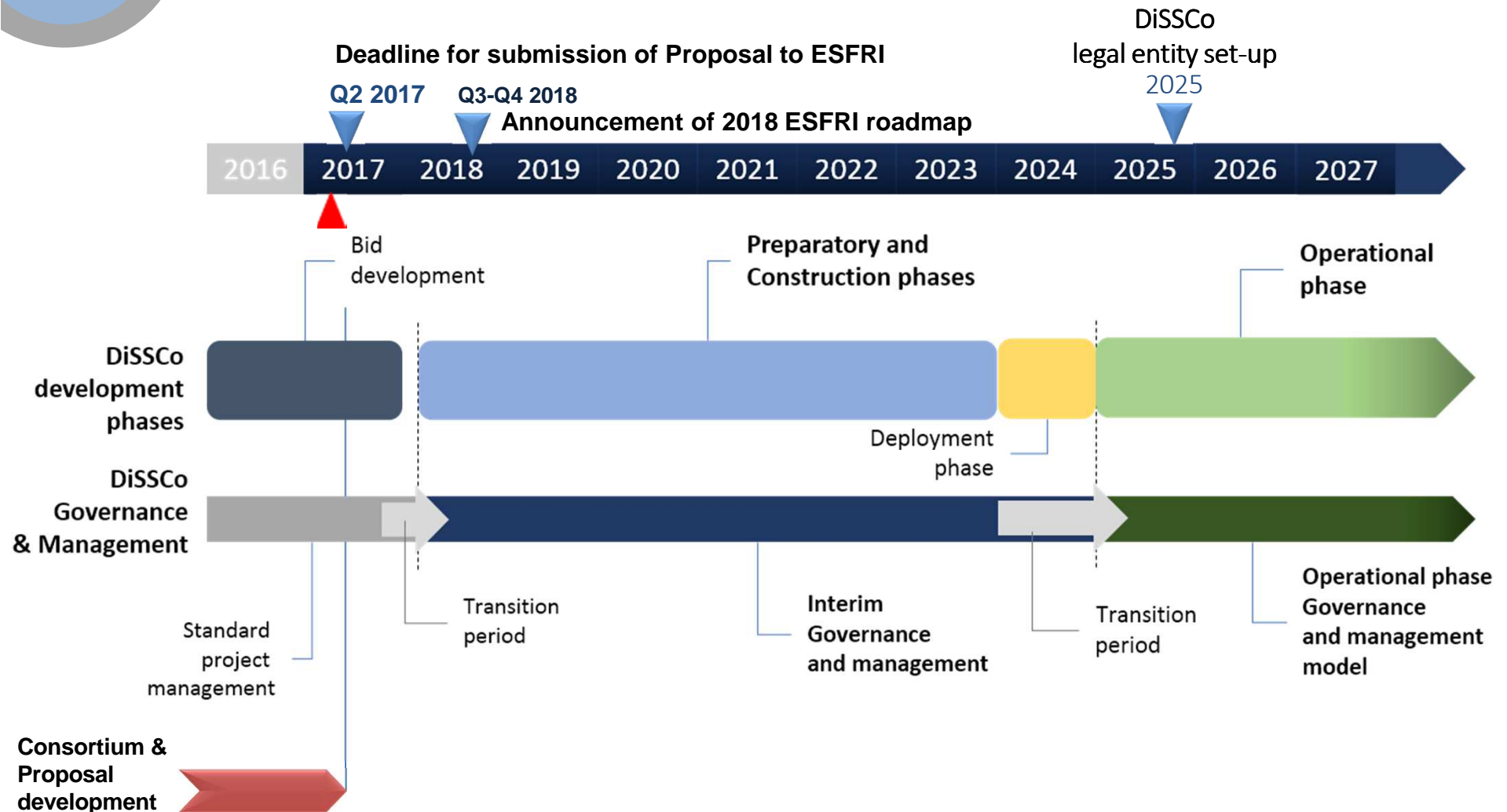
Health & Food

The image for the Social & cultural domain shows an open book with its pages fanned out, resting on a surface. The text "r way, y" and "where fa" is visible on the pages.

Social & cultural

6

DiSSCo Project development timeline

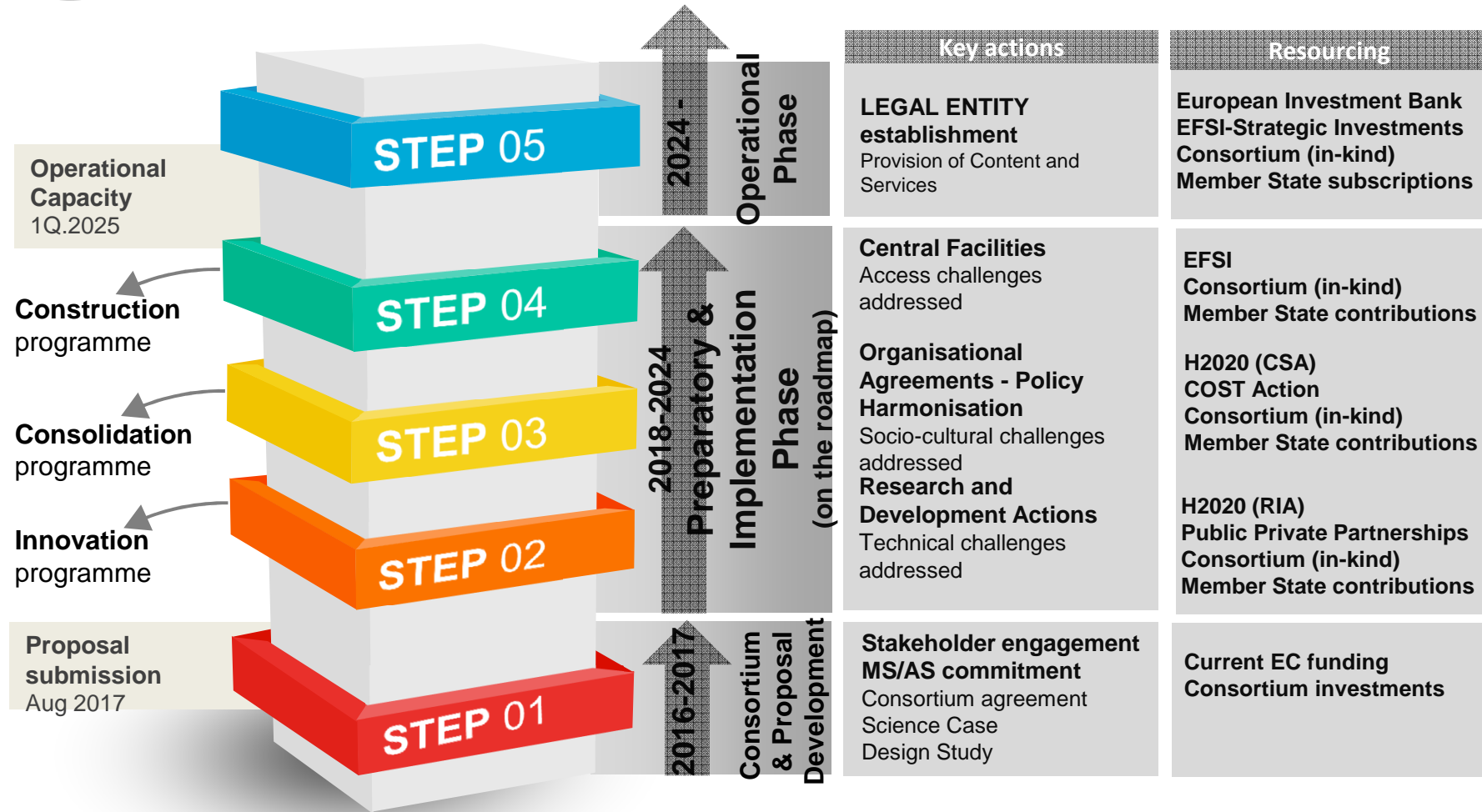


Submission deadline: 31 Aug 2017
National process deadlines: 1 June 2017

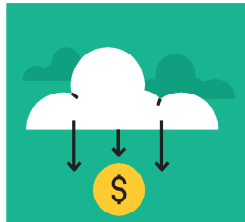


7

DiSSCo Project development process



Preparatory, Construction and Operational estimated costs



Design Study (& Proposal preparation)

already invested

€10M (€0.6M)



Capital Investment

Preparatory & Construction phases

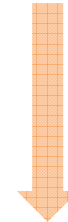
55% already committed

ca. €110M

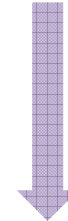


Operational phase

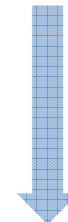
ca. €9M/year



2018



2025



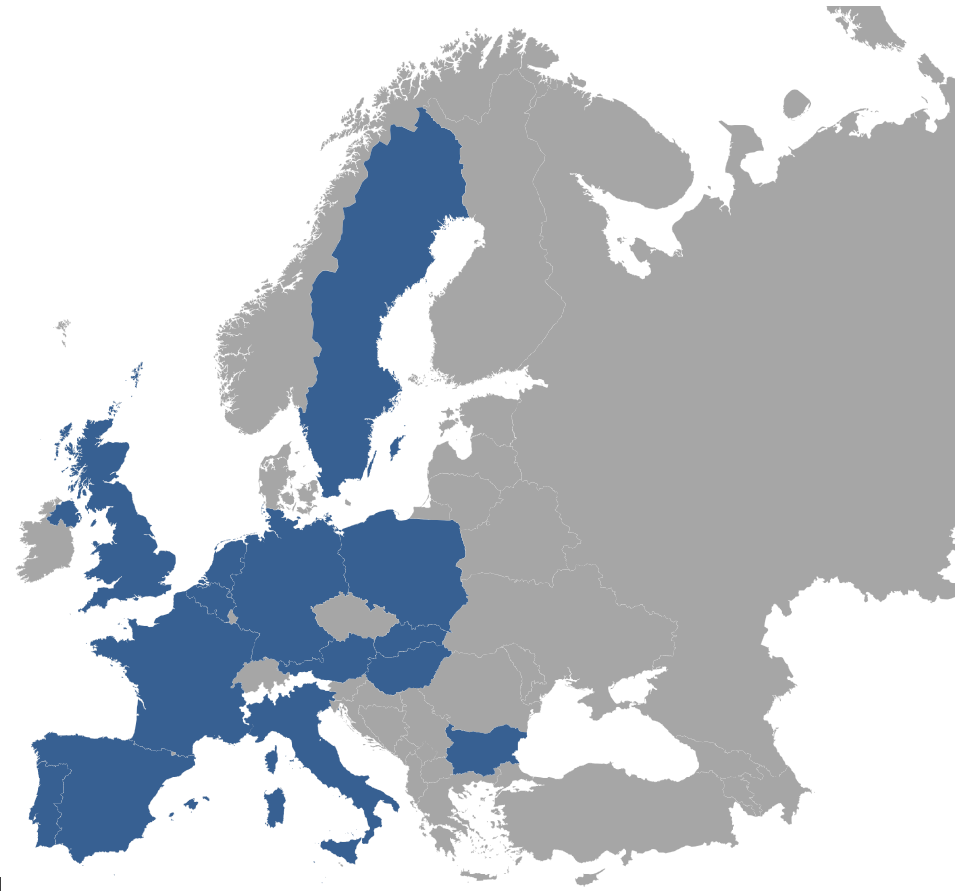
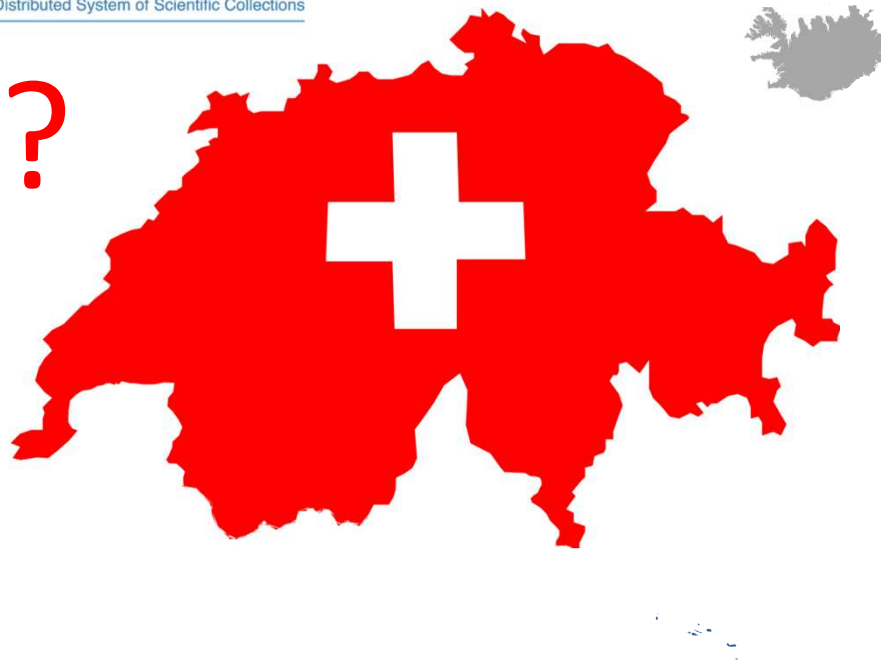
The DiSSCo logo consists of the word "DiSSCo" in a stylized, blue, sans-serif font. The letters are interconnected, with the 'i' and 'S' sharing a vertical stroke, and the 'S' and 'C' sharing a vertical stroke. The 'D' is a simple outline, and the 'o' is a solid circle.

Distributed System of Scientific Collections

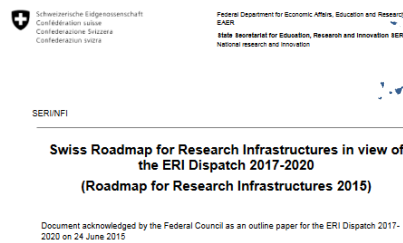


CETAF full member of DiSSCo

CETAF represents the interest of the entire community and its shared goals in the development of the DiSSCo proposal



**Talk
Mobilize
Collaborate
Lobby**



https://ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri-national-roadmaps

-> Swiss NHC Research Infrastructure for Natural History Collections

DiSSCO

Distributed System of Scientific Collections

