European Social Data Platform

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TRENDS

1. SCIENCE WILL OPEN UP
   - Data-driven
   - Reproducibility
   - Better connect within science and with society

2. INFORMATION SOCIETY

3. PLATFORMS

1. SCIENCE WILL OPEN UP

2. INFORMATION SOCIETY
   - Data is the new oil
   - Re-usable

3. PLATFORMS

1. SCIENCE WILL OPEN UP

2. INFORMATION SOCIETY

3. PLATFORMS

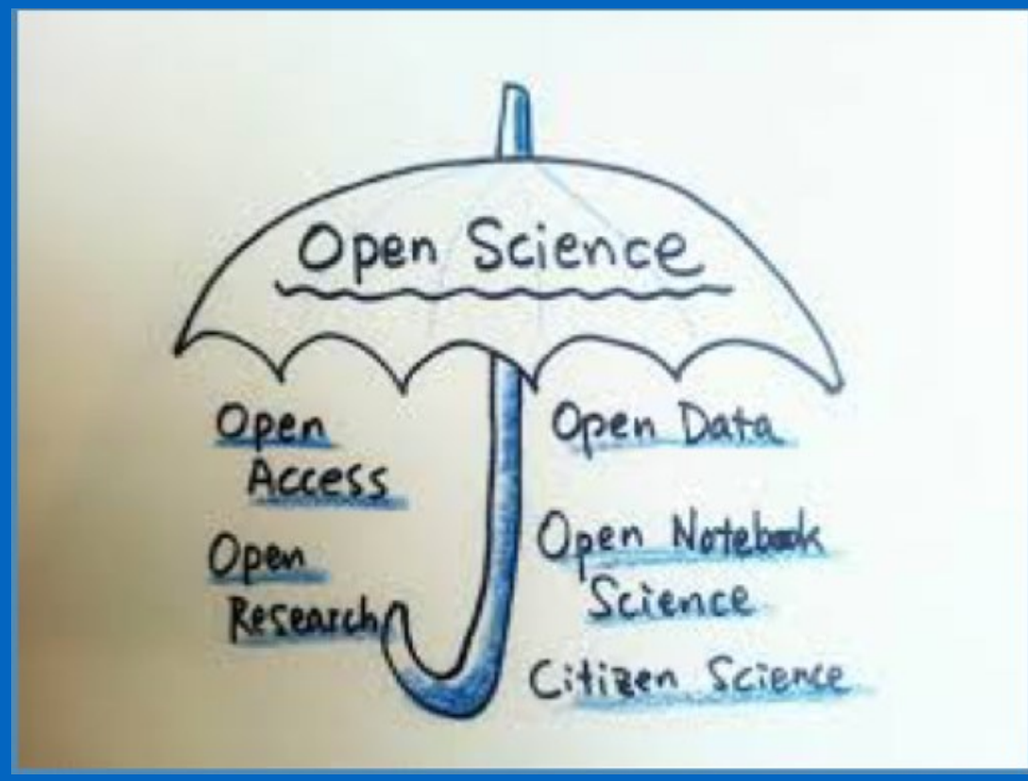
- Value-creating interactions producers & users

Google amazon.com facebook

Open Science

"Open science is the idea that scientific knowledge of all kinds should **be openly shared** as early as is practical in the discovery process."

Michael Nielsen



Why Open Science?

Pascal Lamy

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)

European 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

European Open Science Agenda

1.Reward systems	July 2017
2.Altmetrics	December 2016
3.New models for publishing	Starting up
4.FAIR open data	Working
5.Open Science Cloud	Oct. 16 & Working
6.Research integrity	WP SwafS 2018-20
7.Citizen Science	WP SwafS 2018-20
8.Open education and skills	July 2017

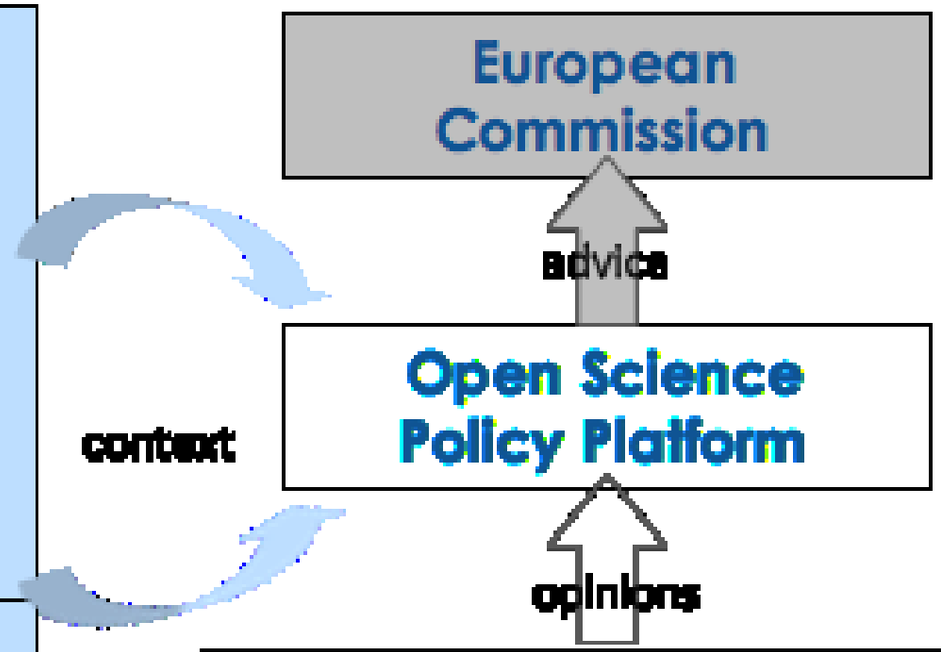
Open Science Policy Platform

ERA & framework conditions for actors:

- European Charter for researchers
- Code of conduct for Research Integrity
- Charter for Access to Research Infra
- …

conditions for data:

- Copyright - TDM
- Data Protection
- Free Flow of Data
- …



European Open Science Agenda:

- OA publishing models
- FAIR open data
- Open Science Cloud
- Alternate metrics
- Rewards & careers
- Education & skills
- Citizen Science
- Research integrity

Wide input from stakeholders:

- ad-hoc meetings and workshops
- e-platform with wider community
- *reports and independent experts*

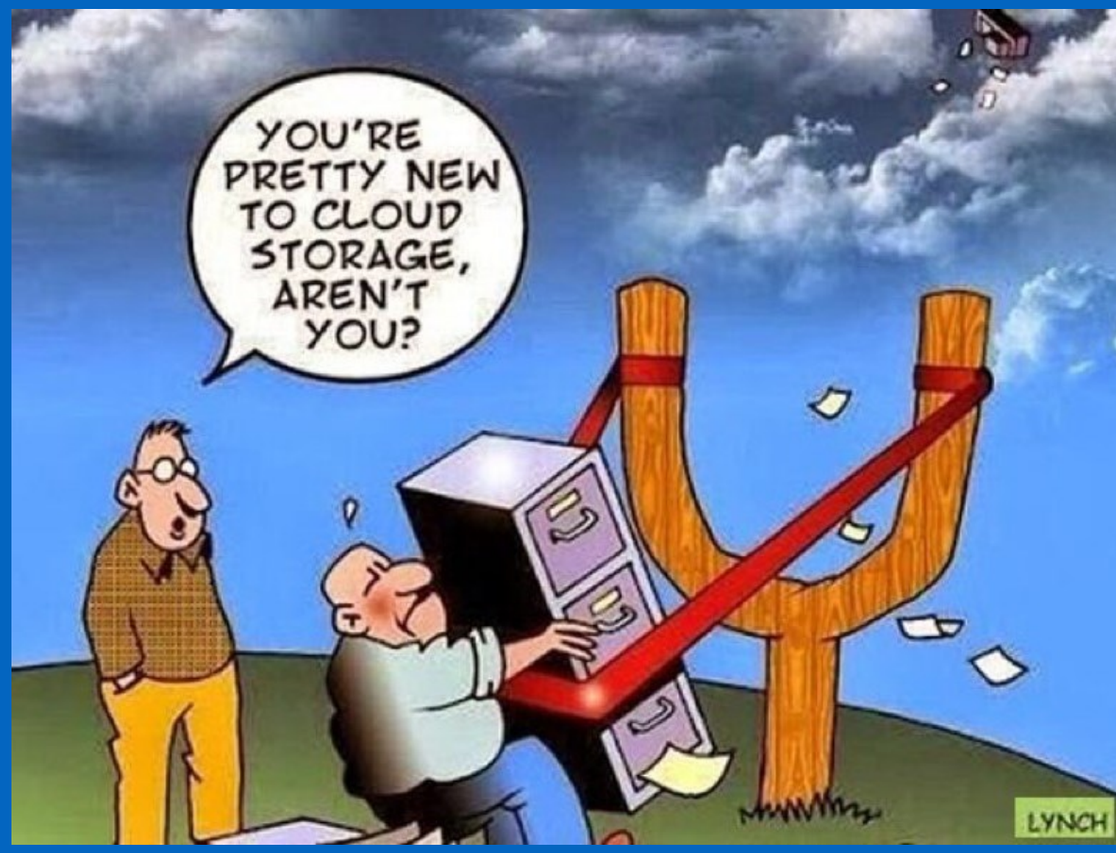
✔ *EG on open science cloud*
✔ *EG on altmetrics*
✔ *EG on publishing models*
✔ *EG on FAIR open data*

✔ *EG on Rewards*
✔ *EG on Skills*
✔ *…. on Citizen Science*
✔ *…. on Integrity*

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



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European Open Science Cloud

European Open Science Cloud is part of Europe´s ambition to support the transition to Open Science and make the most of data-driven science.

Strongly stated need:
it's cost-effective, and privacy & IPR-conscious

Added value:
scale, data-driven science, inter-disciplinary, data - to - knowledge - to - innovation

Bottom-up governance
Federation
Legacy and sustainability
Leverage of MS investment
Trust

Governance layer

IPR and privacy protection
Big data analytics
Data fusion across disciplines
High performance computing
Data access and re-use
Data manipulation and export
Data discovery and catalogue

Data and service layer

High-speed connectivity
Super-Computing
Data storage

Infrastructure layer

Scale of scientific activity (data-driven science)

Physics
Life sciences
Earth sciences
Applied - engineering
Economics
... ...
Social sciences
Humanities
Citizen science

Lead scientific users...

...long tail of science

It’s a cultural challenge

Parameters / How to …

- Create a safe & secure environment
- Realise authentication - of users, of producers
- Ensure quality of the data
- Deal with sensitive data
- Bring trust

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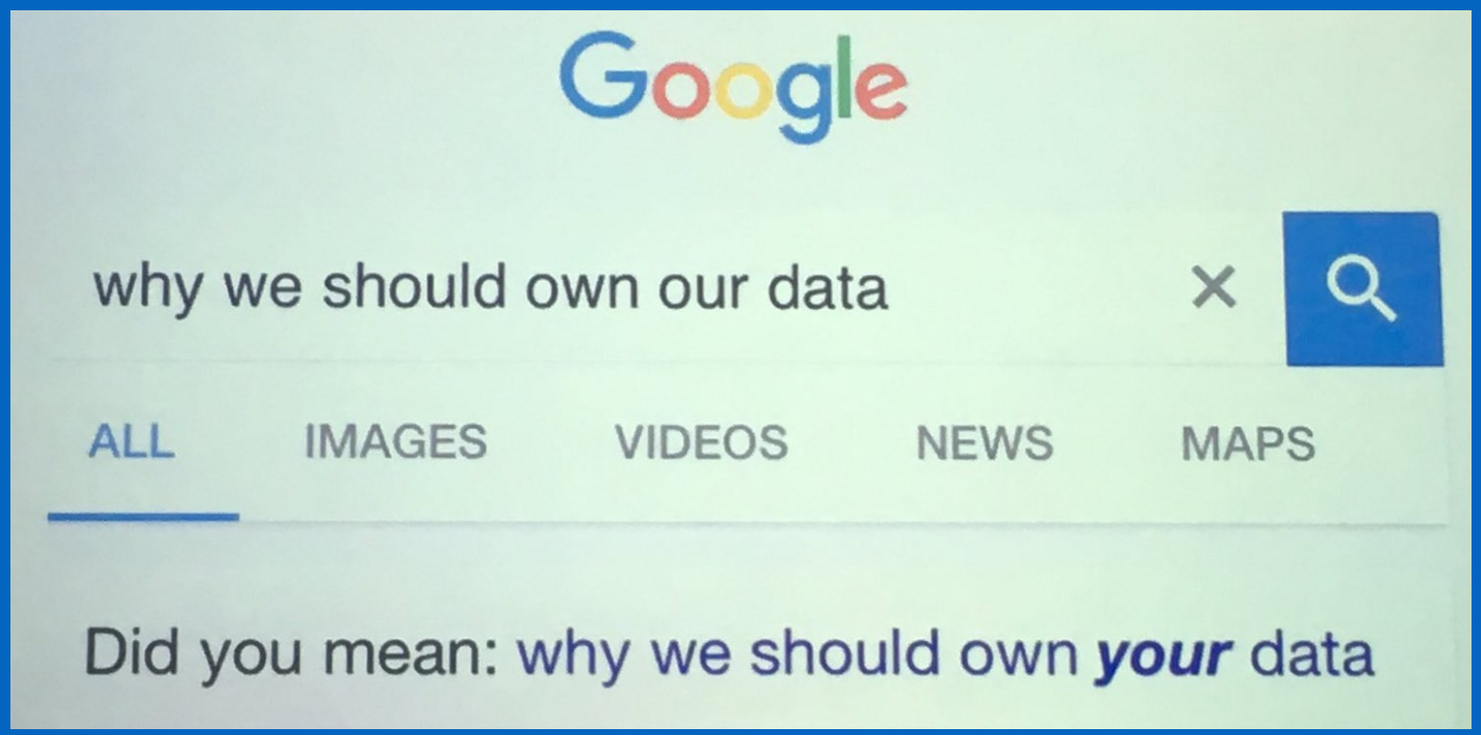
WHERE ARE THE INCENTIVES TO SHARE DATA

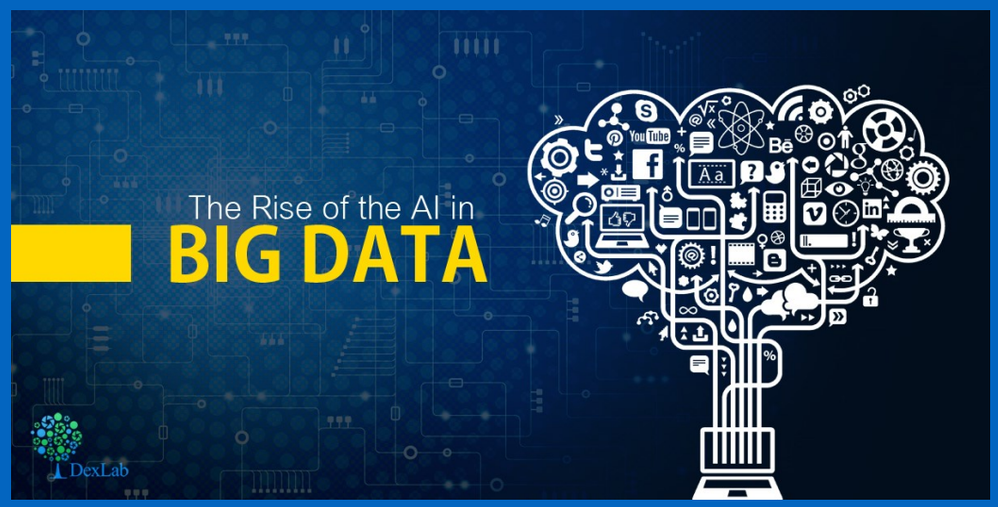
Information Society

Importance of Data

- Data become infrastructure themselves
- Big Data
- Merging Big Data and AI is the next step
- Machines will take better decisions, perform better, and faster than humans



Twitter



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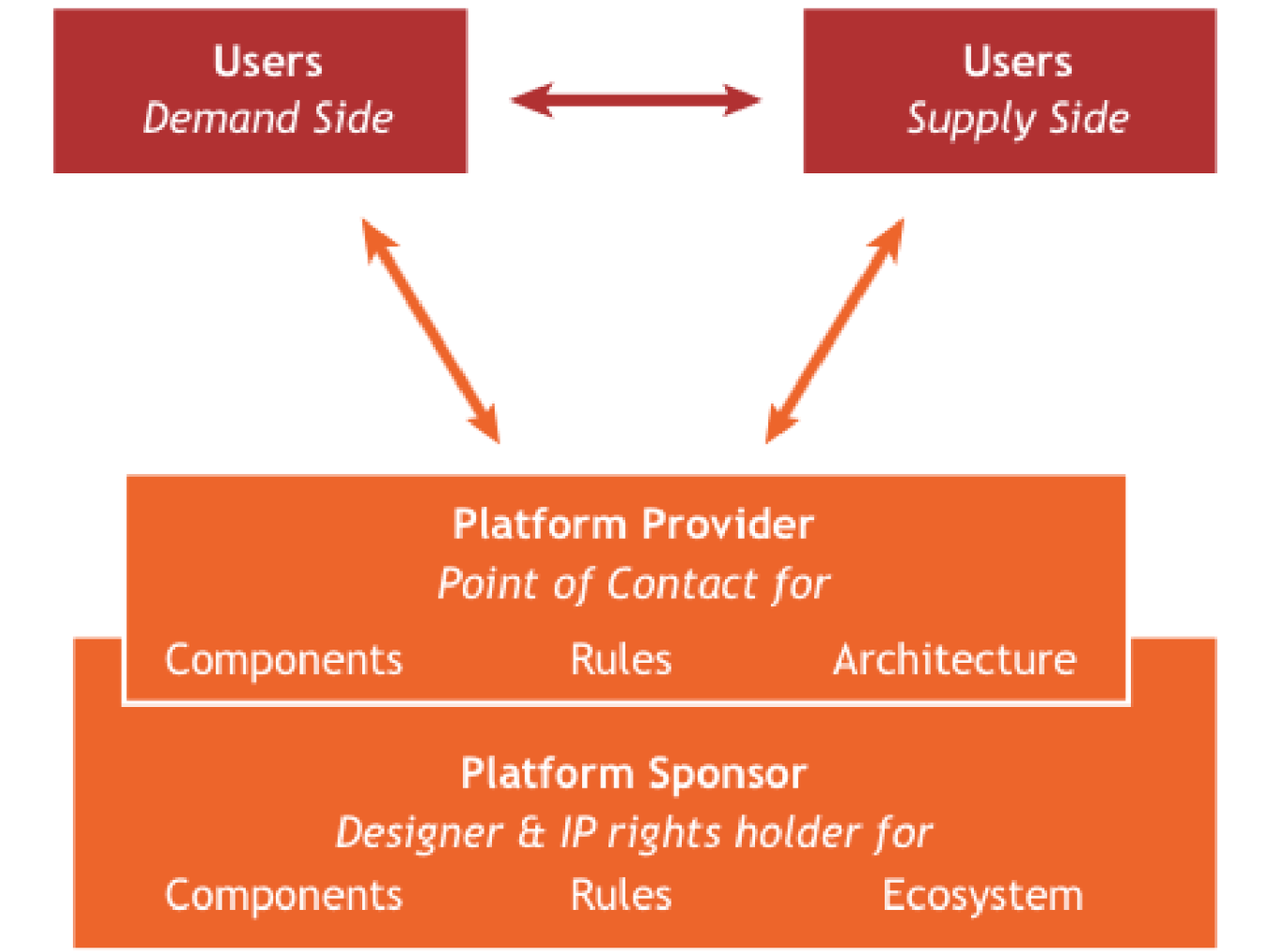
DATA CLUSTERS

PLATFORM

Ecosystem network market



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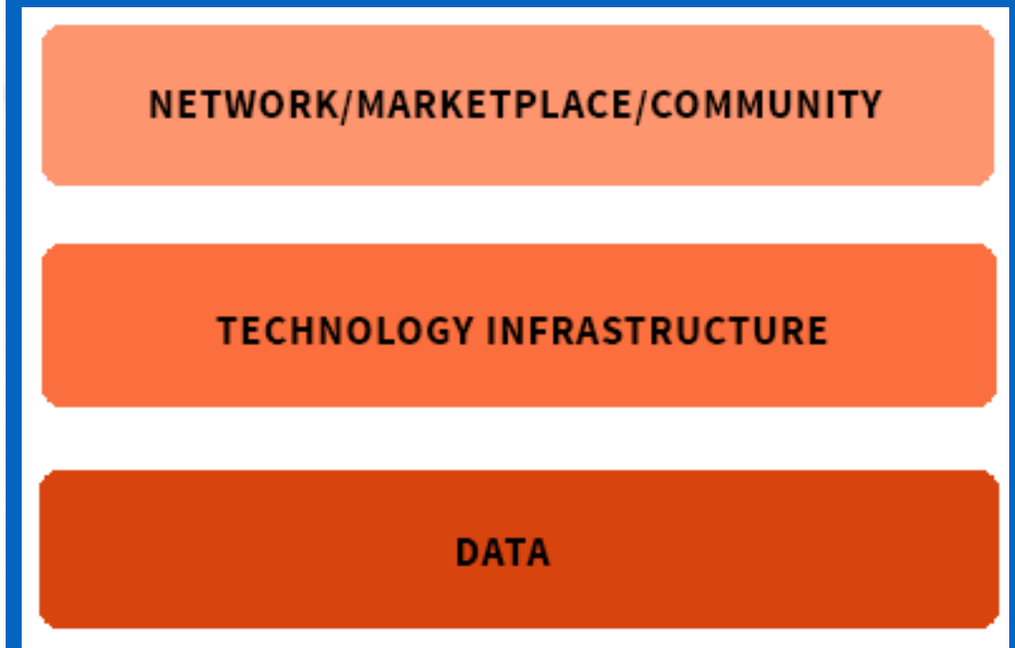


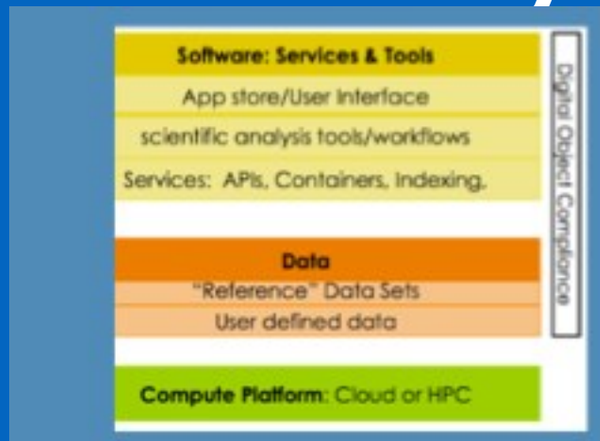
Data Platforms already exist

NIH Commons

NSF Open Science Cloud

Microsoft Azure

Amazon Web Services



NIH Commons Framework Working Group

OSDC
OPEN SCIENCE DATA CLOUD
PIRE
PARTNERSHIP FOR INTERNATIONAL RESEARCH AND EDUCATION

Microsoft Azure

amazon web services

Why CESSDA?

Member Countries are convinced that the provision of access to social science data and metadata is vital to our understanding of society

- Its major challenges
- Ongoing societal processes
- Problems involved and the solutions available

Members seek

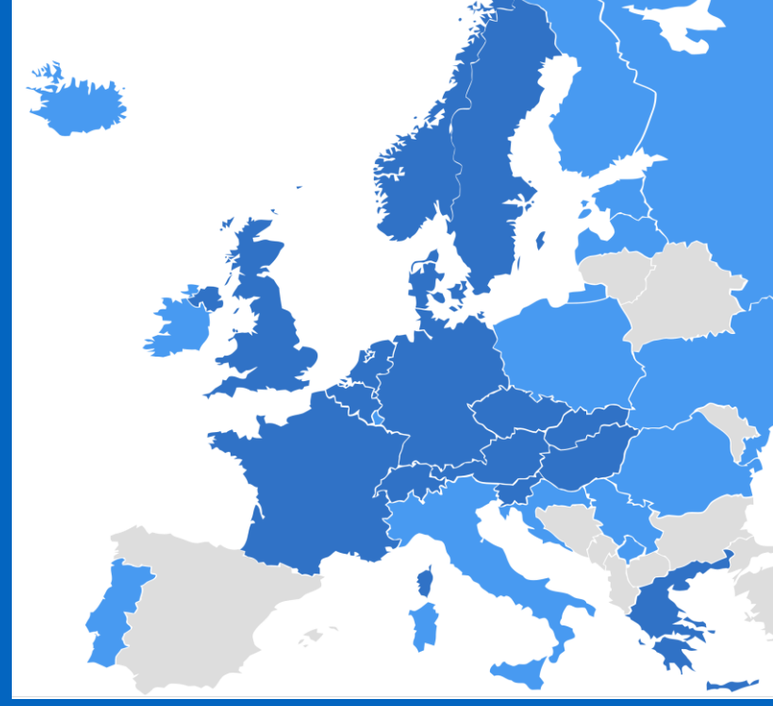
- **To increase the scientific excellence and efficacy of European research in the social sciences, as well as**
- **To expand easy access to data and metadata regardless of any borders**

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

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?

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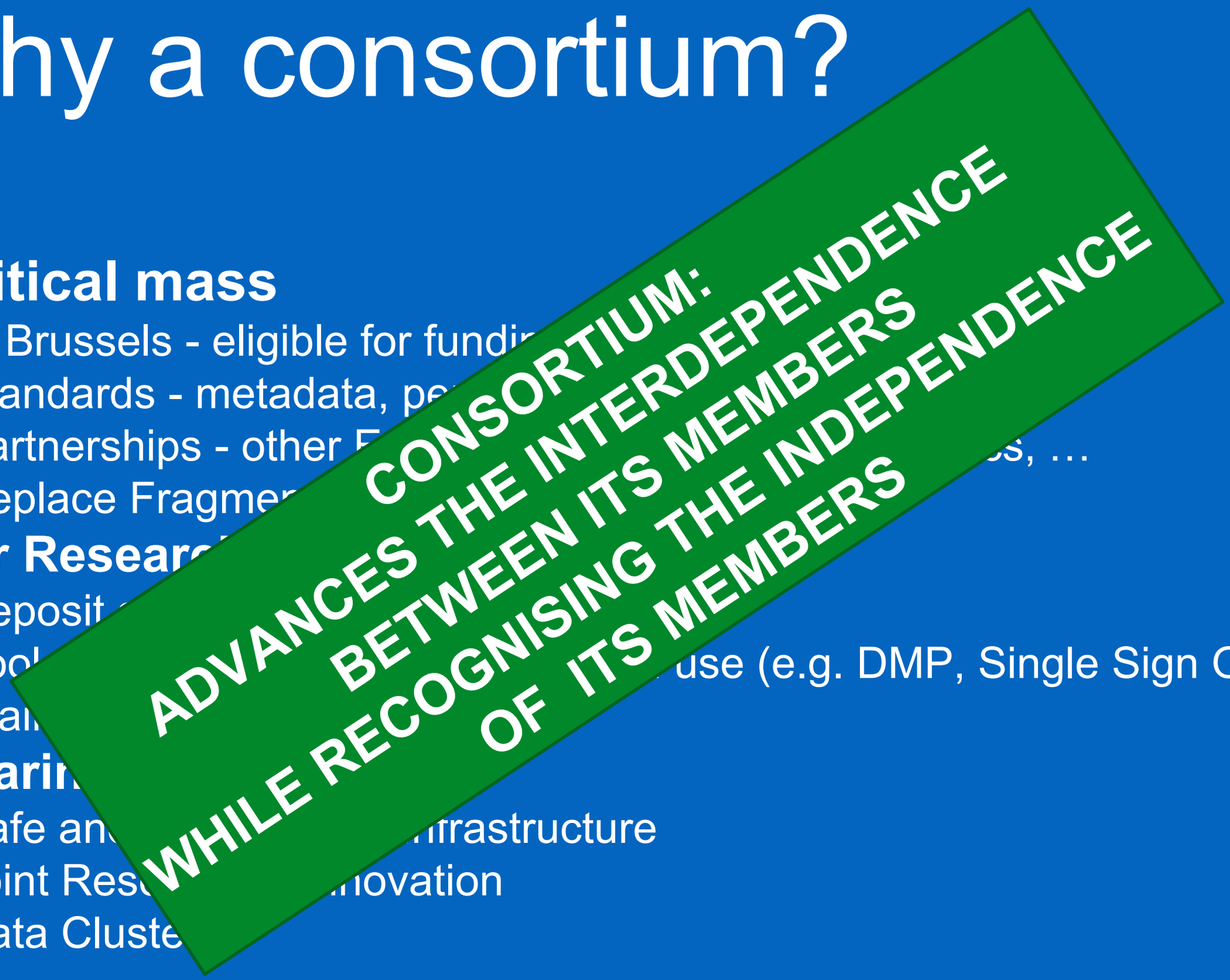

…s, …

use (e.g. DMP, Single Sign On)

…nfrastructure

…novation

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

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 — AUSSDA!
  - 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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