



Open Access in a European Policy Context

Marie Skłodowska-Curie Actions
Innovative Training Networks

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Open Access

- Online access at no charge to the *user*
 - to peer-reviewed scientific publications
 - to research data

Open Science

- A systemic change in the modus operandi of science and research
- Affecting the whole research cycle and its stakeholders



Priorities of Commissioner Moedas

- **Open Innovation**
- **Open Science**
- **Open to the world**



The Commission objective

Optimise the impact of publicly-funded scientific research

- At European level (FP7 & Horizon 2020)
- At Member State level

One way to get there: open access

Expected benefits:

- Better and more efficient science
- Economic growth
- Broader, faster, more transparent and equal access for the benefit of researchers, industry and citizens

... in the European Research Area and beyond

The European Commission is a...

Policy maker

- It proposes EU legislation & legislates with other EU institutions
- It invites Member States to act

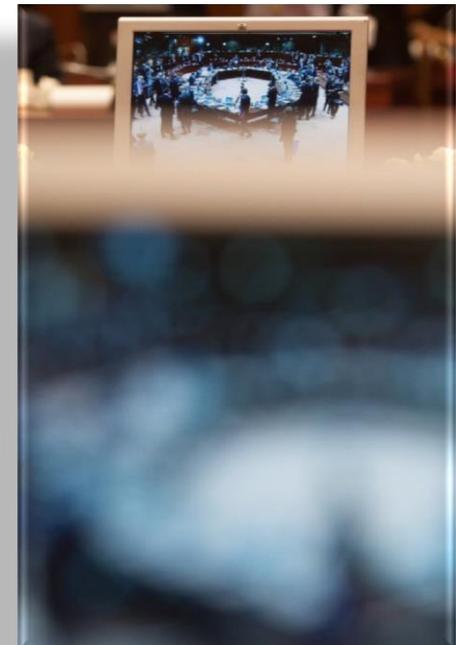
Funding agency

- It sets its own access and dissemination rules for EC-funded research

Capacity builder

- It funds projects that support EC/EU policy

Policy developed jointly in DG RTD and CNECT, with input from the research family



Three key documents (16.07.2012)

Communication 'A reinforced European Research Area partnership for excellence and growth'

Communication 'Towards better access to scientific information: boosting the benefits of public investments in research'

Recommendation on access to and preservation of scientific information

Competitiveness Council 29 May 2015

Member States have expressed their wish for the development of a European Open Science Agenda

The Council Conclusion calls for action to:

- **remove obstacles to wide access to publicly funded research publications and underlying data**
- address better data management and welcome the Open Research Data Pilot in Horizon 2020
- develop action plans or strategies for open science in the context of ERA

Open access policies across the EU

Preliminary findings from

- NPR reporting template of 13 EU MS & 1 Associated Country
- Results of 2014 ERA Progress Report

General findings

- Mostly soft measures rather than legislation: exceptions in more proactive and advanced OA policies
- OA to publications still much more developed than OA to data. Progress as to infrastructures for data (repositories), but openness still quite complex an issue and not addressed in many countries (data)
- Bigger countries and countries with better budget capabilities tend to have more comprehensive OA policies and OA enabling infrastructures, as well as tend to lead or participate more actively in OA networking initiatives
- Nevertheless, smaller or less federated countries have the advantage of easier coordination and better synergistic capabilities

Open Access in Horizon 2020



Open access in Horizon 2020

Regulation establishing Horizon 2020

- "To increase the circulation and exploitation of knowledge, open access to scientific publications should be ensured. Furthermore, open access to research data resulting from publicly funded research under Horizon 2020 should be promoted, taking into account constraints pertaining to privacy, national security and intellectual property rights
- Open access to scientific publications resulting from publicly funded research under Horizon 2020 shall be **ensured** [...].
- Open access to research data resulting from publicly funded research under Horizon 2020 shall be **promoted**. [...]."

From FP7 to H2020: OA to publications

FP7

- **Green** open access pilot in 7 areas of FP7 with '**best effort**' stipulation
- Allowed embargoes: 6/12m **Gold** open access costs eligible for reimbursement as part of the project budget while the project runs

Horizon 2020

- **Obligation** to provide OA, either through the **Green** or **Gold** way in **all areas** (deposition mandatory either way)
- Allowed embargoes: 6/12m **Gold** open access costs eligible for reimbursement as part of the project budget while the project runs & **post-grant support** being piloted
- Authors encouraged to retain copyright and grant licences instead

Uptake of OA in FP7: publications

- 42% of all scientific peer reviewed publications produced during the lifetime of FP7 open access (no data yet for Horizon 2020).
- significant increase in recent years: 56% (2014), 58% (2015).
- The Commission is therefore on track to reach 60% open access by 2016 (target of 2012 Recommendation "Access to Scientific Information")

Open Research Data Pilot in H2020

Key questions:

Which thematic areas are covered?

What data is covered?

What are the requirements?

What about data management?

Open Research Data Pilot in H2020 (I)

Areas of the **2016-2017** Work Programme participating in the Open Research Data Pilot are:

- Future and Emerging Technologies
- Research infrastructures – (**new**: coverage of the whole area)
- Leadership in enabling and industrial technologies – Information and Communication Technologies
- Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing, and Biotechnology: ‘nanosafety’ and ‘modelling’ topics (**new**)
- Societal Challenge: Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy - selected topics as specified in the work programme (**new**)

Open Research Data Pilot in H2020 (II)

Cont'

- Societal Challenge: Climate Action, Environment, Resource Efficiency and Raw materials – except raw materials
- Societal Challenge: Europe in a changing world – inclusive, innovative and reflective Societies
- Science with and for Society
- Cross-cutting activities - focus areas – part Smart and Sustainable Cities (**moved from Energy WP**)

Projects in other areas are encouraged to participate on a voluntary basis!

Open Research Data Pilot in H2020

Projects may opt out in a series of cases, at any stage

- If the project will not generate / collect any data
- Conflict with obligation to protect results
- Conflict with confidentiality obligations
- Conflict with security obligations
- Conflict with rules on protection of personal data
- If the achievement of the action's main objective would be jeopardised by making specific parts of the research data openly accessible (to be explained in data management plan)

Approach: as open as possible, as closed as necessary

Open Research Data Pilot in H2020

Types of data concerned:

- Data needed to validate the results presented in scientific publications ("underlying data")
- Other data as specified in Data Management Plan (=up to projects)

Beneficiaries participating in the Pilot will:

- Deposit this data in a research data repository of their choice
- Take measures to make it possible to access, mine, exploit, reproduce and disseminate free of charge
- Provide information about tools and instruments at the disposal of the beneficiaries and necessary for validating the results (where possible, provide the tools and instruments themselves)

EC: Support & monitoring (Annotated MGA, guidance etc...)

Data management Plans in Horizon 2020

Data Management Plans (DMPs) mandatory for all projects participating in the Pilot, optional for others

DMPs are NOT part of the proposal evaluation, they need to be generated within the first 6 months of the project and updated as needed

- All proposers to submit general information on data management - evaluated under criterion 'Impact'

DMP questions:

- *What data will be collected / generated?*
- *What standards will be used / how will metadata be generated?*
- *What data will be exploited? What data will be shared/made open?*
- *How will data be curated and preserved?*

ORD Pilot: take-up in first calls of H2020

Basis: 3699 Horizon 2020 **signed grant agreements**

Calls in core-areas: opt out 34,6% (149/431)

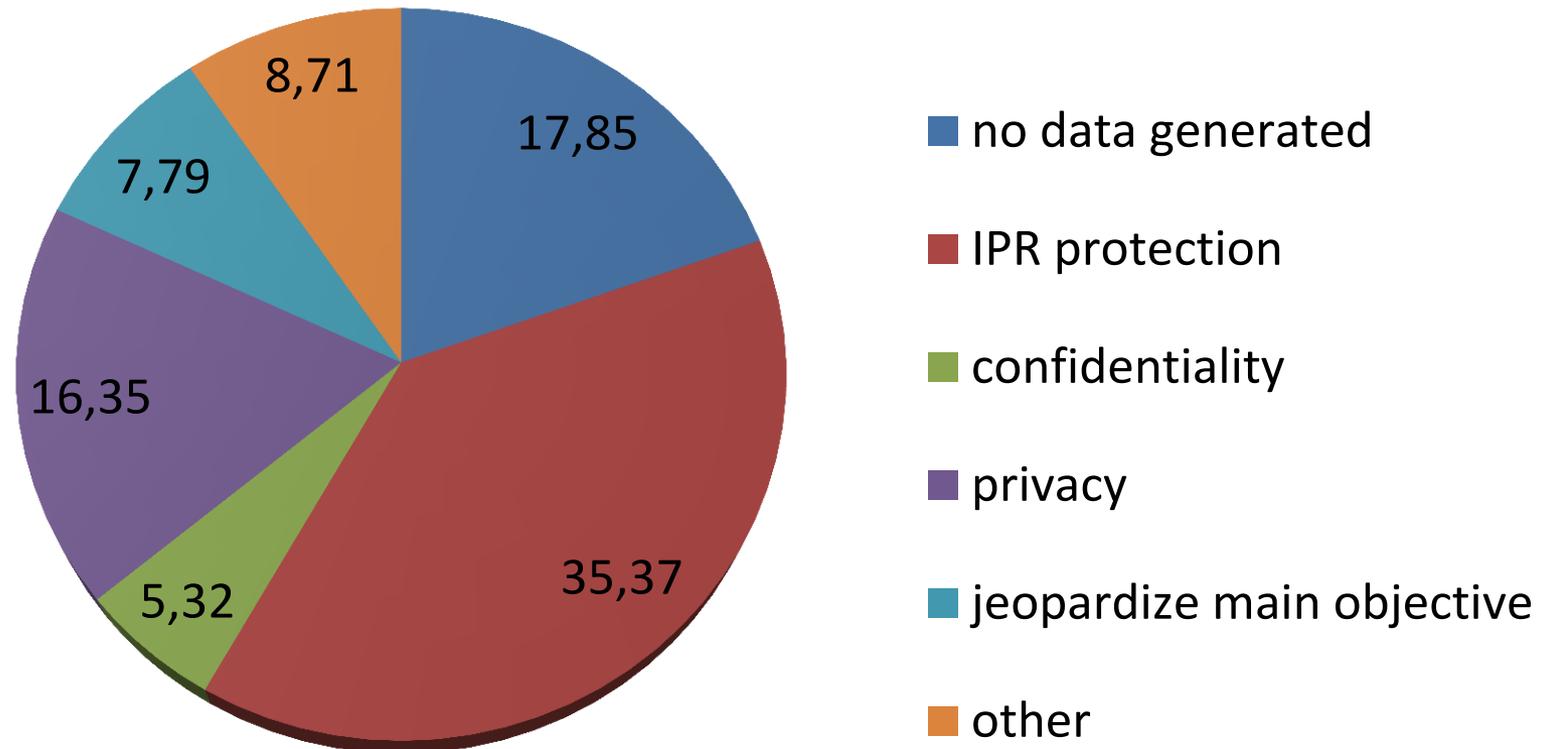
- In other words 65,4% of projects in the core areas participate in the ORD pilot.

Other areas: voluntary opt in 11,9% (409/3268)

Limited divergence from 2014 proposal figures but larger dataset used

Note: 100% participation is not feasible or even desirable (e.g. not all projects generate data)

ORD Pilot: opt-out reasons among proposals





Ongoing coordination and support actions (FP7 funded)

PASTEUR4OA (Open Access Policy Alignment Strategies for European Union Research) Started 2014

FOSTER (Foster Open Science Training for European Research) Started 2014

RECODE - (Policy Recommendations for Open Access to Research Data in Europe) – 2013, finishing

OpenAIRE supporting the implementation of Open Access in Europe (publications and data)

Infrastructure projects (with OA components), e.g. GEO/GEOSS, ELIXIR, EUDAT, CLARIN etc...

We welcome your input!

Mail: RTD-open-access@ec.europa.eu

Web: <http://ec.europa.eu/research/swafs/>

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

OpenAIRE: <https://www.openaire.eu/>



EC Central Library: <http://www.netvibes.com/open-access>

Public consultation: <http://scienceintransition.eu>

Study to measure growth of OA: <http://science-metrix.com/en/publications/reports>

H2020 guidance:

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf

http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf