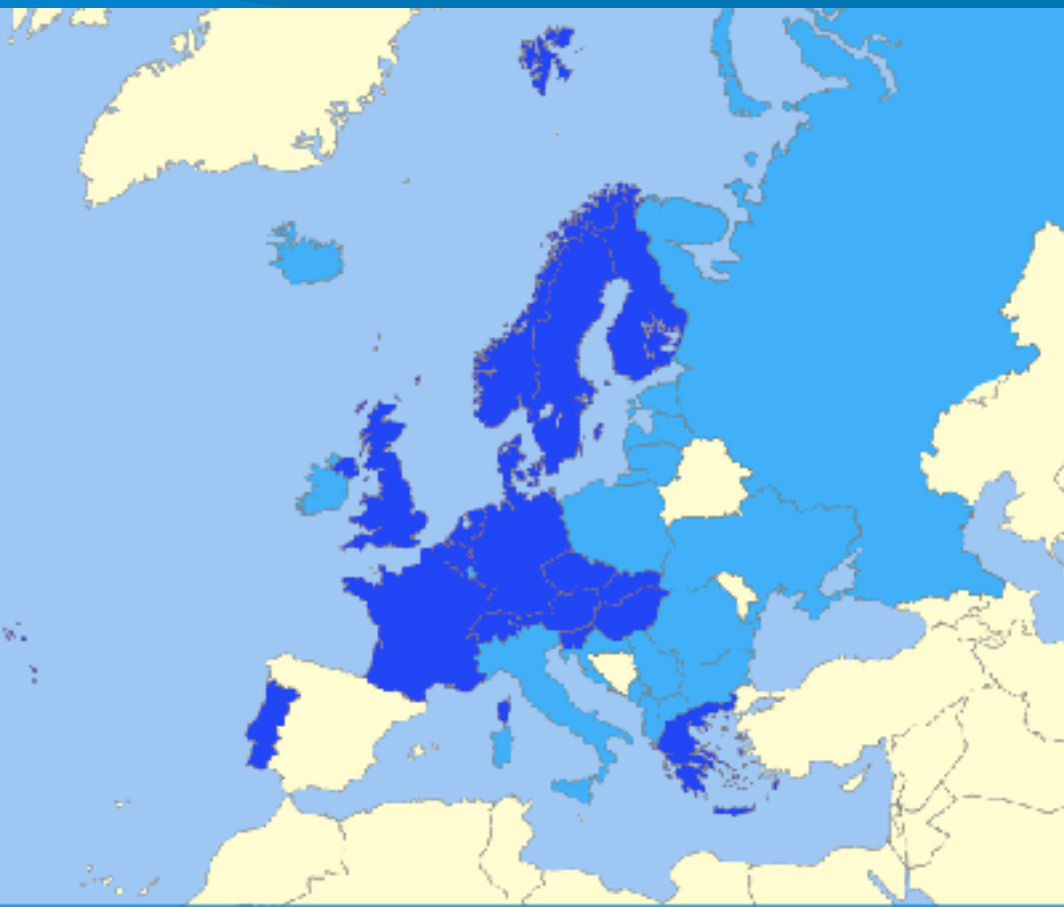


CESSDA ERIC

Consortium of European Social Science Data Archives
European Research Infrastructure Consortium

Ron Dekker

Director CESSDA



Striving for efficiency

Realise the social data part of EOSC

**How to Get the Maximum from
Research Data – Prerequisites and
Outcomes**

University of Tartu, 29 May 2018

Trends

1. Growing importance of data

- A. data-driven, reproducible data
- B. better connecting science and society
- C. mission oriented science & innovation

2. Need for data content

- A. combining data from multiple disciplines
- B. linking and connecting data
- C. Big Data & Artificial Intelligence

3. Platform economies

- A. focus on value-creating interactions
- B. shift from owning to sharing



<https://solutionsreview.com>

www.ucl.ac.uk



Why Open Science?

Europe must embrace the transformative power of open science allowing for a **faster circulation of increasing amounts of knowledge, and seize the potential of open innovation** to trigger faster and fairer growth, building a knowledge economy that is open to the world. (p. 8)

EC Staff Working Doc - on data:
Give the Union a global lead in research data management and ensure that European scientists reap the full benefits of data-driven science



Open Science Agenda

1. Reward systems
2. Altmetrics
3. New models for publishing
4. FAIR open data
5. Open Science Cloud
6. Research integrity
7. Citizen Science
8. Open education and skills

July 2017

December 2016

Working

Working

Oct. 16 & Working

WP SwafS 2018-20

WP SwafS 2018-20

July 2017

European Open Science Cloud

Virtual environment for **all European researchers** to store, manage, analyse and re-use data

Federation of existing and emerging data infrastructures



Council Conclusions 29 May 2018

<http://www.consilium.europa.eu/en/meetings/compet/2018/05/28-29/>

KEY Docs:

- EOSC Declaration from 26 October 2017
- EC Staff Working Document on the Implementation Roadmap for the European Open Science Cloud from April 2018

WHAT

- Creation of EOSC
a joint responsibility of the EC and the Member States + the stakeholders;
- EOSC is a user-centred environment,
serving the research community foremost at the start,
building on its most advanced practices, and **then** expanding
... to the broader user community, including SMEs, citizens and public authorities

Council Conclusions 29 May 2018

<http://www.consilium.europa.eu/en/meetings/compet/2018/05/28-29/>

HOW

- EOSC aimed at ensuring as far as possible open access to scientific results and mainstreaming open science practices in Europe
- Effectiveness to act simultaneously, with research funders fostering open access, data management mandates and FAIR principles as well as incentives and rewards
- Change of Culture among researchers towards openness
- Take into account already established practices by research communities, ESFRI Research Infrastructures, e-Infrastructures, as well as other relevant national infrastructures

Council Conclusions 29 May 2018

<http://www.consilium.europa.eu/en/meetings/compet/2018/05/28-29/>

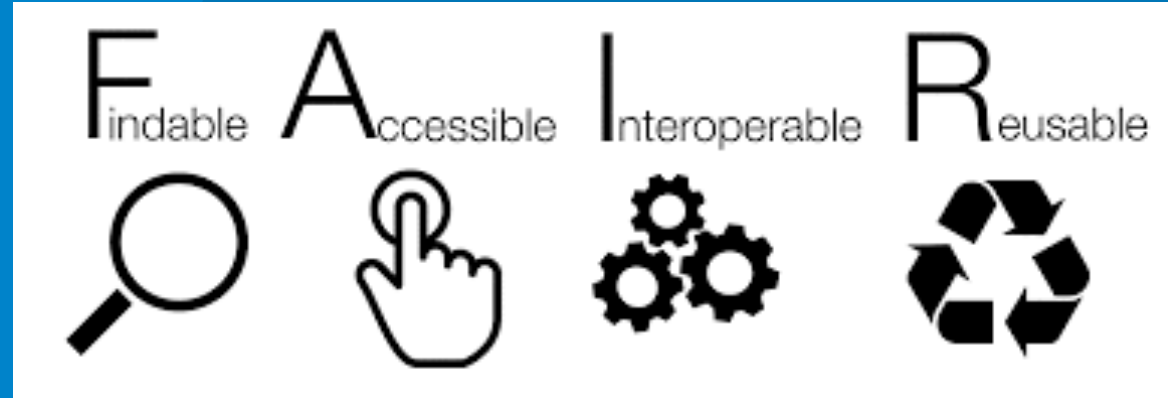
INVITES the Commission and the Member States

to jointly explore the creation of a map of national research data infrastructures and initiatives in the Member States which could be federated,

in order to ensure that current structures, competences, functions, and initiatives regarding research data management are duly taken into account

FAIR

- Findable
 - Easy to find by both human and machine
 - Based on mandatory description of metadata
- Accessible
 - Stored for long-term
 - Easy access & well-defined license and access conditions
- Interoperable
 - Ready to be combined with other datasets
- Re-usable
 - Ready to be used for future research



commons.wikimedia.org

EOSC Declaration

all EOSC stakeholders consider sharing the following intents and will actively support their implementation in the respective capacities

- Data culture and FAIR data
- Research data services and architecture
- Governance and funding

Action list of the 'coalition of the doers'

- | | | |
|----------------------|----------------------------|-----------------------|
| • Data Culture | Skills | FAIR Data Governance |
| • Transition to FAIR | Research Data Repositories | Data Management Plans |
| • User Needs | Service Deployment | Thematic Areas |
| • Governance Model | | |

EC Staff Working Doc

SWD(2018) 83 final

EOSC should act as a trusted platform between research data needs, and cloud-based scientific services in the private marketplace

EOSC Model action lines

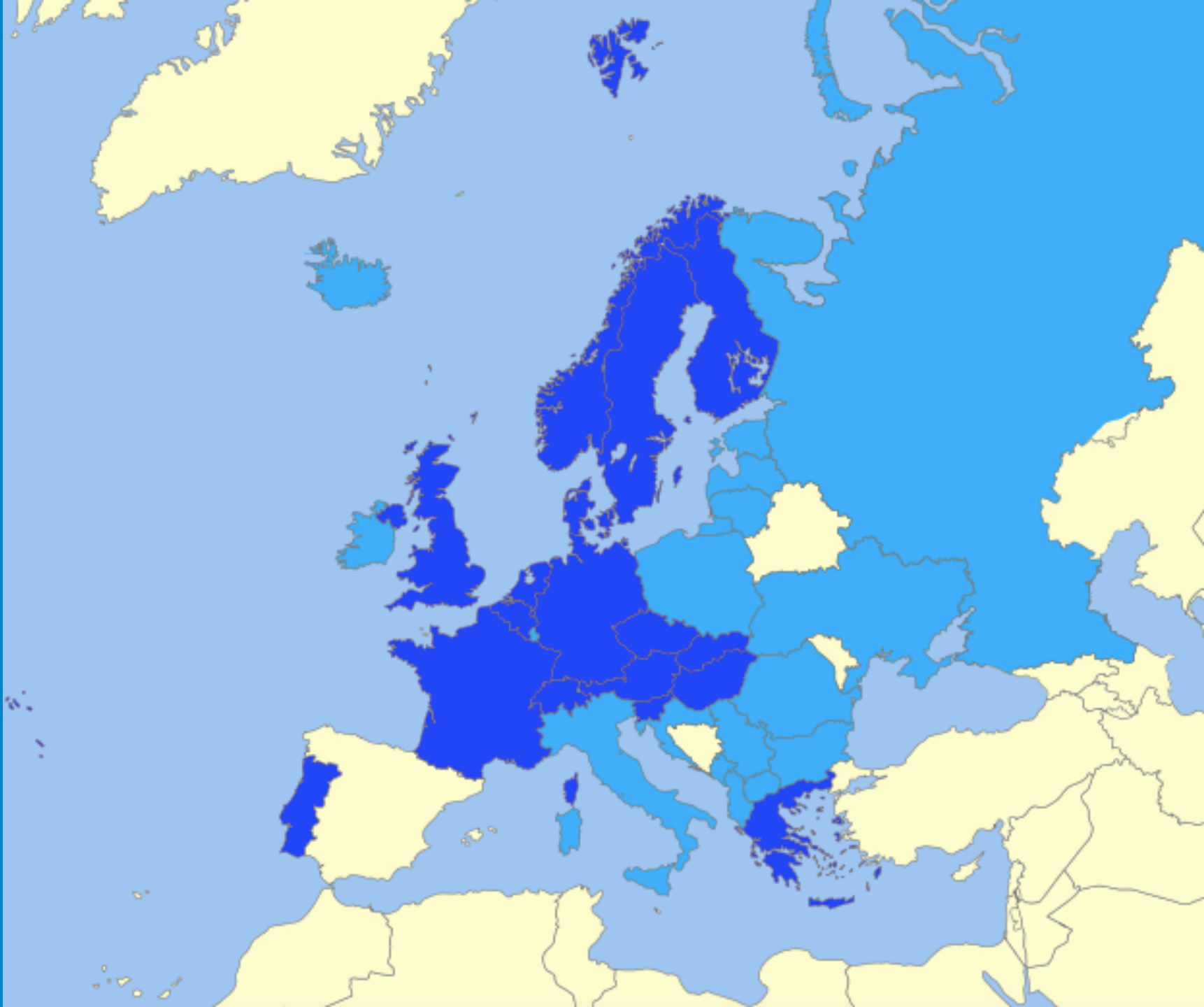
1. Architecture
2. Data
3. Services
4. Access & Interface
5. Rules
6. Governance

FP9 - Horizon Europe



- Open Science
 - ERC
 - **Research Infrastructures** *Consolidating the landscape of European research infrastructures
Opening, integrating and interconnecting research infrastructures
'Computing Science' - Infrastructures for computing science ...
LT EU Strategy and assessments on research infrastructures*
 - Marie Skłodowska-Curie Actions
- Global Challenges / Integrated Clusters *About 10-15% via Missions - have measurable impact
Activities involving SSH will be fully integrated.*
 - Health
 - **Resilience and Security** (40% SSH, 60% Sciences) *Democracy, Cultural Heritage, Soc & Ec Transformations,*
 - Food, Natural Resources *Disaster-Resilient Societies, Protection and Security, Cybersecurity*
 - Climate, Energy, Mobility (transport)
 - Digitising *High Performance Computing and Big Data,
incl. "Privacy by design"*
- Open Innovation

CESSDA



CESSDA Mission and Vision

MISSION: The task of CESSDA ERIC is
to provide a distributed and sustainable research infrastructure
enabling the research community to conduct high-quality research in the
social sciences
contributing to the production of effective solutions to the major challenges
facing society today
and to facilitate teaching and learning in the social sciences

VISION: CESSDA wants to be a key player in the social sciences domain,
striving for full European coverage, providing

- **a trusted platform for researchers** with tools and services to curate,
publish and re-use research data
- **training** to the research community throughout the whole research cycle

Stakeholders

Members

- **Governments**, Research Funding Organisations
- Universities, other Research Performing Organisations

Service Providers

- **Data Services**
- IT Infrastructure (computing, network, software)
- Research Libraries
- Publishers

Data Producers

- **Researchers** & Research Performing Organisations

Data Re-Users

- **Researchers**, Professionals, Citizens

TRUST



TRAINING



TECHNOLOGY



TOOLS



Why a consortium?

- **Critical mass**

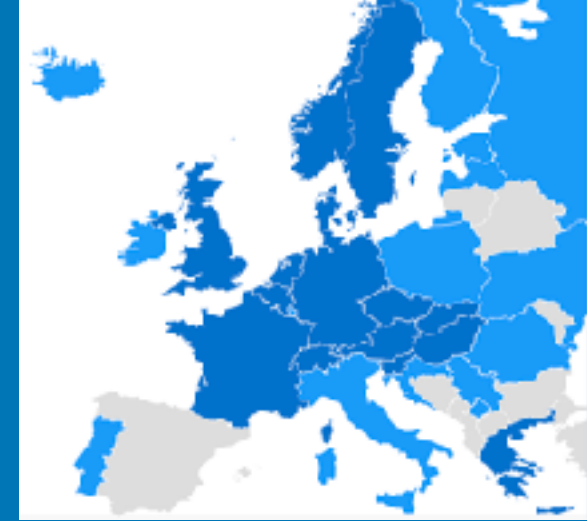
- In Brussels - eligible for funding, trusted repositories
 - Standards - metadata, persistent identifiers
 - Partnerships - other ESFRI's/ERICs, National Statistics, ...
 - Replace Fragmentation by Coordination

- **Sharing expertise**

- Safe and Secure Data Infrastructure
 - Joint Research & Innovation
 - Data Clusters

- **For Researchers**

- Deposit , Find, and Re-use
 - Tools for constructing data, provide seamless access and use
 - Training



Why a consortium?

- **Critical mass**

- In Brussels - eligible for funding, trust
 - Standards - metadata, persistent
 - Partnerships - other ESFRI's
 - Replace Fragmentation

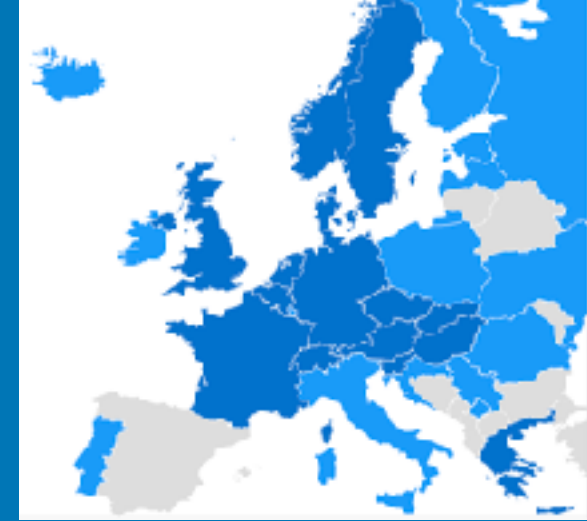
- **Sharing expertise**

- Safe and Secure
 - Joint Rese
 - Data O

- **For**

- Depo
 - Tools fo, provide seamless access and use
 - Training

**ADVANCES THE INTERDEPENDENCE
BETWEEN ITS MEMBERS
WHILE RECOGNISING THE INDEPENDENCE
OF ITS MEMBERS**



Value Propositions

| Stakeholder | Goal of stakeholder |
|-------------------|---|
| Members & EC | Provide research infrastructure to increase excellence |
| Service Providers | Critical mass, sharing expertise and technology, common infrastructure |
| Data Producers | Expertise and compliance with RDM plan, Secure storage and GDPR compliance, data citation, Safe re-use (code of conduct, secured access) |
| Data Re-users | FAIR data, esp. easy to find and access, quality of available data, have context data, join a research community / data cluster, expertise on use of complex data |

Tools & Services

| | TOOLS & SERVICES | Data Users | Data Producers | Service Providers | Funders/ Members |
|-----------|--|------------|----------------|-------------------|------------------|
| Available | CESSDA Data Catalogue | X | | | |
| | CESSDA Metadata Harvester | | | X | |
| | CESSDA Metadata Profile | | | X | |
| | CESSDA Data Management Expert Guide | | X | | |
| | CESSDA Knowledge Exchange (Intranet) | | | X | |
| 2018 | Social Sciences Common Vocabulary Manager | | | X | |
| | Social Sciences Multilingual Thesaurus | | | X | |
| | Social Sciences Multilingual Question Bank | X | X | | |
| 2019 | CESSDA Quality Assurance | | | | X |
| | CESSDA Self-Archiving | | X | | |
| | Single Sign On | X | X | X | |
| | CESSDA Access to Sensitive Data | X | | | |
| 2020 | Social Sciences Data Discovery Tools | X | | | |
| | Social Sciences Research Data Management | | X | | |
| | CESSDA Data Tags | | X | X | |

CESSDA Data Catalogue

The screenshot shows the CESSDA Data Catalogue website. At the top left, there is a 'Beta' badge. The main header features the 'cesstda eric' logo and the text 'Products and Services Catalogue'. A search bar contains the text 'Find Social and Economic Research Data'. Below the search bar, it indicates '107010 results found in 43ms' and provides buttons for 'Advanced search', 'Reset filters', and 'Clear search'. The language is set to 'English'. On the left side, there are filter categories: Topic, Collection years, Availability, Country, Publisher, and Language of data files. The main content area shows search results with 'Results per page' set to 30 and 'Sort by' set to 'Title (ascending)'. The first result is titled '"Arma sunt necessaria" (Arms are necessary) Guns, Gun Culture and Cultural Origins of the Second Amendment to the U.S. Constitution' by Lenz, Michael, with an 'Open' button. The second result is titled '"Being mischievous" and "The man and his wife"' by Petzell, Malin, also with an 'Open' button. The text below the second result states: 'The study comprises five stories told in the Bantu language Kagulu of Tanzania. The stories are available as sound recordings as well as glossed transcriptions. However, the transcriptions do not closely follow the sound recordings but have been normalised in cooperation with a native'.

Beta

Language: English

cesstda eric
Products and Services Catalogue

Find Social and Economic Research Data

107010 results found in 43ms

Advanced search Reset filters Clear search

Topic ?

Collection years ?

Availability ?

Country ?

Publisher ?

Language of data files ?

Results per page 30

Sort by Title (ascending)

1 2 3 4 ...

["Arma sunt necessaria" \(Arms are necessary\) Guns, Gun Culture and Cultural Origins of the Second Amendment to the U.S. Constitution](#)
Lenz, Michael

Availability [Open](#)

Language: EN [Go to study](#)

["Being mischievous" and "The man and his wife"](#)
Petzell, Malin

Availability [Open](#)

The study comprises five stories told in the Bantu language Kagulu of Tanzania. The stories are available as sound recordings as well as glossed transcriptions. However, the transcriptions do not closely follow the sound recordings but have been normalised in cooperation with a native

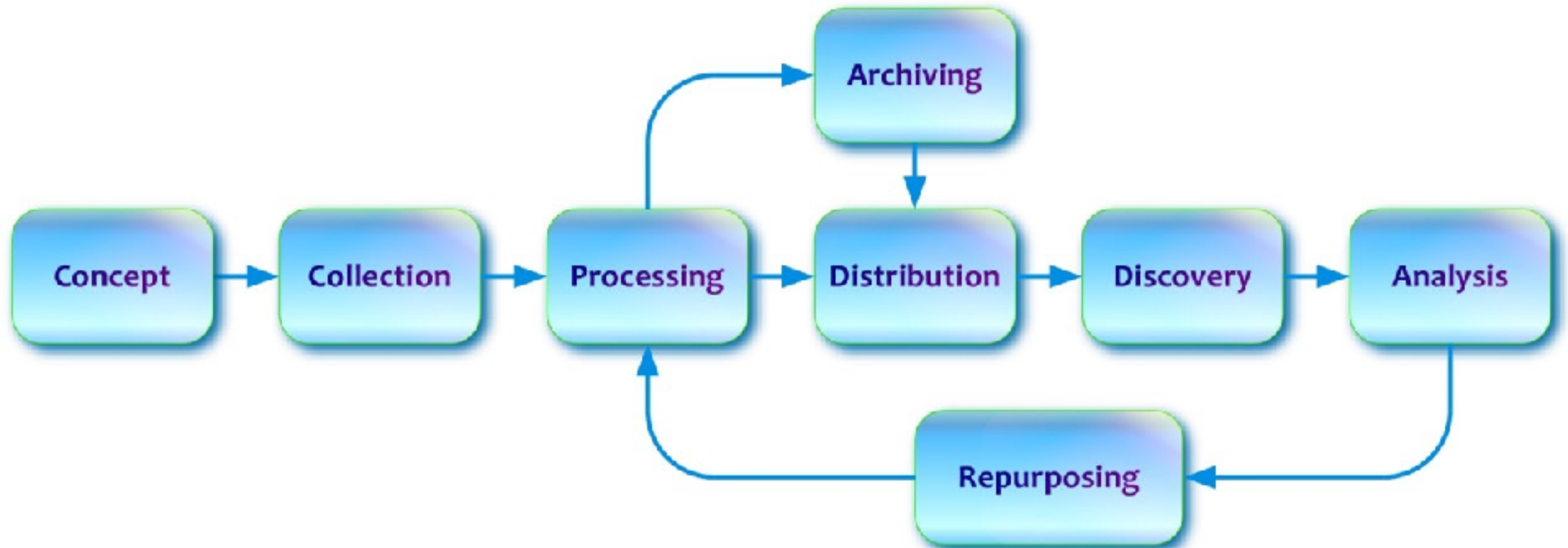
DATA CLUSTERS



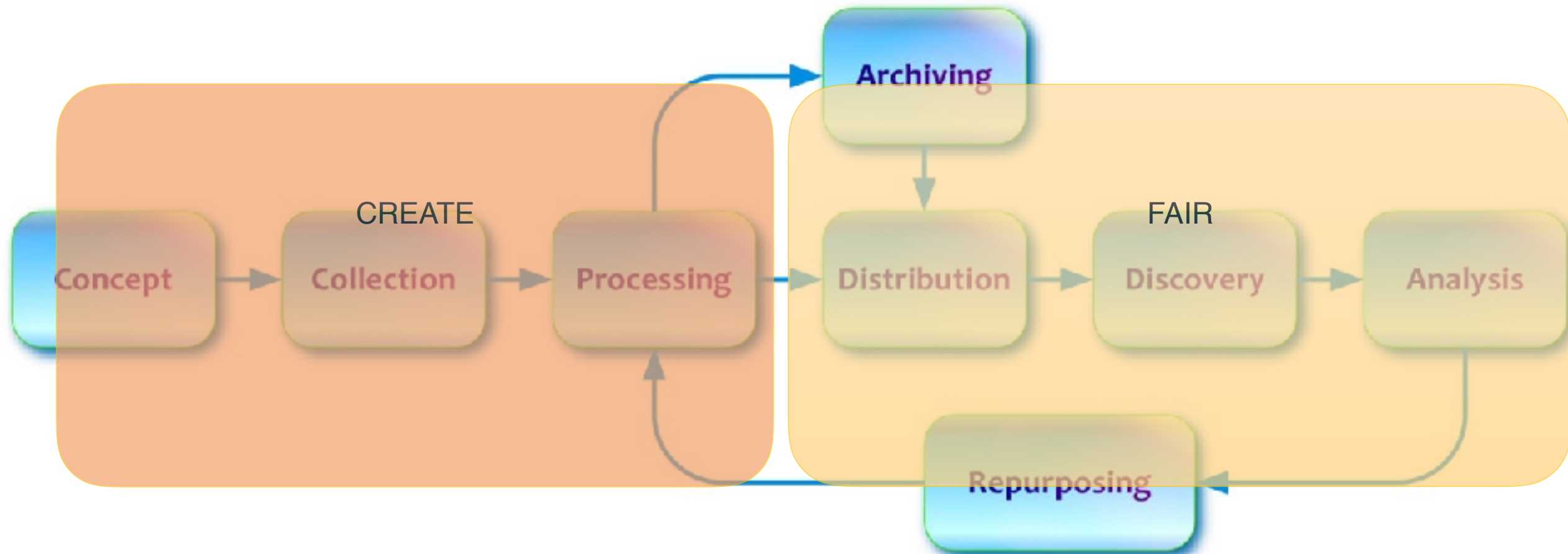
CESSDA as part of EOSC

- Data Deposit and Reuse
 - FAIR
 - CESSDA Catalogue (Findable)
 - Safe & Secure Data Infrastructure (Accessible)
 - **CESSDA Providers as Trusted Repositories**
 - Pilots on Interoperability
- Training & Tools/Services
 - Train the Trainers & Train the Researchers
 - Data Management Tools, Vocabularies, Easy-deposit

Data Life Cycle

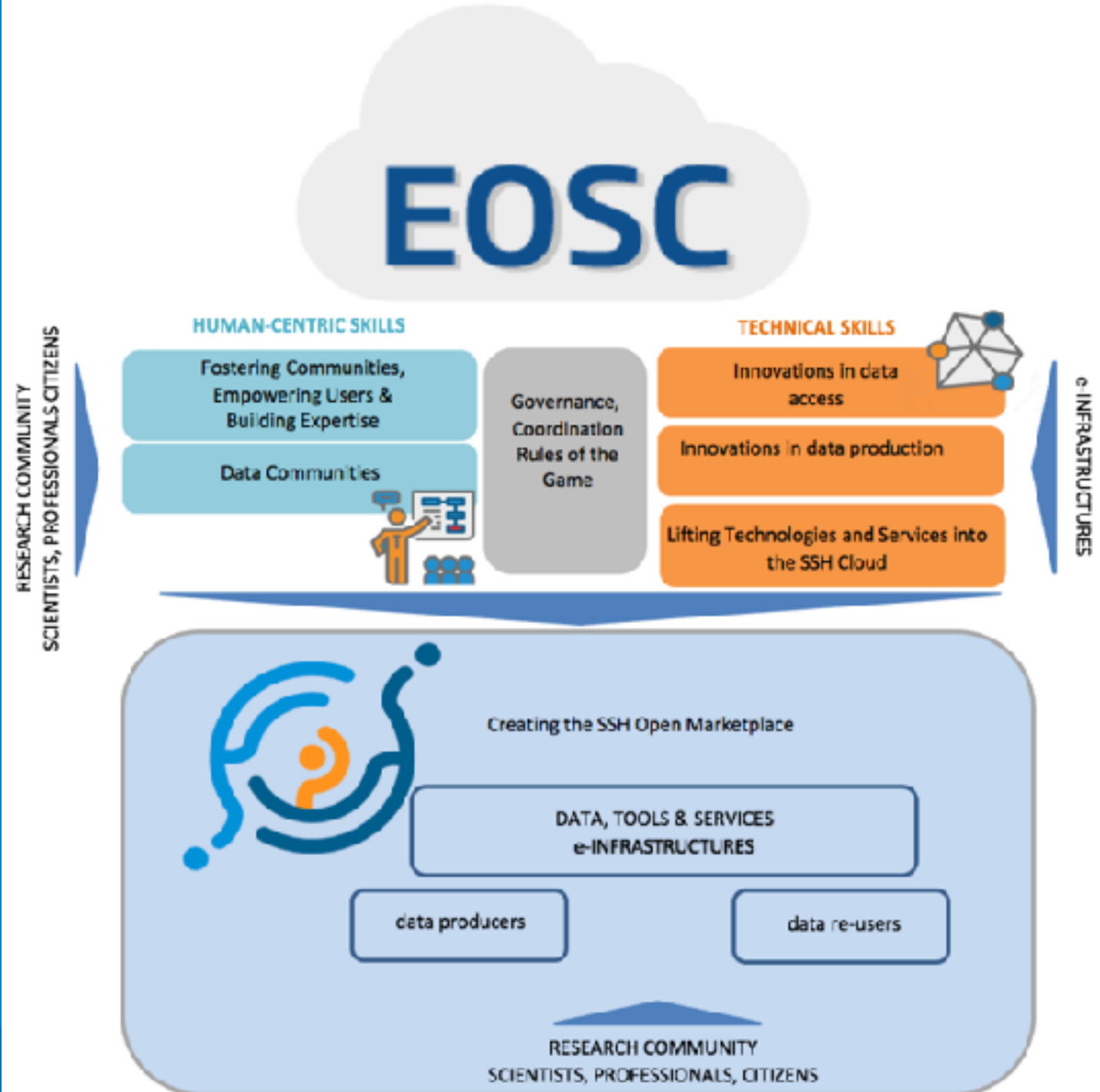


Data Life Cycle



SSHOC

- Whole Research Data Lifecycle
 - Inclusive Approach
- Tech & Human Dimension
- R&I Track for Tools
 - Readiness to Cloud
- Experiment with Communities
 - Mazzucato - Missions
 - Platforms are user-oriented
- Integrate e-Infra
 - Horizontal Services
 - Secure Platforms iso Downloading



Get your data organised

Why ?

- Science and Society ask for these data
 - Importance of research data, good descriptions, easy access
- More efficient use of public finances
 - Long-term access
 - Re-use of FAIR data

How?

- Focus on the data-user
 - Problem-oriented
 - Have the users involved - right from the beginning!
- Have a national backbone — ESSDA!
 - Longterm archiving and access, expertise, training, etc.
 - Ensures Sustainability and brings Trust in the ecosystem

Personal Note

IF YOU WANT TO GO FAST,
GO ALONE.

IF YOU WANT TO GO FAR,
GO TOGETHER

Thank you

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WWW.CESSDA.EU

Twitter [@CESSDA_DATA](https://twitter.com/CESSDA_DATA)