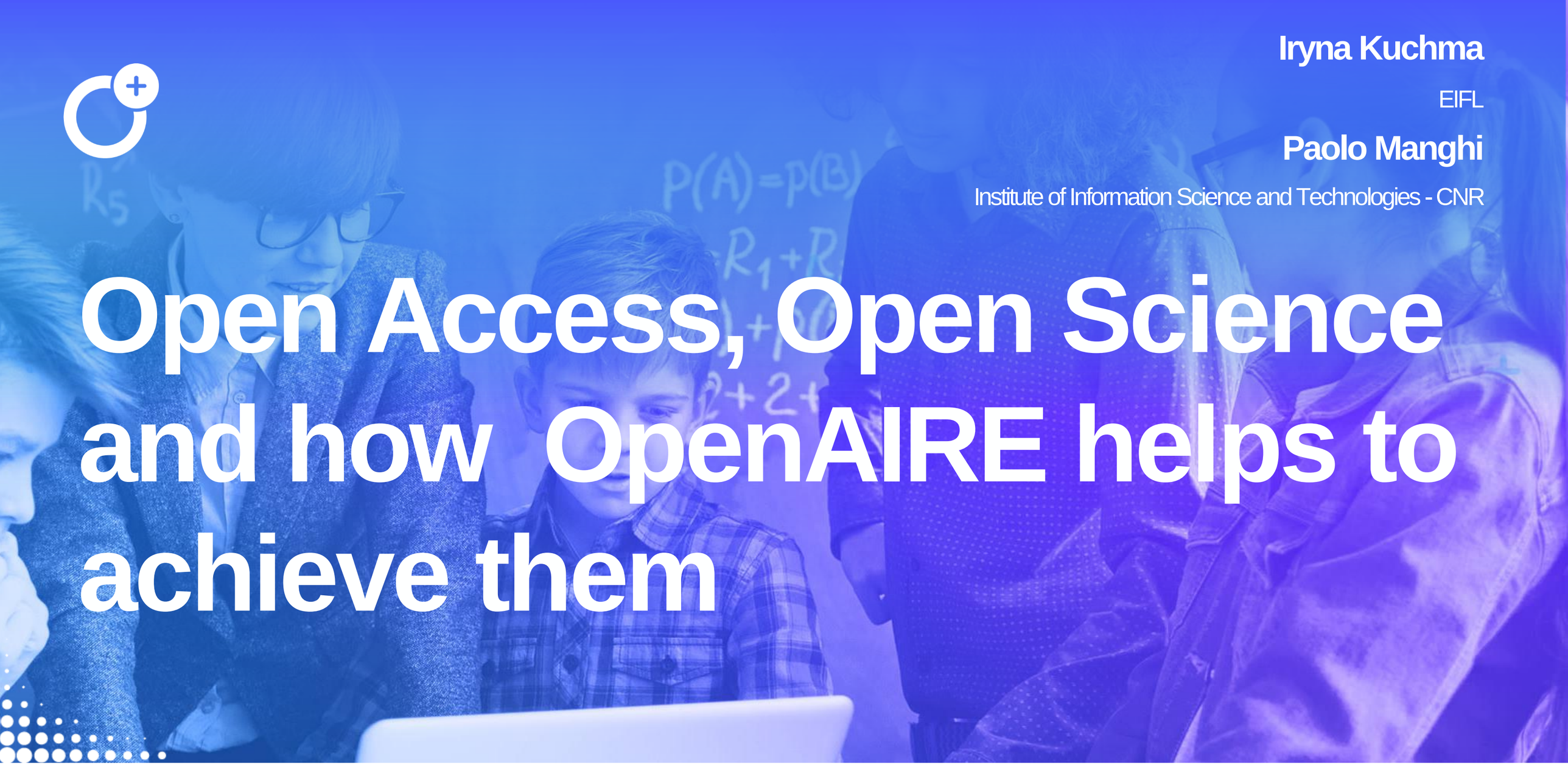
Iryna Kuchma

EIFL

Paolo Manghi

Institute of Information Science and Technologies - CNR

Open Access, Open Science and how OpenAIRE helps to achieve them



View original

Flag media

EU-komissio Suomessa @EUkomissio 55d

Keskustele tiedekomissaari @Moedas kanssa 31.8 klo 17.30 Helsingissä! Ks. europa.eu/!JP44fh #EUdialogues pic.twitter.com/93i3QaelKY

Council of the European Union

“

ACKNOWLEDGES that Open Science has the potential to increase the quality, impact and benefits of science and to accelerate advancement of knowledge by making it more reliable, more efficient and accurate,

better understandable by society and responsive to societal challenges, and has the potential to enable growth and innovation through reuse of scientific results by all stakeholders at all levels of society, and ultimately contribute to growth and competitiveness of Europe.

Brussels 27 May 2016

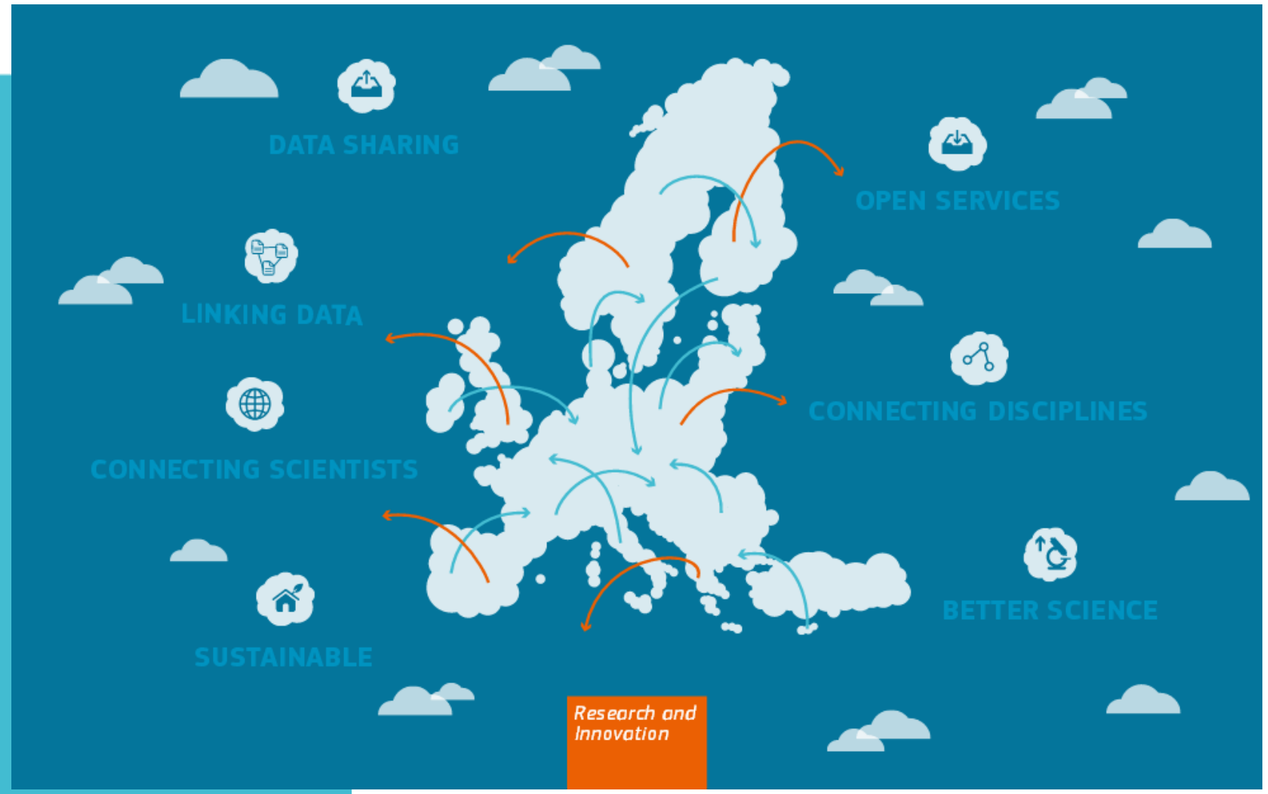
FOSTER

Source: ***EC Competitiveness Council, 26-27/05/2016*** *http://data.consilium.europa.eu/doc/document/ST-9526-2016-INIT/en/pdf*

European Commission

Realising the European Open Science Cloud

First report and recommendations of the Commission High Level Expert Group on the European Open Science Cloud



FOSTER

Source: ***Realising the European Open Science Cloud DG Research & Innovation 2016***
http://ec.europa.eu/research/openscience/pdf/realising_the_european_open_science_cloud_2016.pdf#view=fit&pagemode=none

“Mostly due to current methods capture and data malpractice, approximately 50% of all research data and experiments is considered **not reproducible**, and the vast majority (likely over 80%) of data never makes it to a trusted and sustainable repository.

At an investment of Europe in data-generating research of €120 Billion between 2014-2020, the **annual capital destruction** is consequently **very substantial**.

FOSTER

Source: ***Realising the European Open Science Cloud, EC DG Research & Innovation 2016***
http://ec.europa.eu/research/openscience/pdf/realising_the_european_open_science_cloud_2016.pdf#view=fit&pagemode=none

“

This will mean a new way of working through deep, equal partnerships between the science communities and the ICT communities …

… to turn these data into knowledge as renewable, sustainable fuel for innovation in turn to meet global challenges.

FOSTER

Source: ***Realising the European Open Science Cloud, EC DG Research & Innovation 2016***
http://ec.europa.eu/research/openscience/pdf/realising_the_european_open_science_cloud_2016.pdf#view=fit&pagemode=none

Open Science | Digital Single M

https://ec.europa.eu/digital-single-market/en/open-science

Search

Search

https://ec.europa.eu/digital-single-market/en/open-science

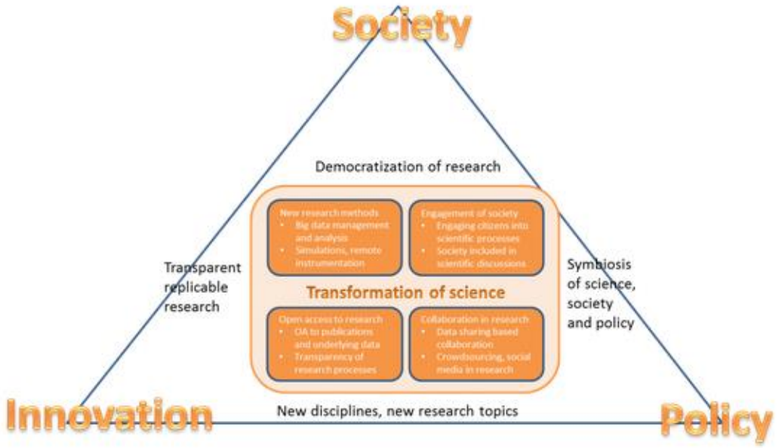
European Commission > Strategy > Digital Single Market > Policies >

Digital Single Market

POLICY

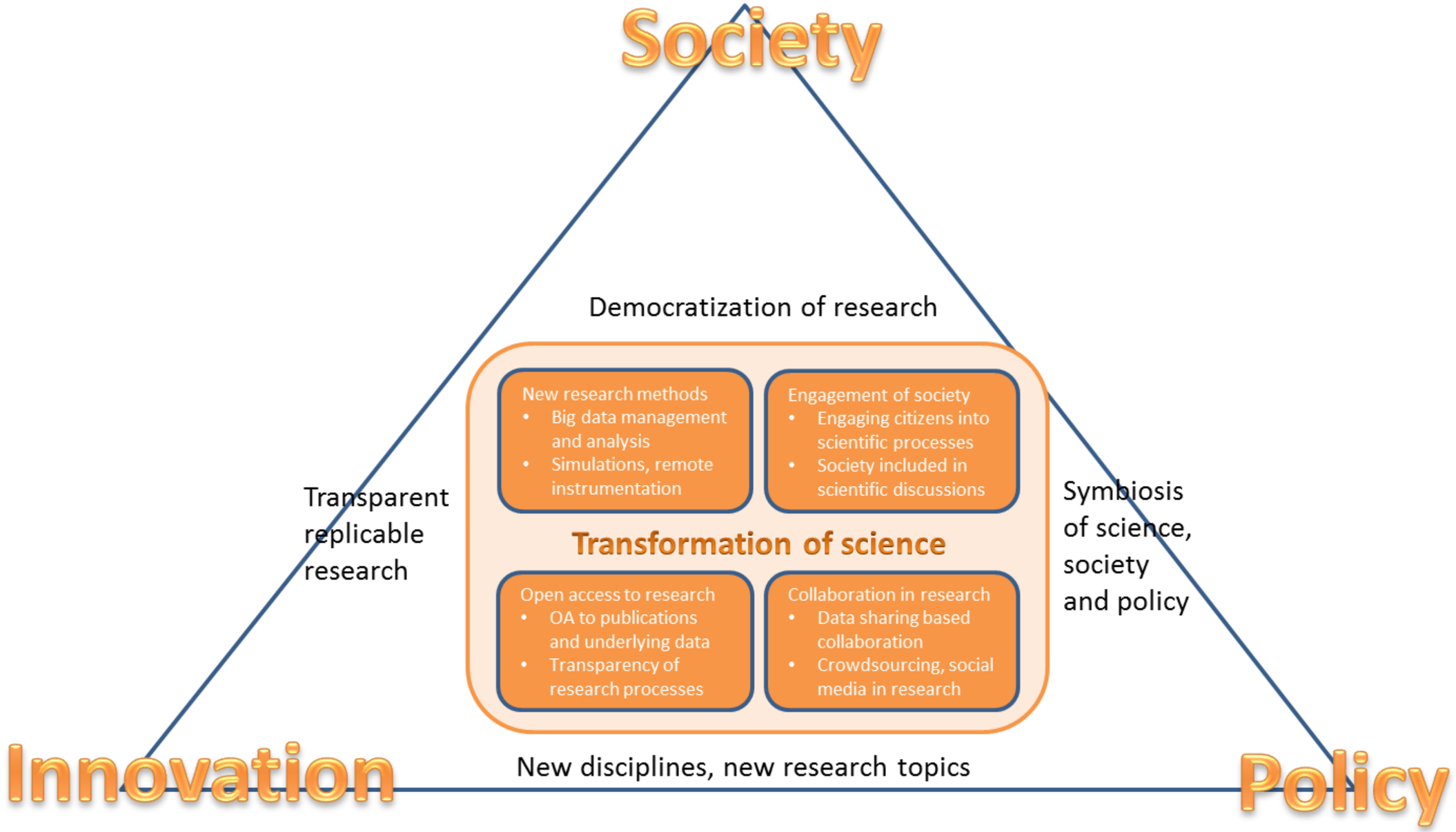
Open Science

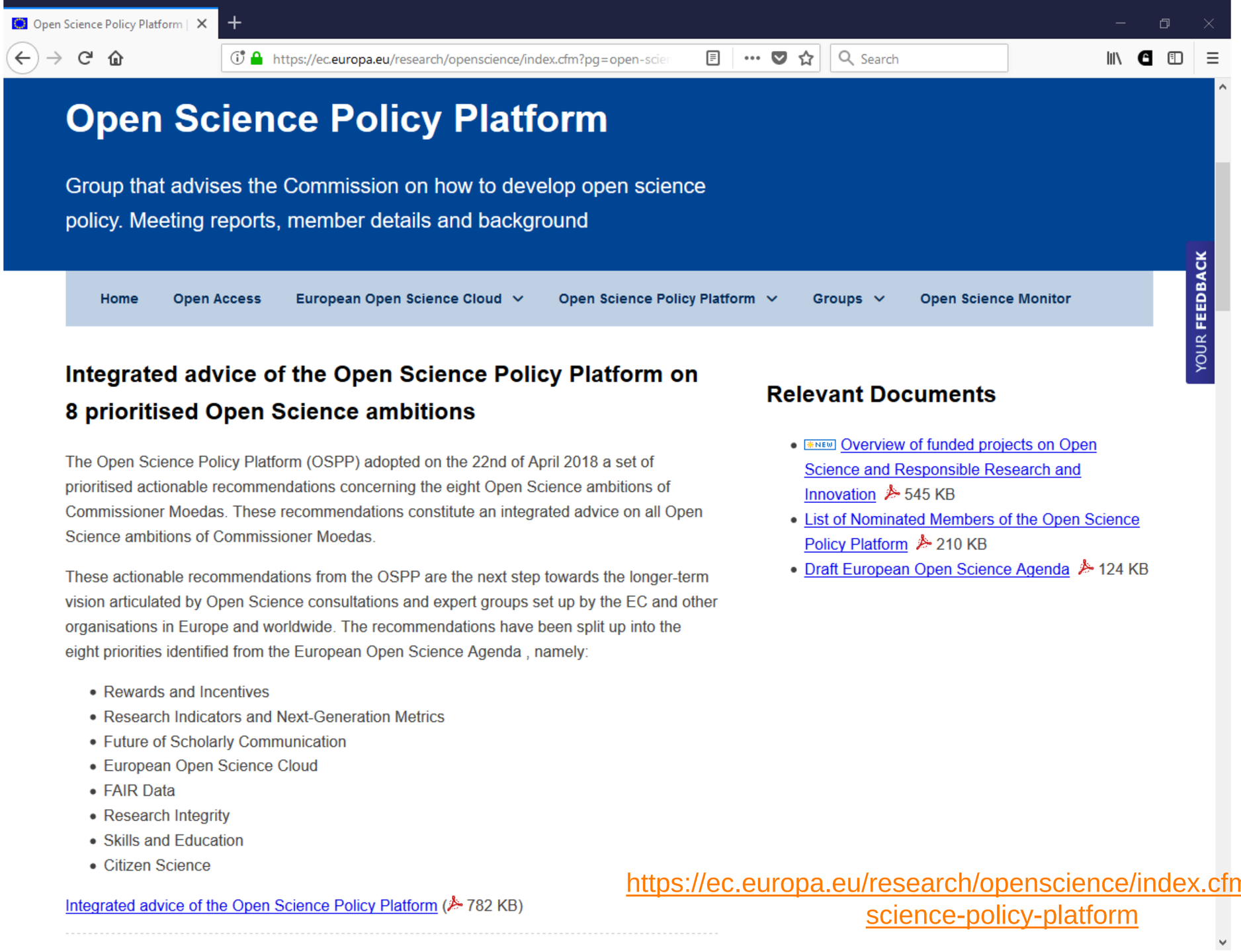
Open Science aims at transforming science through ICT tools, networks and media, to make research more open, global, collaborative, creative and closer to society.



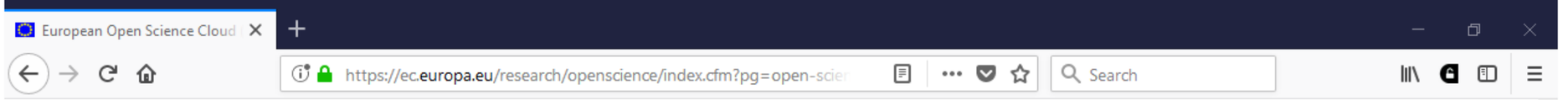
About Open Science

- Policies +
- Blog posts
- News
- Events
- Projects
- Funding


Society
Democratization of research
New research methods
• Big data management and analysis
• Simulations, remote instrumentation
Engagement of society
• Engaging citizens into scientific processes
• Society included in scientific discussions
Transformation of science
Open access to research
• OA to publications and underlying data
• Transparency of research processes
Collaboration in research
• Data sharing based collaboration
• Crowdsourcing, social media in research
Transparent replicable research
Symbiosis of science, society and policy
Innovation
New disciplines, new research topics
Policy



https://ec.europa.eu/research/openscience/index.cfm?pg=open-science-policy-platform



European Open Science Cloud (EOSC)

This is a cloud for research data in Europe. Background, policy information, events and publications related to the EOSC

Overview of the EOSC Strategic Implementation Roadmap

24 May 2018

After the adoption of the Implementation Roadmap for the European Science Cloud (Staff Working Document SWD(2018) 83) on 14 March 2018 and in order to introduce, illustrate and update the information in this document with the latest developments, the following presentations give an overview of the implementation roadmap.

Please note that the information and views set out in this presentation do not necessarily reflect the official opinion of the European Union and are published for illustrative purposes only.

Presentations

- EOSC strategic implementation roadmap:
  Short version (1.3 MB) | Long version (1.4 MB)

Events

21 November 2018, Brussels, Belgium - Open science conference 2018, Back-to-Back Belgium-European Commission

29 January 2019, Brussels, Belgium - 2019 Infoday, Ensuring Excellent Research by Investing in Researchers Talents, Skills and Career Development

See all Events

Focus on past events

29 May 2018, Brussels, Belgium - KEP thematic seminar – nature-based solutions for key urban

Science Europe – cOAlition S

https://www.scienceeurope.org/coalition-s/

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SCIENCE EUROPE

Shaping the future of research

cOAlition S

Login Area

News

(07/02/18) Stephan Kuster is the new Secretary General of Science Europe… Read more

(02/02/2018) Science Europe and NWO have launched an initiative to align RDM policies across Europe… Read more

Documents

Science Without Publication Paywalls: cOAlition S for the Realisation of Full and Immediate Open Access... read more

What is cOALition S? https://www.scienceeurope.org/coalition-s

On 4 September 2018, a group national research funding organisation, with the support of the European Commission and the

"After 1 January 2020 scientific publications on the results from research funded by public grants provided by national and European research councils and funding bodies, must be published in compliant Open Access Journals or on compliant Open Access Platforms."

In addition:

- Authors retain copyright of their publication with no restrictions. All publications must be published under an open license, preferably the Creative Commons Attribution Licence CC BY. In all cases, the license applied should fulfil the requirements defined by the Berlin Declaration;
- The Funders will ensure jointly the establishment of robust criteria and requirements for the services that compliant high quality Open Access journals and Open Access platforms must provide;
- In case such high quality Open Access journals or platforms do not yet exist, the Funders will, in a coordinated way, provide incentives to establish and support them when appropriate; support will also be provided for Open Access infrastructures where necessary;
- Where applicable, Open Access publication fees are covered by the Funders or universities, not by individual researchers; it is acknowledged that all scientists should be able to publish their work Open Access even if their institutions have limited means;
- When Open Access publication fees are applied, their funding is standardised and capped (across Europe);
- The Funders will ask universities, research organisations, and libraries to align their policies and strategies, notably to ensure transparency;
- The above principles shall apply to all types of scholarly publications, but it is understood that the timeline to achieve Open Access for monographs and books may be longer than 1 January 2020;
- The importance of open archives and repositories for hosting research outputs is acknowledged because of their long-term archiving function and their potential for editorial innovation;
- The 'hybrid' model of publishing is not compliant with the above principles;
- The Funders will monitor compliance and sanction non-compliance.

Open Science: carrying out and publishing

Carrying out

Facilities (eInfrastructures)

Scientific workflows (experiments and provenance)

Practices and standards (methodology and interoperability)

Communities and collaboration (RIs, VREs)

Community training and support (RIs, EC)

Making available/Publishing

Reuse, repeat, reproduce experiments

Transparency (provenance and attribution)

FAIR-ness for all products

Assessment and reward (open peer review, citations, usage stats, and altmetrics)

Community training and support (RIs, EC)

OpenAIRE

European Commission

OpenAIRE: Supporting Open Science scholarly communication

- **Foster** and **encourage** the shift of scholarly communication towards Open Science
- **Monitor** Open Science scholarly communication
- **Support** Open Science publishing


Citizen Scientist


Research admins


Researchers


Content providers


Research communities


Funders


SMEs


Research Organization

The OpenAIRE scholarly communication graph

Building and maintaining an **open metadata** scholarly communication graph of interlinked **scientific products**, in turn linked to **Open Access information**, **funding information** and **community views**

OpenAIRE
Graph

- Complete
- De-duplicated
- Participatory

OpenAIRE

European Commission

Metadata collection and Dashboards

OpenAIRE Dashboards

CONNECT
Research communities

EXPLORE
Researchers (All)

PROVIDE
Content providers

DEVELOP
Innovators

MONITOR
Research managers
Funders

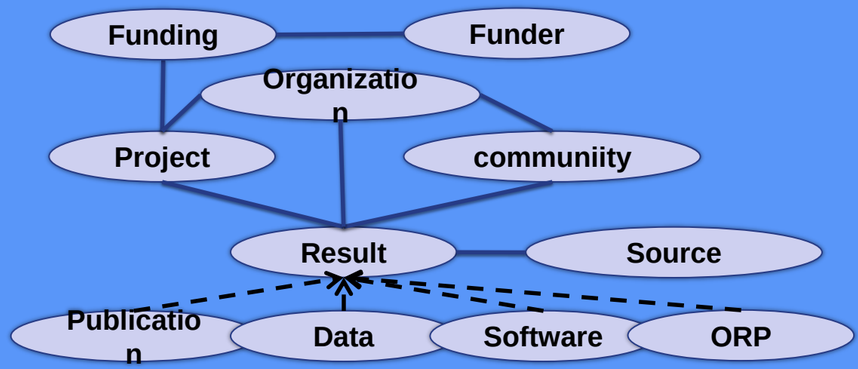
Info Space Services

TERMS OF USE

Brokering
Cleaning
Validation
Harvesting

ScholeXplorer

De-duplication
Inference
Uploading



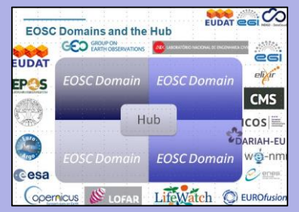
GUIDE LINES

Content Providers

Publications repositories
Data repositories
Registries
Software repositories
OA Journals
CRIS systems

GRID
iD
zenodo
crossref
DataCite

EOSC-Hub



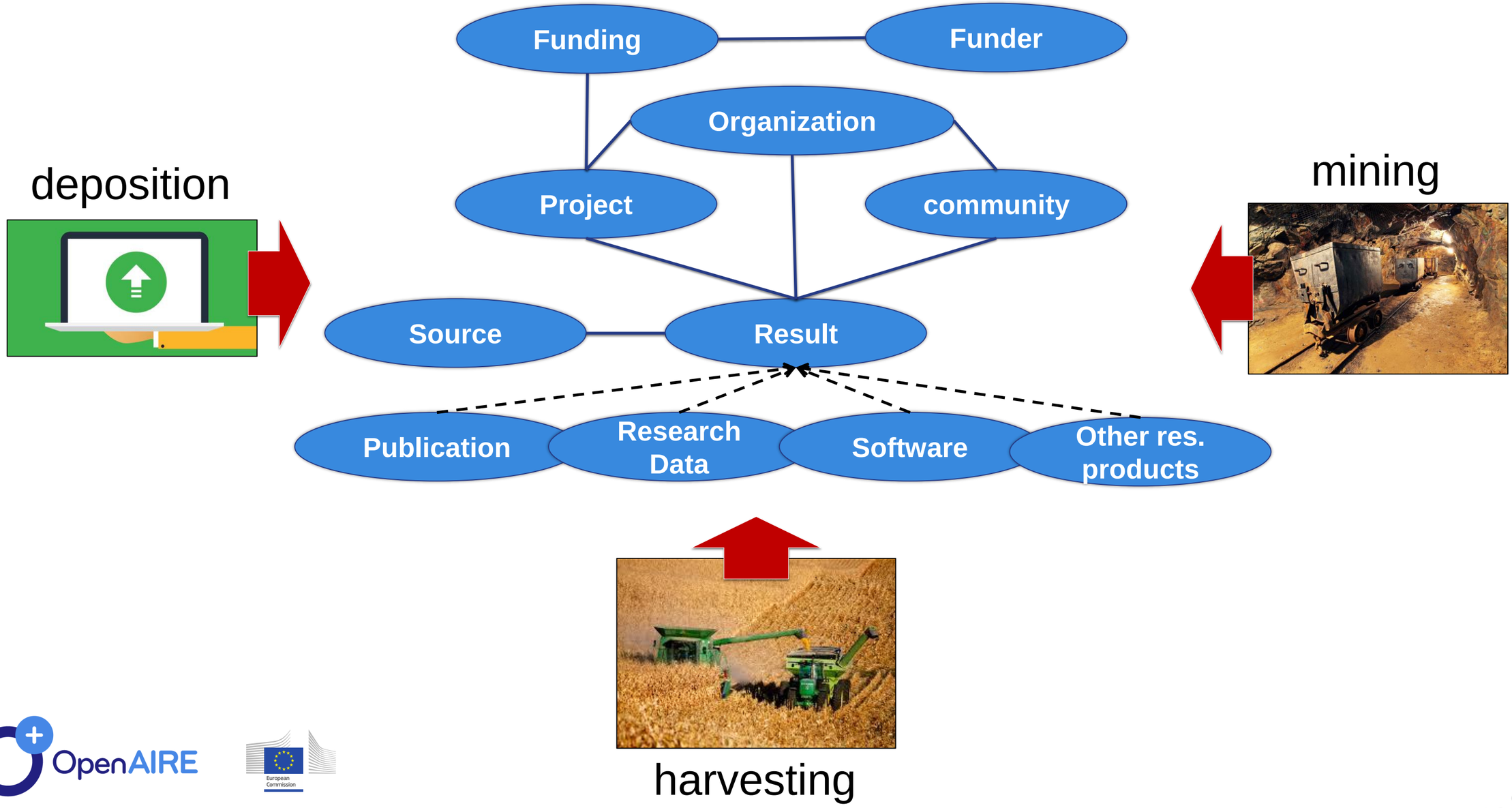
Research Infras

PARTHENOS
EPOS
egi
DARIAH-EU
eli ir

OpenAIRE

European Commission

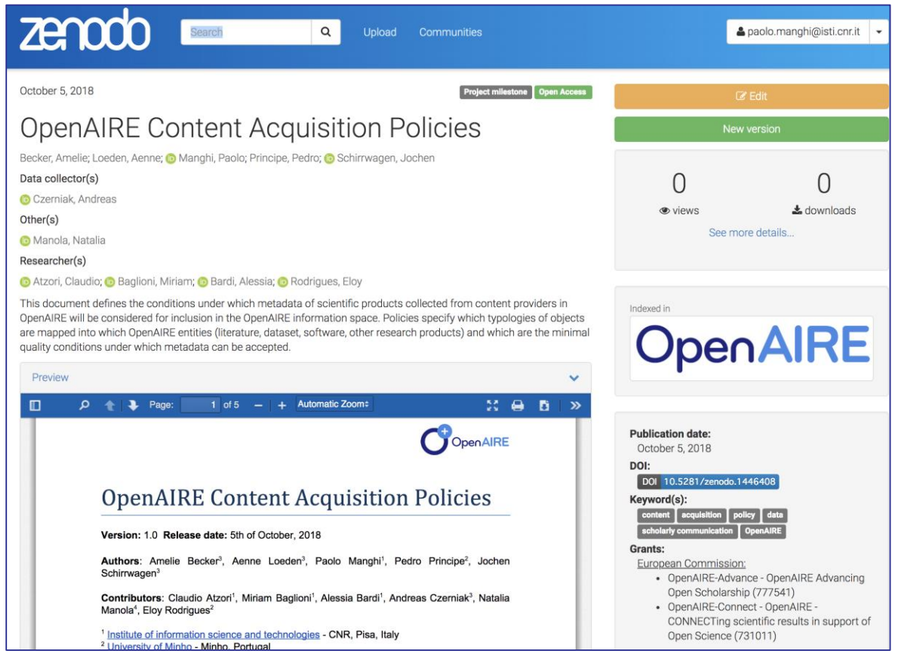
OpenAIRE Data Model and Flows



Content Acquisition Policy

ALL Publications, Research data, Software, Other research products

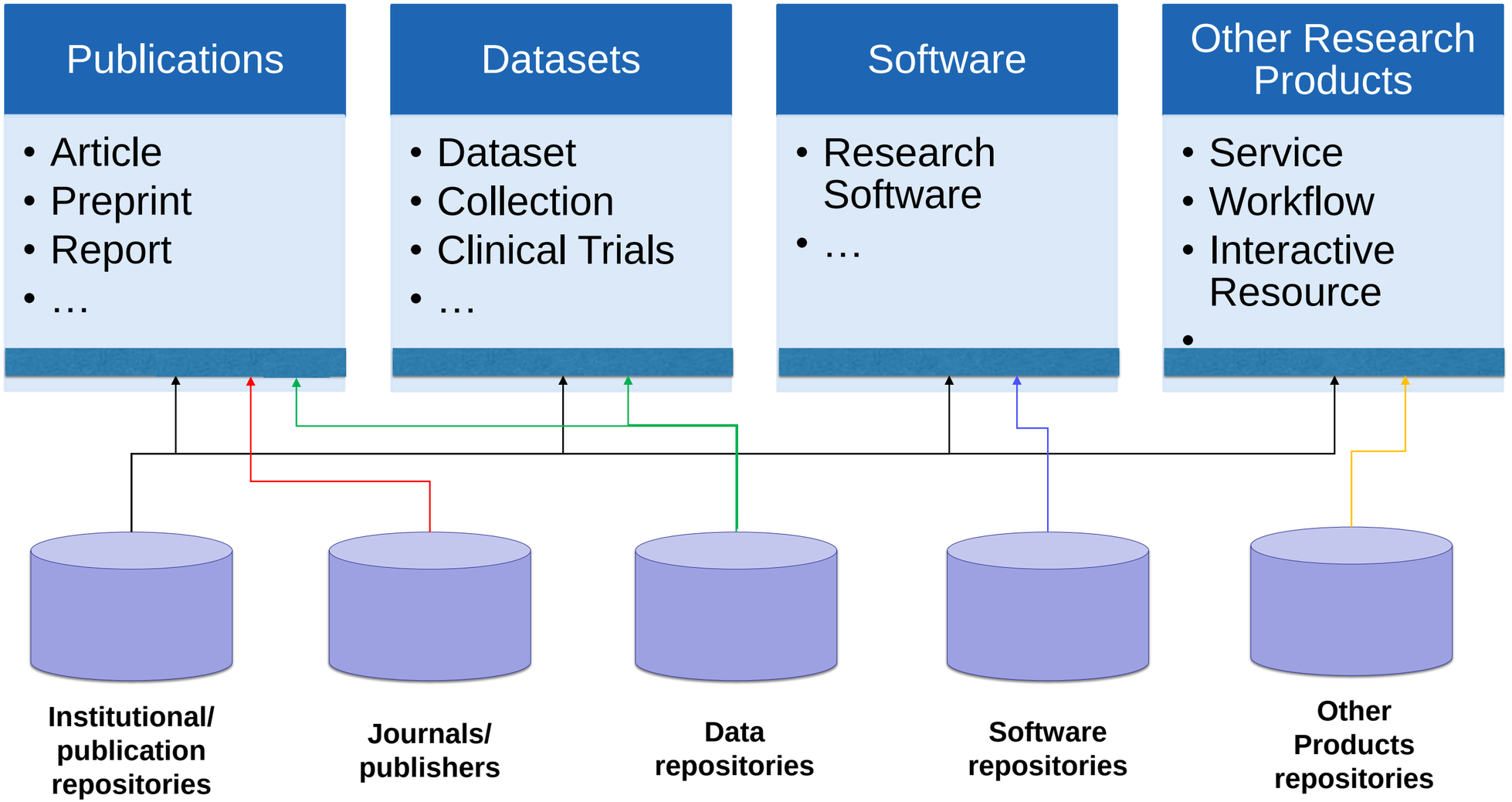
- Respecting the OpenAIRE guidelines (DataCite metadata)
- Using PIDs with resolvers



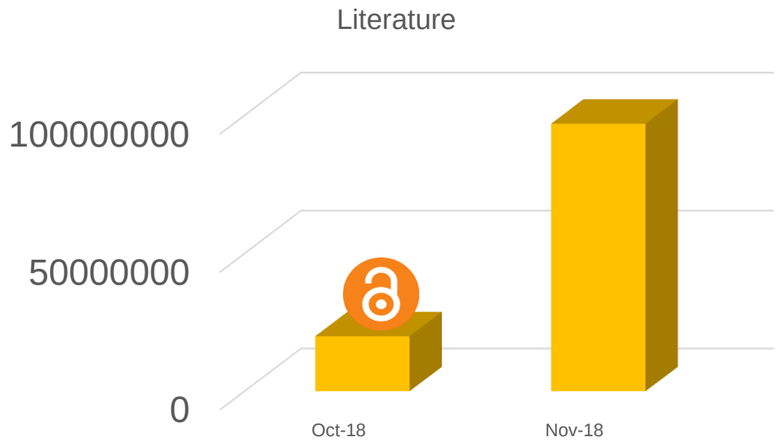
OpenAIRE

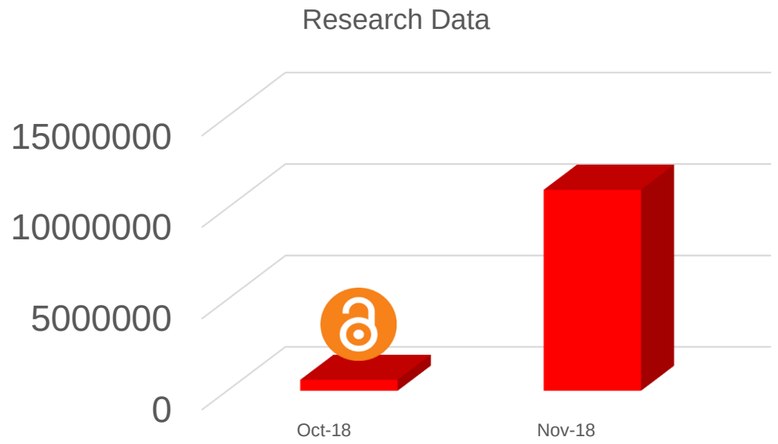
European Commission

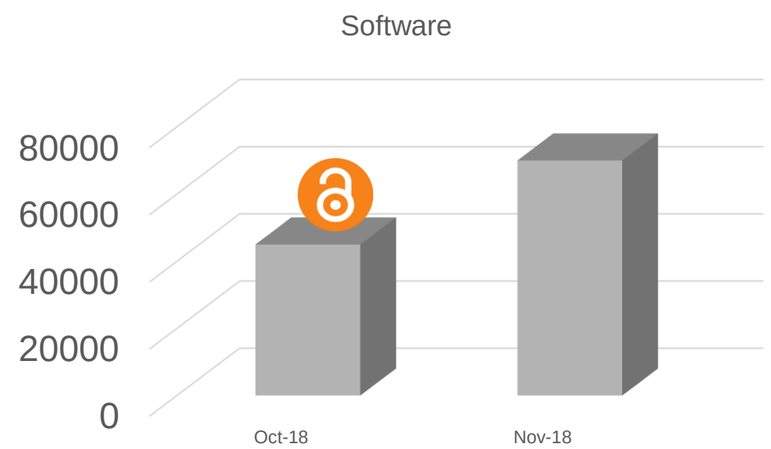
Harvesting: Revised Classification of Research Products



Content acquisition policy transition: from Oct 2018 to November 2018







Aims

Funding Impact

Publications, research data, software made available/published

Open Access/Science Impact

Monitoring of Open Science impact: data/software FAIRness, reproducibility trends

Added-value functionalities

- Funders
  - Trends in research fields: new (multidisciplinary) disciplines
- Institutions
  - Open Access / Open Science behavior, ability to attract cross-funder grants
- Projects
  - Success, interconnections, possible liaisons

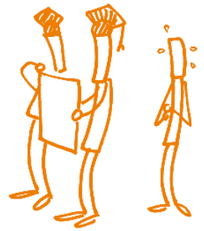
Useful links

- OpenAIRE Catalogue of services http://catalogue.openaire.eu
- Get started on Open Science:
  - Open Access Basics & Research Data Management Handbook https://www.openaire.eu/os-primers
  - Open Science Guides https://www.openaire.eu/guides
  - Horizon 2020 Factsheets https://www.openaire.eu/openaire-h2020-factsheets
- APIs http://develop.openaire.eu

OpenAIRE

European Commission

https://www.fosteropenscience.eu/toolkit

What is Open Science?	Best Practice in Open Research	Open Access Publishing	Open Peer Review	Sharing Preprints
				
Data Protection & Ethics	**Open Source Software & Workflows**	**Managing & Sharing Research Data**	**Open Science & Innovation**	**Open Licensing**
				

Thank you!

Iryna Kuchma

iryna.kuchma@eifl.net

European Commission