



data management plans ec policies for scientific information

*8th International Digital Curation Conference
"Infrastructure, Intelligence, Innovation: driving the Data Science agenda"*

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**Carlos Morais Pires
European Commission
DG CONNECT, unit C1
carlos.morais-pires[[@](mailto:carlos.morais-pires@ec.europa.eu)]ec.europa.eu**

Author's views do not commit the European Commission



presentation outline

EC policies in scientific information
EC and data e-infrastructures

Digital Agenda
101011101110000100 2010-2020
for Europe



Neelie Kroes

Digital Agenda

Digital (information) single market



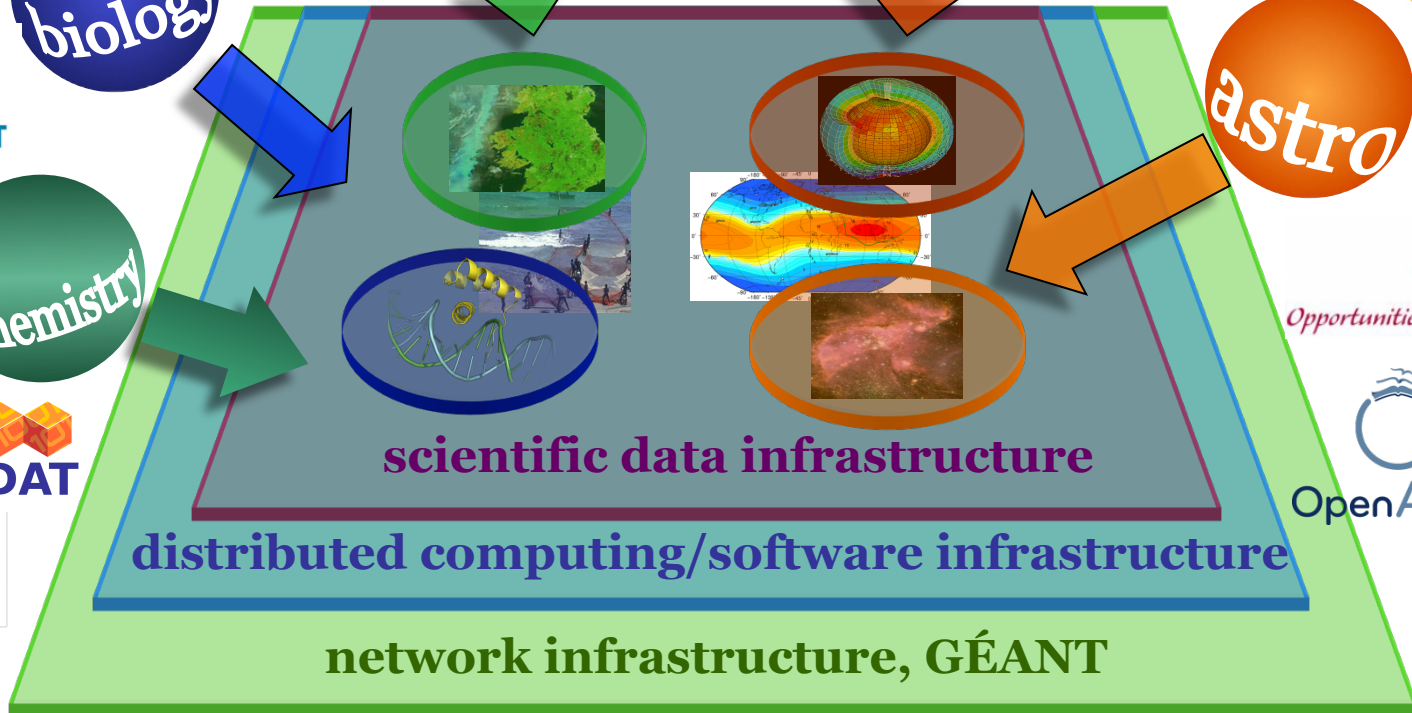
Open Science means optimal sharing of research results and tools such as publications, research data, software, educational resources and infrastructures across institutional, disciplinary and national boundaries.



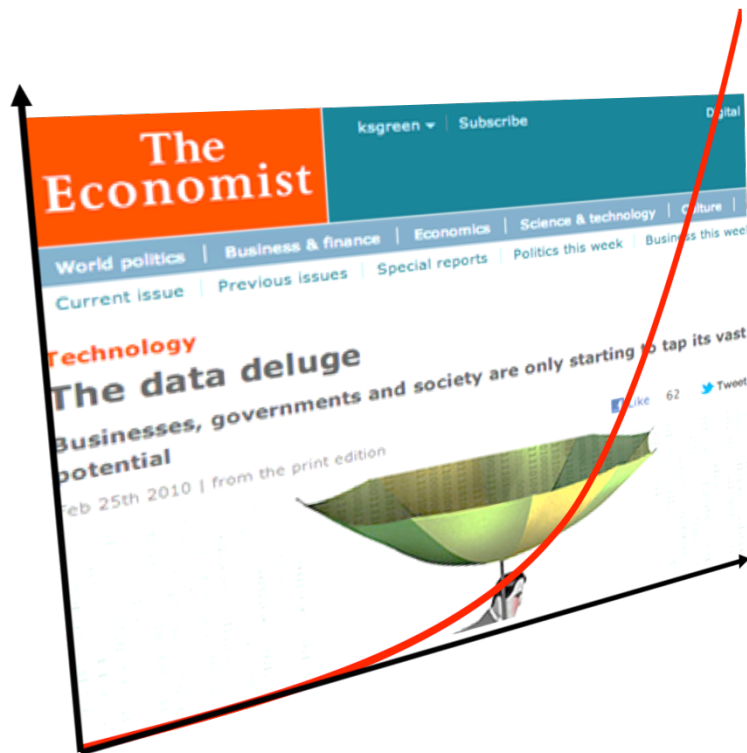
European Commission



Opportunities for Data Exchange

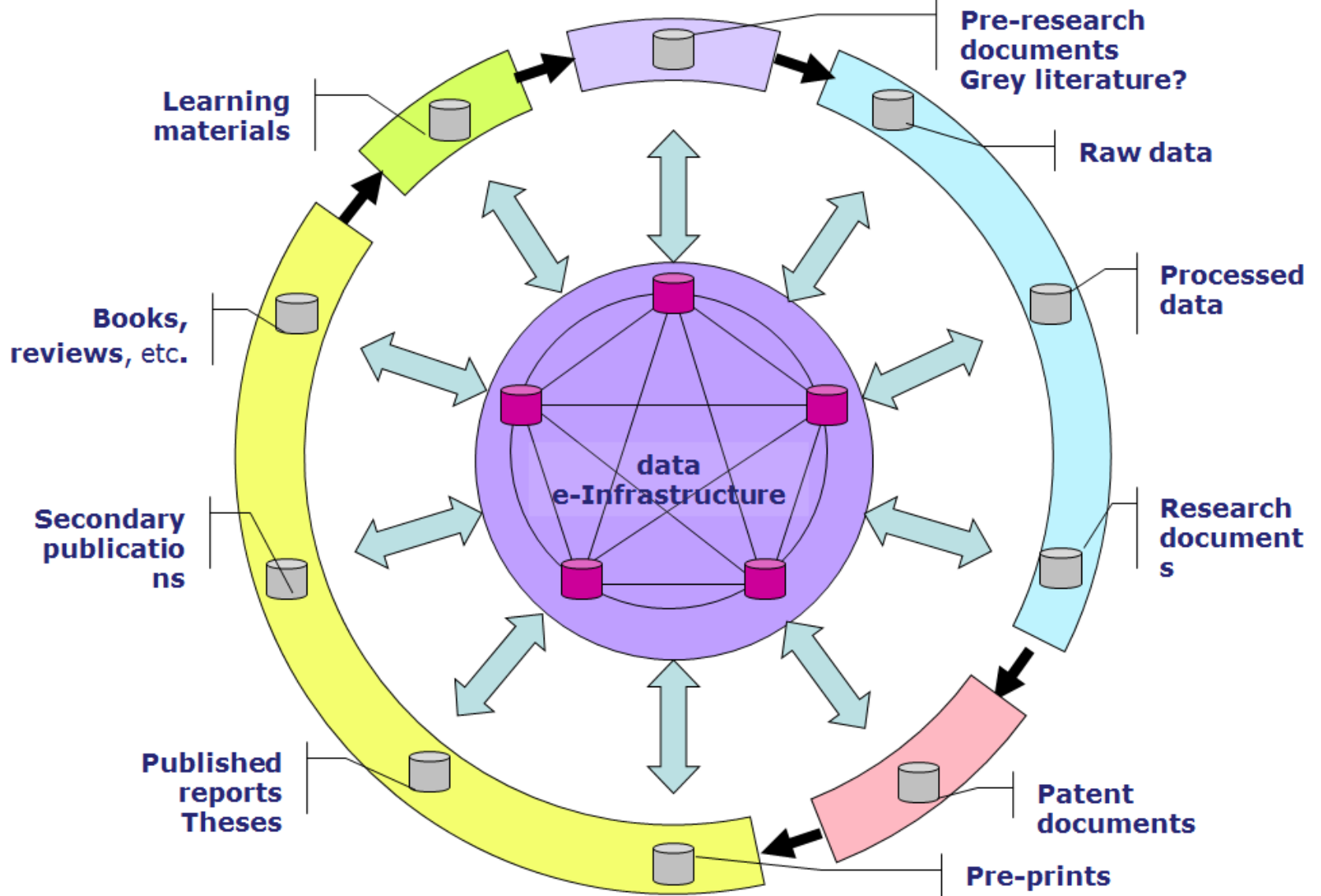


preservation, volumes, costs, etc



| The cost of data in \$/€/£ per byte from (*) | |
|--|-----------|
| "Reliable" code / Curated data | 10 |
| "Production" code | 1 |
| Book | 10^{-1} |
| [Movie] | 10^{-3} |
| Big physics (e.g. LHC) data | 10^{-7} |

(*) Peter Buneman, Univ. Edinburgh, Linz April 2006,

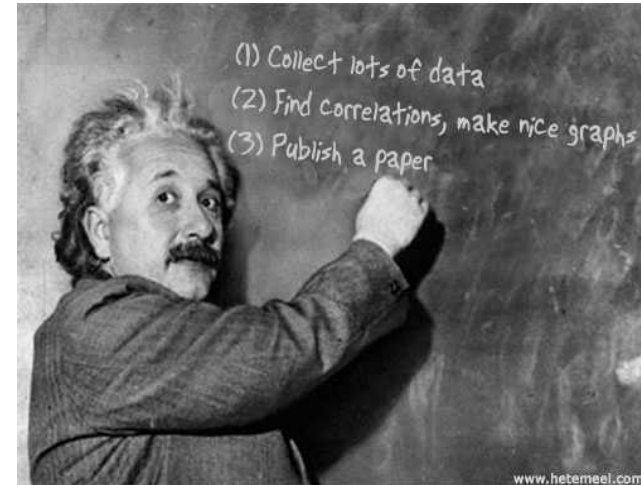


intelligent access to scientific information

We don't know how scholarly communication will adapt to new paradigms bringing closer human and machine readable information...

e-Infrastructure can help realising the AAIR vision and opportunities for innovation in publishing

publication + data + software



Open Infrastructures for Open Science

Open Scientific Content

data, computational resources and software resulting from public funded research

Open Culture

career systems should support and reward those who participate in the culture of sharing

Open Infrastructures

reliable, high-performance and economically efficient infrastructures

"To make progress in science, we need to be open and share. [...] With the right infrastructure and the right approach, we can bring on a new age of scientific practice and discovery"

Neelie Kroes on "Open infrastructures for Open Science", Rome 11 April 2012



Open Infrastructures for Open Science

COM and REC on Scientific Information, July 2012

Open Access,

Long term preservation,

Capacity building with data infrastructures



recommendation:

[...] hereby recommends that member states

COMMISSION RECOMMENDATION

on access to and preservation of scientific information

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 292 thereof,

Whereas:

- (1) The Communication from the Commission Europe 2020¹ puts forward the development of an economy based on knowledge and innovation as a priority.
- (2) The targets set by the Europe 2020 strategy are given in more detail in particular in the Flagship Initiatives 'Digital Agenda for Europe'² and 'Innovation Union'³. Among the actions to be taken under the 'Digital Agenda', publicly funded research should be widely disseminated through

¹ COM (2010) 2020 final of 3.3.2010, available at: <http://eur->

open access publication of scientific data and papers. The 'Innovation Union' initiative calls for a European Research Area (ERA) framework to be set up to help remove obstacles to mobility and cross-border cooperation. It states that open access to publications and data from publicly funded research should be promoted and access to publications made the general principle for projects funded by the EU research Framework Programmes.

- (3) On 14 February 2007, the Commission adopted a Communication on scientific information in the digital age: access, dissemination and preservation⁴, accompanied by a staff working paper. This provided an overview of the state of play in Europe regarding scientific publishing and the preservation of research results, examining relevant organisational, legal, technical and financial issues.
- (4) The Communication was followed in November 2007 by Council Conclusions on scientific information in the digital age: access, dissemination and preservation. The Conclusions invited the Commission to experiment with open access to scientific publications resulting from projects funded by EU research framework programmes and included a set of actions to be undertaken by the Member States. There have been advances in some of the areas dealt with in the Conclusions, but not all targets have been met and progress has been uneven among Member States. EU action is needed to make the most of Europe's research potential.
- (5) 'Open access policies' aim to provide readers with access to peer-reviewed scientific publications and research data free of charge as early as possible in



recommendation

Preservation and re-use of scientific information

4. Reinforce the preservation of scientific information...



recommendation

E-infrastructures

5. Further develop e-infrastructures underpinning the system for disseminating scientific information...

recommendation

E-infrastructures

- reinforcing the infrastructure for access to and preservation of scientific information at national level, and earmarking the necessary funds;
- **ensuring the quality and reliability of the infrastructure, including through the use of certification mechanisms for repositories;**
- ensuring interoperability among e-infrastructures at national and global level.

recommendation

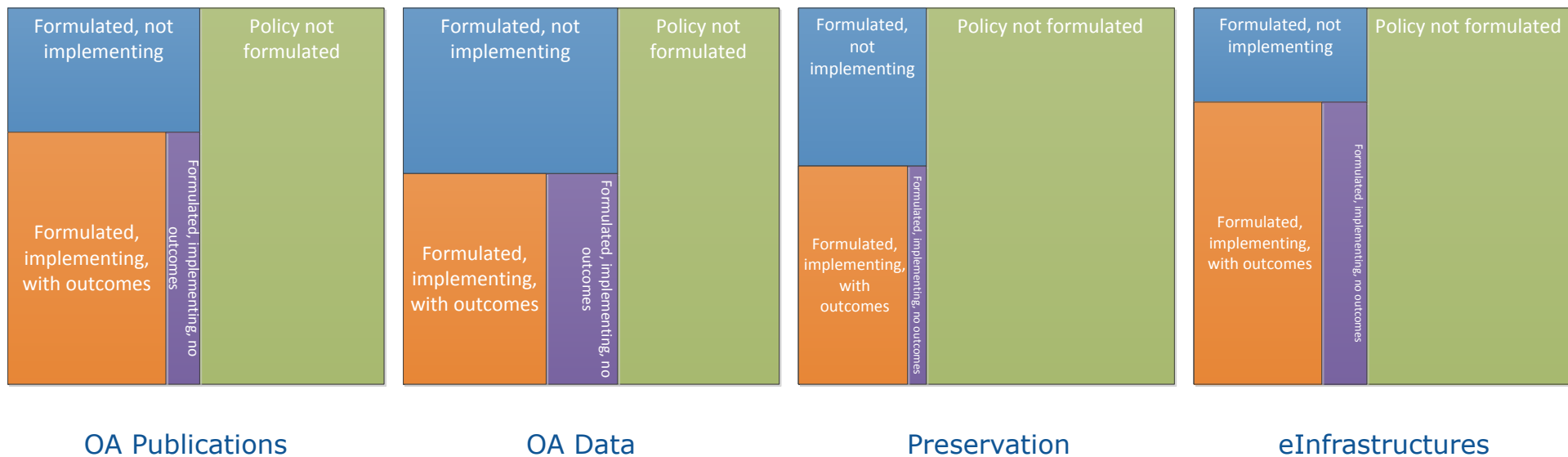
E-infrastructures

6. **Ensure synergies among national e-infrastructures at European and global level by:**

- contributing to the interoperability of e-infrastructures, in particular addressing scientific data exchange, taking into account experiences with existing projects, infrastructures and software developed at European and global level;
- supporting transnational cooperative efforts that promote the use and development of information and communication technologies infrastructure for higher education and research.

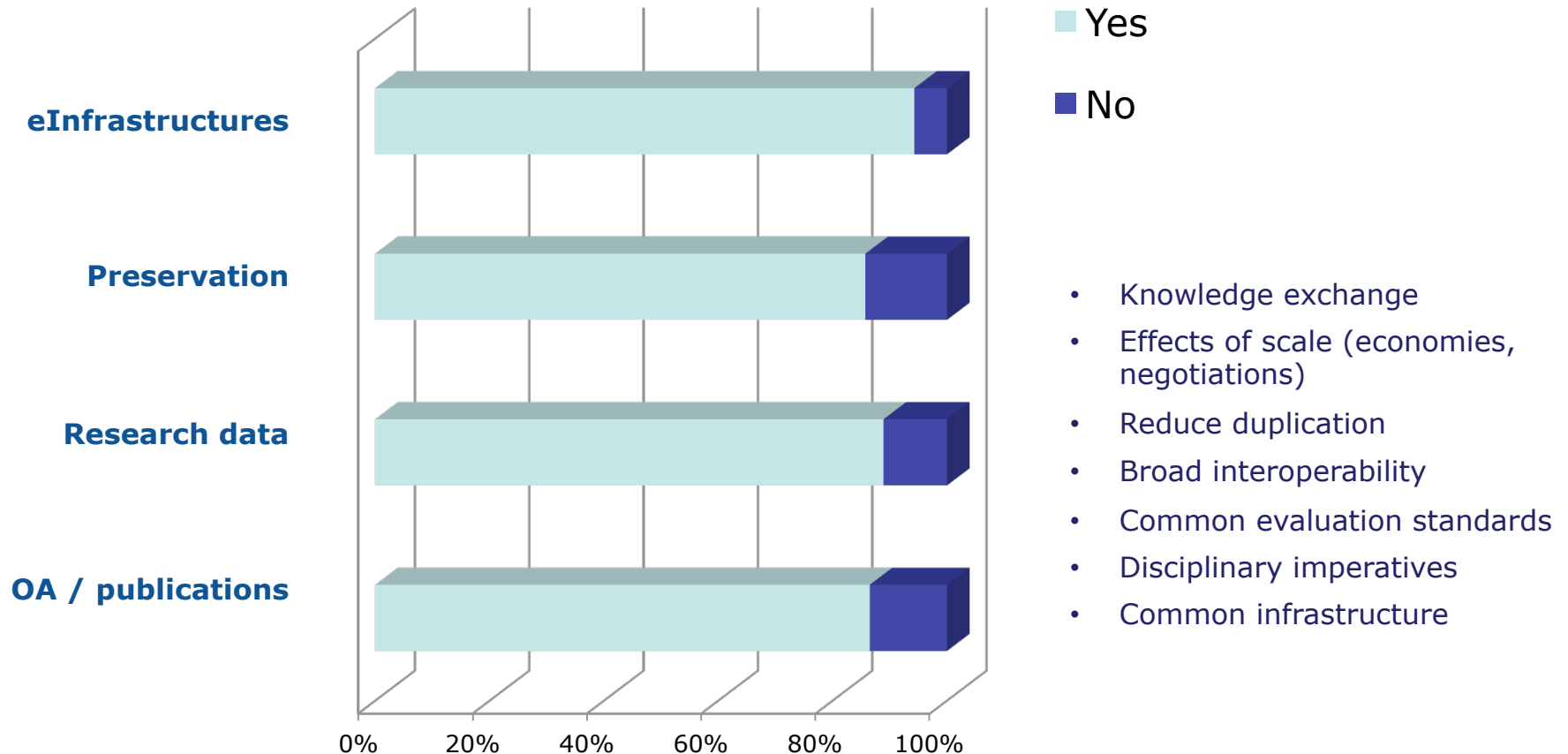
Better Access to Scientific Information

- National policy not formulated
- National policy formulated but not implemented
- National policy formulated, implemented but no outcomes yet
- National policy formulated, implemented, and outcomes delivered



Better Access to Scientific Information

Do you think the following require coordination / collaboration at the European level?





ToGether®
SINCE 1957

Thank You!

Carlos Morais Pires

[carlos.morais-pires\(at\)ec.europa.eu](mailto:carlos.morais-pires(at)ec.europa.eu)