Open access to publications in an Open Science Context

SYSLOG Training
'Open Access Policies and Requirements to Publications and Research Data in Horizon 2020'
September 2015

Agenda

Open Access to Publications in Horizon 2020

- Open Science and Open Access - the policy context
- Practical implementation
- *Questions and Answers*

Coffee break

Open Access to Research Data in Horizon 2020

- The Open Data Pilot: Policy context and update
- The Open Data Pilot: Practical implementation
- *Questions and Answers*
- Case study

OPENAIRE support

Final Q&A

Open Science is

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

Key drivers of Open Science

- Exponential growth of data
- Availability of digital technologies
- Increase of the global scientific population
- Public demand for better and more efficient science
- Demand for accountable, responsive and transparent science
- Need to address faster societal challenges
- Need to contribute to economic growth


Citizens science
Data-intensive
Open code
Open workflows
Pre-print
Analysis
Open data
Data gathering
Publication
Open access
Open annotation
Conceptualisation
Review
Alternative Reputation systems
Scientific blogs
Collaborative bibliographies

Priorities of Commissioner Moedas:

- Open Innovation
- Open Science
- Open to the world

Commissioner view

Carlos Moedas, Commissioner for Research, Science and Innovation

Günther Oettinger,Commissioner for Digital Economy and Society

"Open science is [...] about making sure that science serves innovation and growth. It guarantees open access to publicly-funded research results and the possibility of knowledge sharing [...]."

Blog post by Commissioners Oettinger and Moedas (22 June 2015): Open science for a knowledge and data-driven economy

https://ec.europa.eu/commission/2014-2019/oettinger/blog/open-science-knowledge-and-data-driven-economy_en

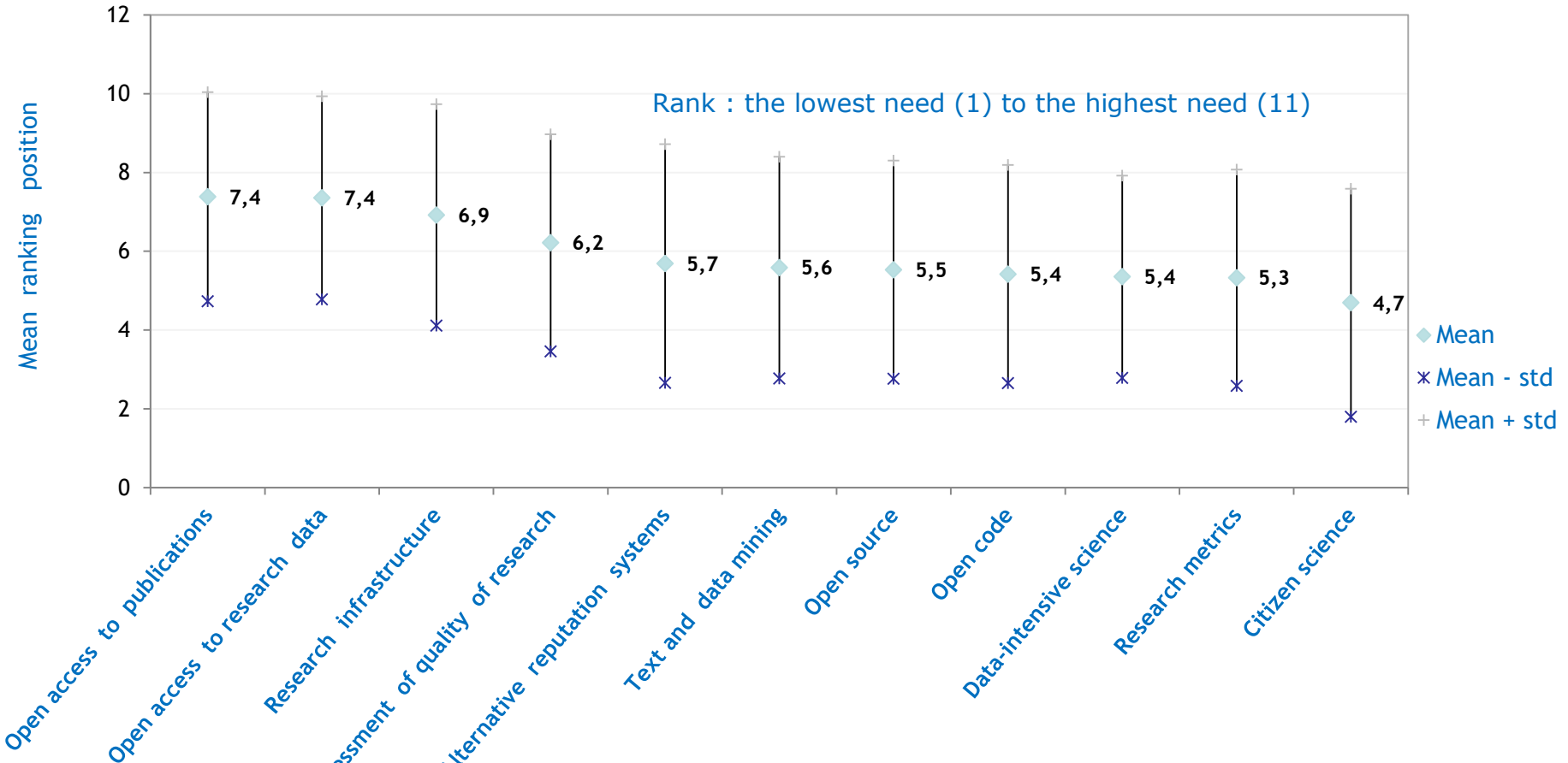
Public consultation: Science 2.0: Science in Transition

- **Assess the degree of awareness amongst the stakeholders of the changing modus operandi**
- **Assess the perception of the opportunities and challenges**
- **Identify possible policy implications and actions to strengthen the competitiveness of the European science and research system**

Numbers:

- **From 03.07.2014 to 30.09.2014**
- **498 submitted responses of which 164 Organisations and 38 Public Authorities**
- **28 position papers voluntary submitted in addition to questionnaire**

On what issues within 'Science 2.0' do you see a need for policy intervention?



What do we understand by OA?

OA = online access at no charge to the anybody

- to peer-reviewed scientific publications
- to research data

Two main OA publishing business models

- **Self-archiving**: 'traditional' publication plus deposit of manuscripts in a repository ('Green OA')

  Both versions contain the same peer-reviewed content, but may be differently formatted

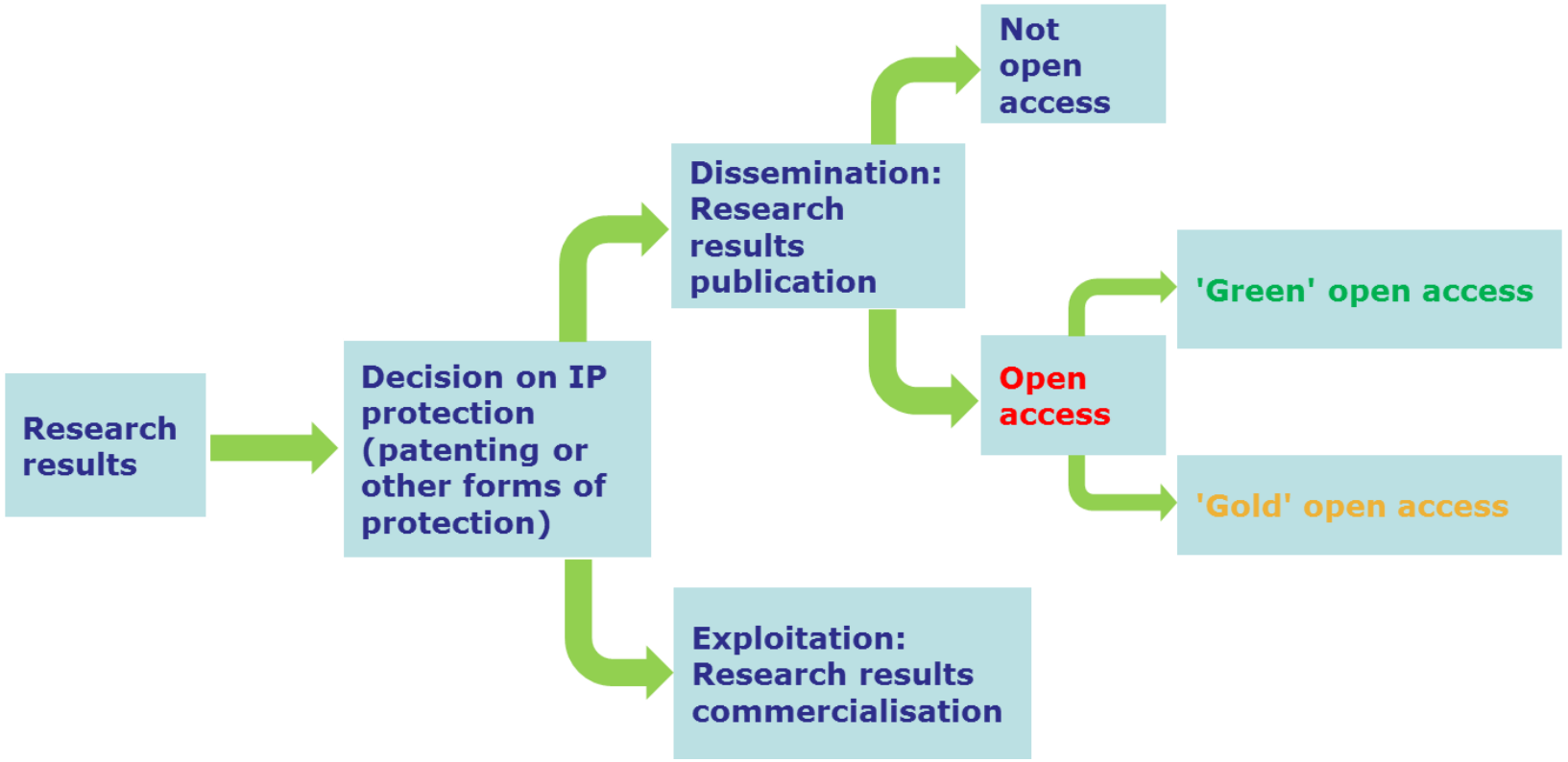
- **OA publishing**: immediate OA provided by publisher ('Gold OA')

  usually, but not always, 'Author-pay' model (APC)

  some journals offer both subscriptions and open access publishing to selected on-line articles (hybrid journals)

What OA is NOT

- Not an obligation to publish
- Not at odds with patenting (see graph)
- OA publications go the same peer review process



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

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

Open Science
Competitiveness Council 29 May 2015

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

Council Conclusion, 29 May 2015:

CALLS for action to remove obstacles to wide access to publicly funded research publications and underlying data;

CALLS for actions addressing better data management and, in this context, WELCOMES the Pilot on Open Research Data under Horizon 2020;

In the context of the implementation of the European Research Area (ERA), LOOKS FORWARD to the possible development of action plans or strategies for open science

European Commission

Open access policies across the EU

Preliminary findings from

(i) NPR reporting template of 13 EU MS & 1 Associated Country

(ii) 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 (for 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**

The international landscape (1)

Study to measure the growth of OA

- Wide sample of 1 million records for in-depth study of between 2008 and 2013
- Focus on ERA, Brazil, Canada, Japan and USA
- Global proportion higher than previously assumed:
  - 55% of those published in 2012 are now free (adjusted for precision and recall), if counting gold, green and other
- OA papers were between 26% and 64% more cited on average
- Backfilling of papers is really important: about 700,000 papers from 1996-2011 became freely available between April 2013 and April 2014, the same quantity as those published 2013

The international landscape (2)

Study to measure the growth of OA

- OA availability varies among disciplines: 'tipping point' passed in Biology, Biomedical Research, Mathematics & Statistics and in General Science & Technology. Least open access in SSH, applied sciences, engineering and technology
- The majority of 48 major science funders considers both Gold and Green OA acceptable. More than 75% accepted embargo periods of 6-12 months
- Policies for OA to data not as well developed but increasing

Working with international organisations (OECD, RDA, GRC 'Berlin conferences and others) and sectoral/thematic iniatives (for data)

The international landscape (3)

Robust open access policies around the world – not invented in Europe

- Strong US OA mandate for federally funded research (agencies with budget of over 100 million €), most notably NIH
- Strong green open access mandate in Latin America (SCIELO)
- Strong open access policies also in Canada, Australia and Japan
- Developing policies in other countries, e.g. China, Russia…
- Key non-state funders also have robust mandates (Wellcome Trust, Gates Foundation)

European Commission

Open Access in Horizon 2020

OA in Horizon 2020: where to look

- Regulation establishing Horizon 2020 (article 18)
- Specific Programme (preamble 1.3)
- Rules for Participation (article 43)
- Work Programme 2014-15 (Introduction 1.5 and relevant areas)
- Model Grant Agreement (articles 6.2.D.3, 29.2 and 29.3)
- Annotated Model Grant Agreement (reference to Guidelines below)
- Guidelines on Open Access to Scientific Publications and Research Data in Horizon 2020
- Guidelines on Data Management in Horizon 2020
- Source for all documents: Participant Portal (reference documents) http://ec.europa.eu/research/participants/portal/desktop/en/home.html

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 from pilot to underlying principle

FP7

- **Green** open access pilot in 7 areas of FP7 with **'best effort' stipulation**
- Allowed embargoes: 6/12 months
- **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: 6/12 months
- **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

OA to publications: implications for GA preparation and project follow-up

- Obligatory clause 29.2
- Make sure beneficiaries are aware
- Monitoring as part of the project reporting
- FAQ documents, factsheet and guidance published

We welcome your input

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Contacts DG RTD

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Links

EC OA website
http://ec.europa.eu/research/science-society/open_access

Open Access Resources (Netvibes – EC Central Library)
http://www.netvibes.com/open-access

Public consultation 'Science in Transition' (Open Science)
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