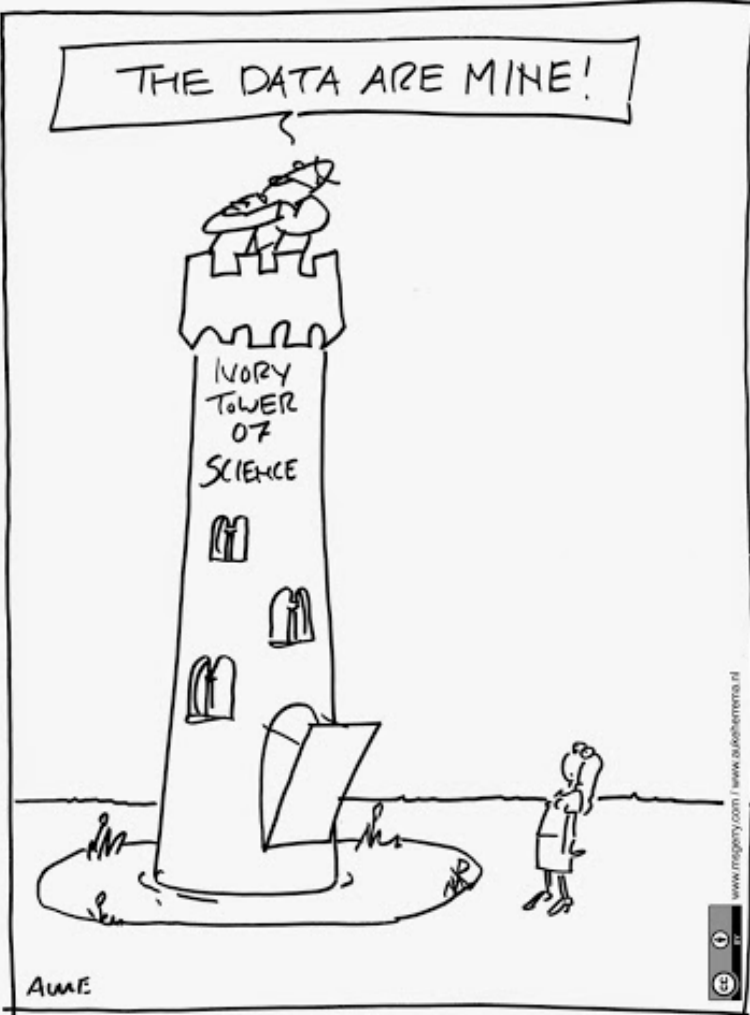


THE DATA ARE MINE!



SCENE FROM THE PAST ?

Next Steps towards the Development of European Common Principles and Core requirements for Research Data Management

Stan Gielen, member of SE Governing Board and president of the Netherlands Organisation for Scientific Research

Content

- ▶ Principles for aligning RDM requirements
- ▶ Suggested topics for RDM requirements
- ▶ Next steps

Principles for aligning RDM Requirements

Principles for aligning RDM Requirements

1. Open access to research data is an enabler of high quality research, a facilitator of innovation and safeguards good research practice.
2. There are sound reasons why the openness of research data may need to be restricted but any restrictions must be justified and justifiable.
3. Open access to research data carries a significant cost, which should be respected by all parties.
4. The right of the creators of research data to reasonable first use is recognised.
5. Use of others' data should always conform to legal, ethical and regulatory frameworks including appropriate acknowledgement.
6. Good data management is fundamental to all stages of the research process and should be established at the outset.
7. Data curation is vital to make data useful for others and for long-term preservation of data.
8. Data supporting publications should be accessible by the publication date and should be in a citeable form.
9. Support for the development of appropriate data skills is recognised as a responsibility for all stakeholders.
10. Regular reviews of progress towards open access to research data should be undertaken.

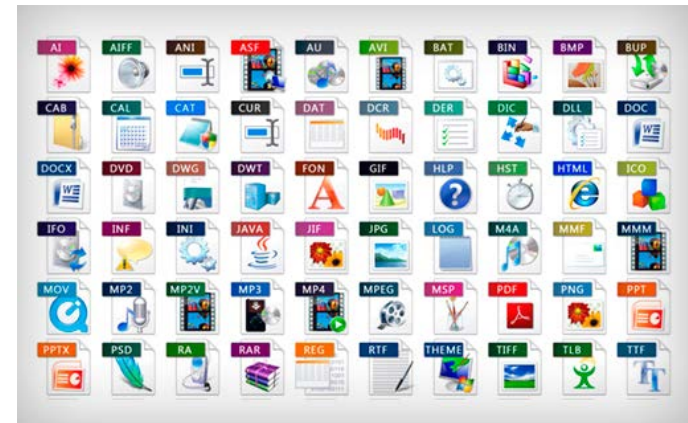
Suggested topics for RDM requirements

1. Data description and collection / reuse of existing data
2. Documentation and data quality
3. Storage and back-up
4. Ethics and legal compliance, codes of conducts
5. Data sharing and long term preservation

NB. Researchers do not have to address each topic in detail. They may refer to texts made available by funding agency, EU, university or to domain protocols broadly accepted by researchers in their field/community!

Data description and collection / reuse of existing data

- ▶ Types of data
- ▶ Data and file formats
- ▶ Collection, creation or reuse of data



Documentation and data quality

- ▶ Metadata
- ▶ Unique and persistent identifier (DOI)
- ▶ Data quality control measures

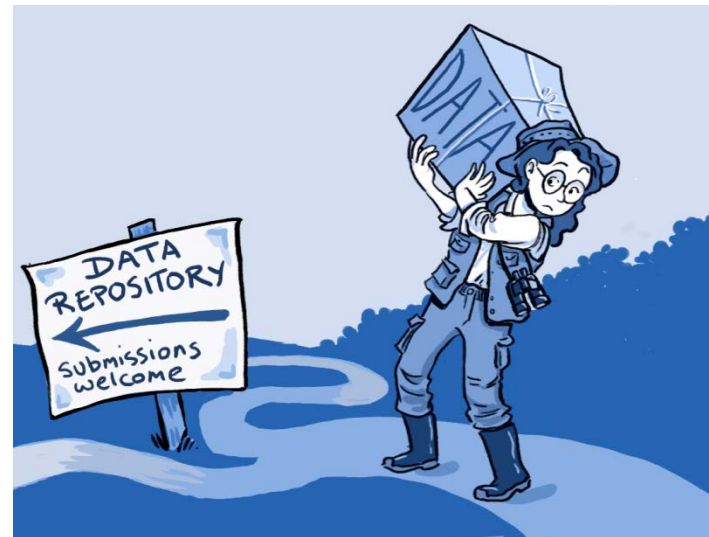


Storage and back-up

- ▶ Storage plan during research
- ▶ Data security management

Minimum requirements for certificated research data repositories

- ▶ Persistent Unique Identifier
- ▶ Metadata
- ▶ Data access & Usage Domain
- ▶ Machine Readability
- ▶ Long-term Preservation



Ethics and legal compliance, codes of conducts

- ▶ Codes of conduct and ethical data management
- ▶ IPR, copyright, other legal issues

Can data access combat fake news?

Mercè Crosas

Chief Data Science and Technology Officer, Institute for Quantitative Social Science, Harvard University

Data sharing and long term preservation

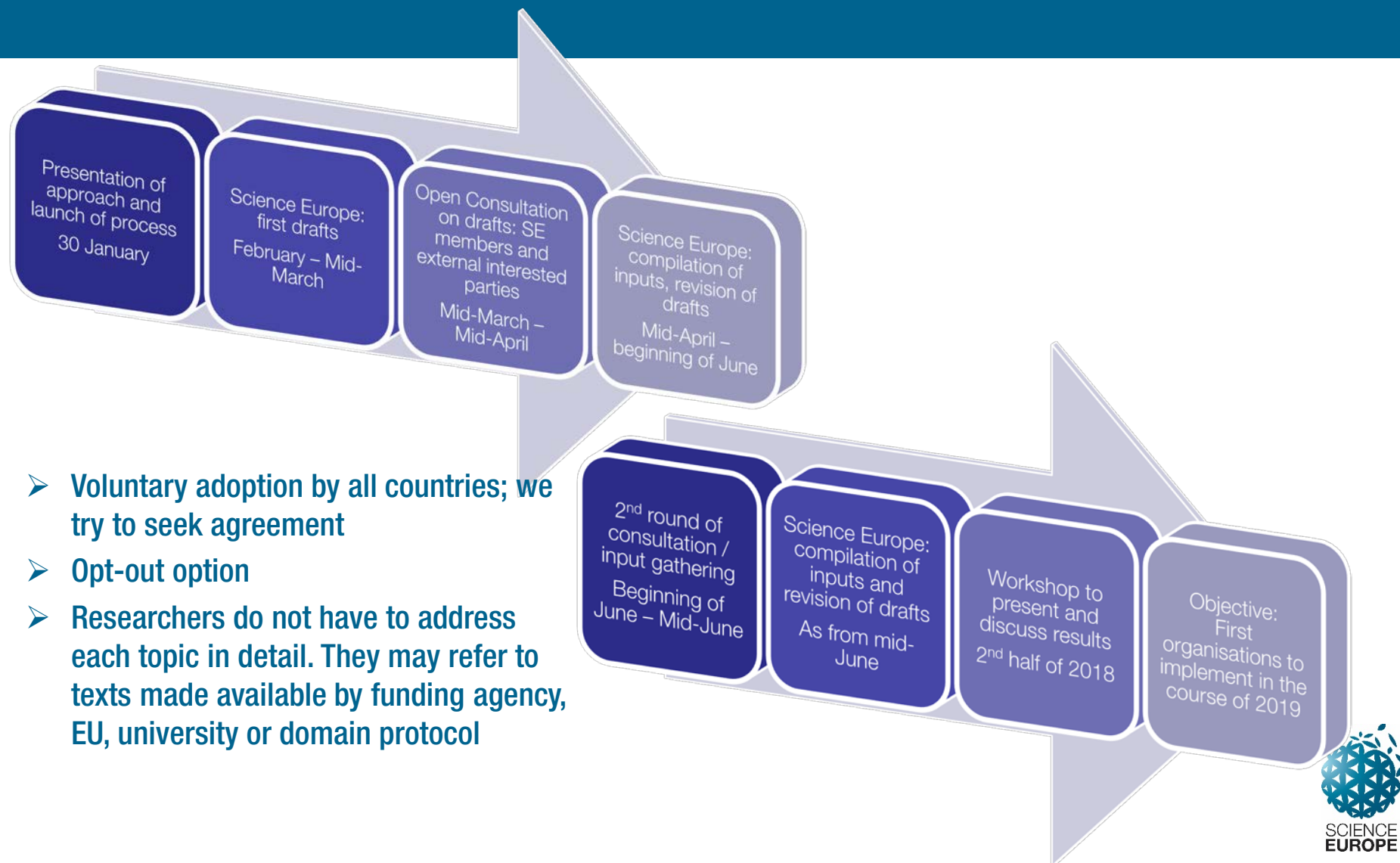
- ▶ Possibilities and mechanisms to share data (licences, security)
- ▶ Data repository or archive & selection of preserved data
- ▶ Methods or software tools to access
- ▶ Responsible person for data management (data steward)
- ▶ Costs of data management and making data FAIR
- ▶ Data sharing embargo reasons & time needed

Making data FAIR

- ▶ Meet FAIR principles (*Findable, Accessible, Interoperable, and Reusable*)
- ▶ GO FAIR international support and coordination office (**GFISCO**) in Germany and the Netherlands.
 - ▶ Support the initiation and the operation of GO FAIR Implementation Networks that operate internationally.
 - ▶ Train thousands of data stewards in Europe



Next steps



- **Voluntary adoption by all countries; we try to seek agreement**
- **Opt-out option**
- **Researchers do not have to address each topic in detail. They may refer to texts made available by funding agency, EU, university or domain protocol**

Thank you for your attention and contribution

