

Open access in an Open Science Context

Daniel Spichtinger, DG RTD/A6 daniel.spichtinger@ec.europa.eu

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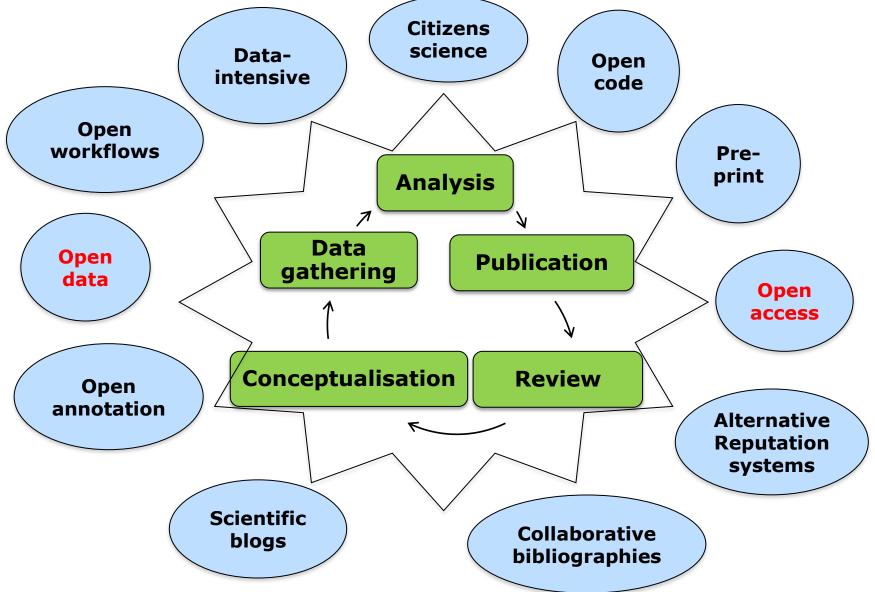
Open Access

- 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







Commissioner view



"As I see it, European success now lies in sharing as soon as possible, (...). The days of **open science** have arrived."

Speech at "Presidency Conference Open Science", 04 of April, 2016, Amsterdam

Open Science as part of an Open Approach

Open Innovation Open Science Open to the world



Open Access in Horizon 2020





From a pilot to underlying principle!

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 through OpenAIRE
- Authors encouraged to retain copyright and grant licences instead



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** 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: <u>opt out 34,6%</u> (149/431)

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

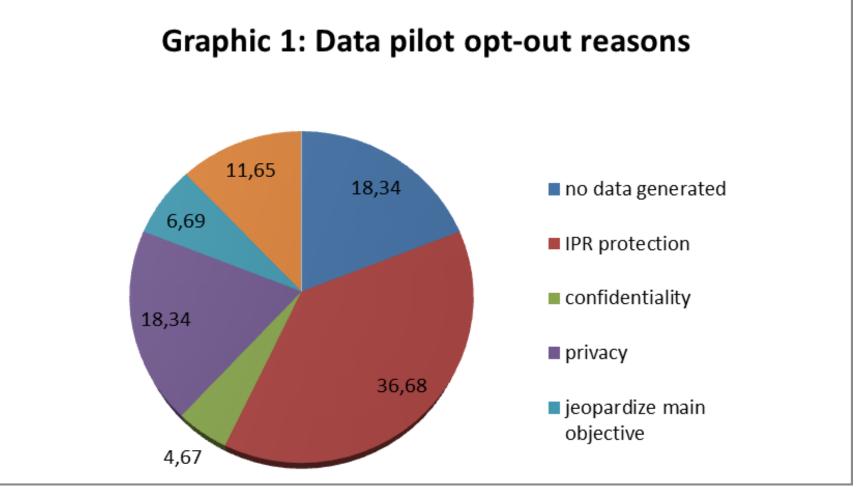
Other areas: voluntary opt in 11,9% (409/3268)

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





The way ahead: ORD extension

Extension of limited Open Research Data (ORD) pilot to cover all of Horizon 2020 (from 2017 WP), whilst retaining key characteristics:

- Robust opt outs options for IPR, confidentiality/privacy and security reason as well as if OA runs against the main objective of the project
- Targeted primarily towards data underlying publications (other data as specified in DMP)
- a Data Management Plan (DMP) is obligatory for projects that do not opt-out
- Data management costs fully eligible
- Whether projects opt-out or not does not affect the evaluation

General approach: as open as possible, as closed as needed



The Way ahead Council Conclusions 27 May 2016 OA publications

...welcomes OA to publications as the default

...transition should be based on common principles such as transparency, research integrity, sustainability, fair pricing and economic viability;

...calls on MS, EC and SH to remove financial and legal barriers,

...invites the EC to develop and encourage measures for optimal compliance in Horizon 202), encourages MS to work with SH on the national level to do the same ...goal: OA by 2020



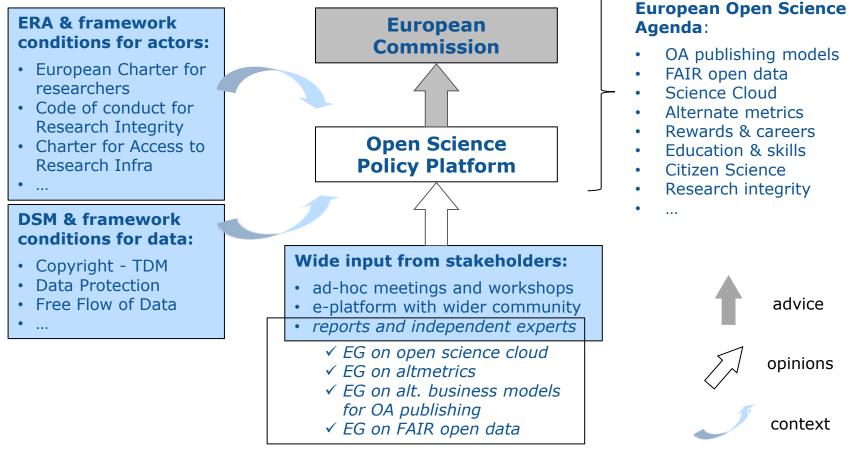
The Way ahead Council Conclusions 27 May 2016

OA data

- the underlying principle for the optimal reuse of research data should be: "as open as possible, as closed as necessary".
- ...welcomes ORD extension
- ...calls on EC to promote data stewardship and to implement DMPs
- ...encourages action on MS level
- ...emphasises the importance of FAIR principles: including long term preservation and curation



The way ahead: Open Science Policy Platform





Ongoing coordination and support actions (FP7& Horizon 2020 funded)

PASTEUR40A (Open Access Policy Alignment Strategies for European Union Research) Started 2014

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

<u>RECODE</u> - (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: <u>RTD-open-access@ec.europa.eu</u>





Web: <u>http://ec.europa.eu/research/openscience/index.cfm</u> Twitter: <u>@OpenAccessEC</u>

Ressources

NEW Open innovation, open science, open to the world. A vision for Europe <u>http://bookshop.europa.eu/en/open-innovation-open-science-open-to-the-world-</u> pbKI0416263/

NPR report

https://ec.europa.eu/research/openscience/pdf/openaccess/npr_report.pdf#view=fi t&pagemode=none

H2020 guidance updated on the portal:

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cuttingissues/open-access-dissemination_en.htm

NEW Council Conclusions

http://data.consilium.europa.eu/doc/document/ST-9526-2016-INIT/en/pdf

