The European Commission and Open Access

Jean-François Dechamp
DG Research & Innovation
European Commission
The 8th Annual Munin Conference, Tromsø University, Norway
What do we understand by OA?

**OA = online access at no charge to the user (& further distribution and proper archiving)**

- to peer-reviewed scientific publications / to research data
- Not an obligation to publish
- Not at odds with patenting
- OA publications go the same peer review process

**Two main OA publishing business models**

- **Self-archiving**: deposit of manuscripts & immediate/delayed OA provided by author
- **OA publishing**: costs covered & immediate OA provided by publisher
  
  e.g. 'Author-pay' model (APC), public funding, sponsorship, crowdfunding, 'freemium' etc.
Dissemination and exploitation
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 (e.g. e-Infrastructure)
Two Commissioners on open access

Vice-President Neelie Kroes
Digital Agenda
Digital single market

Commissioner
Máire Geoghegan-Quinn
Research & Innovation
Horizon 2020
European Research Area (ERA) & Innovation Union
The Commission objective

The Commission wants to 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 and their policy files:
- Economic growth ➔ Innovation Union
- Broader, faster, more transparent and equal access for the benefit of researchers, industry and citizens ➔ Responsible Research and Innovation
- Across Europe (and beyond) ➔ European Research Area (and international developments)
The Commission strategy

1. Develop and implement open access to research results from projects funded by the EU Research Framework Programmes (FP7, Horizon 2020)
   - Incl. funding research and supporting activities in the area of open access

2. Encourage national initiatives at Member State level

3. Contribute to co-ordination between Member States, within the European Research Area (and beyond)
Open access in FP7

OA publishing costs are eligible in FP7
  • Since the beginning of FP7, for all projects
  • Limited to duration of project

OA Pilot in FP7
  • 7 areas (>1800 projects to date)
  • 20% of total FP7 budget (2007-2013)

European Research Council
  • Updated (2013) Scientific Council Guidelines for OA
  • OA to primary data

OpenAIRE
  • EU-funded portal giving access to repositories across Europe (implements FP7 Pilot)
Latest SiS FP7 projects

**RECODE** - (Policy Recommendations for Open Access to Research Data in Europe) - 2013

**SERSCIDA** - (Support for Establishment of National/Regional Social Sciences Data Archives) - 2011

**MEDOANET** - (Mediterranean Open Access Network) - 2011

**SISOB** - (An Observatorium for Science in Society based in Social Models) - 2010

**ACUMEN** - (Academic Careers Understood through Measurement and Norms) - 2009
Call in 2013 SiS Work Programme

_Upstream support_ to the definition, development and implementation of open access strategies and policies and to their coordination in the European Research Area

- **PASTEUR4OA** (Open Access Policy Alignment Strategies for European Union Research)
- From 01.02.2014

_Downstream training_ on Open Access in the European Research Area

- **FOSTER** (Foster Open Science Training for European Research)
- From 01.02.2014
Call in 2014/15 SWAFS Work Programme

**GARRI.3.2014** Scientific information in the digital age: text and data mining (TDM)
- Study TDM in the modern research environment

**GARRI.4.2015** Innovative approach to release and disseminate research results and measure their impact
- Need to examine the situation from A to Z
- How peer-review develops outside of traditional methods
- How indicators and bibliometrics are adequate
- Support and promotion actions

Publication date: 11.12.2013
Three key documents (16.07.2012)

**Communication** 'A reinforced European Research Area partnership for excellence and growth'
- Global setting

**Communication** 'Towards better access to scientific information: boosting the benefits of public investments in research'
- Focus on Horizon 2020

**Recommendation** on access to and preservation of scientific information
- Focus on EU Member States
1. Communication 'ERA'

The ERA is based on the internal market in which researchers, scientific knowledge and technology circulate freely

Five priority areas:

- More effective national research systems
- Optimal transnational cooperation and competition
- An open labour market for researchers
- Gender equality and gender mainstreaming in research
- Optimal circulation, access to and transfer of scientific knowledge

Joint statement by stakeholders organisations

Formal commitments and activities on open access by: EARTO, NordForsk, Science Europe, LERU, EUA and CESAER
2. Communication 'Towards better access to scientific information'

Why does better access matter for Europe?
The Commission's vision
Where do we stand?
  • Access to publication and data, preservation, international context
What are the barriers to change?
  • Transition to OA to publications, the case of data, long-term preservation
Action at European level
  • What has the Commission done so far, what are the next steps (Horizon 2020)
3. Recommendation to Member States

Member States to define policies for and implement:

- OA to publications
- OA to research data – taking into account data-specific concerns
- Preservation and re-use of scientific information
- E-infrastructures

Consistency between H2020 policy and MS policy

Structured co-ordination of MS at EU-level + reporting:

National Points of Reference (28 MS + Norway on voluntary basis)
## Our milestones

<table>
<thead>
<tr>
<th>Year</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>• EC-funded Study on the scientific publication market in Europe</td>
</tr>
</tbody>
</table>
| 2007 | • EC Communication on scientific information  
• Council Conclusions on scientific information in the digital age  
• FP7 (OA publishing costs/Gold OA) |
| 2008 | • Open Access Pilot in FP7 |
| 2009 | • OpenAire platform launched to give EU-wide access to publications (and since Dec. 2011: research data)  
• EC Communication on ICT infrastructures for e-Science |
| 2012 | • Surveys: OA in FP7, State of play in Member States  
• EC Communication on ERA  
• Scientific information package: EC Communication and Recommendation on scientific information |
| 2013 | • Public hearing on open research data  
• Open access in Horizon 2020  
• Open access in the ERA |
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**. [...].

A lengthy process of agreement between all parties!
From FP7 to H2020: OA to publications

**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 (tbc)**
- **Obligation** to provide OA, either through the **Green** or **Gold** way in **all areas**
- Allowed embargoes: 6/12 months
- **Gold** open access costs eligible for reimbursement as part of the project budget while the project runs & **other support being piloted**
Key steps for OA to publications in H2020 (1/2)

Each beneficiary will be asked to ensure OA to all peer-reviewed scientific publications relating to its results:

- **Deposit** a machine-readable copy of the published version or final peer-reviewed manuscript accepted for publication in a repository and,
- **Ensure** OA on publication or at the latest within 6/12 months

And also:

- **Ensure** OA to the bibliographic metadata that identify the deposited publication, via the repository
- "**Aim to deposit**" at the same time the research data needed to validate the results
Key steps for OA to publications in H2020 (2/2)

Both routes will be valid and complementary (deposit also in the case of OA publishing)

OA publishing:
- Eligibility of OA publishing costs during the grant
- Piloting a mechanism for open access publishing after the end of the grant agreement with the Commission (call EINFRA-2-2014 – e-Infrastructure on open access)

Choice of repository (possibly OpenAIRE-compliant)

Encouragement to authors to retain their copyright and grant adequate licences to publishers
Key steps for OA to research data in H2020 (1/2)

A limited pilot will ensure OA to some data, on a voluntary basis and with opt-out safeguards

Beneficiaries will accept to:

- **deposit** in an open access repository:
  - **a) the data**, including associated metadata, needed to **validate** the results presented in scientific publications as soon as possible;
  - **b) other data**, including associated metadata, as specified and within the deadlines laid down in the **data management plan**;
- **provide information**, via the repository, about tools and instruments at the disposal of the beneficiaries and necessary for validating the results (where possible, provide the tools and instruments).
Key steps for OA to research data in H2020 (2/2)

No change in obligation to protect results, confidentiality obligations, security obligations or obligations to protect personal data

- All of which still apply

No OA to specific parts of research data if this would jeopardize the achievement of the action's main objective

- To be explained in the DMP

Core areas of H2020 to be announced

Support & monitoring to be developed (call EINFRA-2-2014 – e-Infrastructure on OA)

Guidelines under developments
Study to measure the growth of OA

- Focus on ERA, Brazil, Canada, Japan and USA
- 2008–2011: 21 out of 28 EU MS have achieved a majority of OA papers by April 2013. During this period eight of the EU28 countries have reached a 'tipping point' of 50% of papers available in OA (EU average: 45%)
- 15 Member States reported to have implemented OA national measures (stakeholder actions appear in 10 others)
- Emergence of OA with a dominance of 'Green' and 'hybrid' OA to publications / Joint initiatives / slow progress of OA to data
- Global proportion higher than previously assumed:
  - Around 50% of OA scientific papers published in 2011
  - More than 40% of OA scientific papers published from 2004-2011
Situation in the ERA & beyond (2/2)

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
- Overall OA advantage occurs in all but four disciplines
- 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
In summary...

- Open access as a means to improve knowledge circulation
- Horizon 2020 ambitious yet pragmatic on aspects of open access
- Both *Green* and *Gold* open access measures are promoted
  - Not all countries are the same
  - Transition period
- Support from/for H2020: work programmes e-Infrastructure & Science with and for Society
- Open access must be effective, affordable, competitive and sustainable for researchers and innovative businesses
The EU in a larger landscape

Global Research Council

G8 Science

UNESCO

'Berlin' conferences on OA

Etc.
New challenges ahead

- **Publishing activities**: new comers, new business models, new peer review models, new services...
- **Open science & 'Big Data'**
- **Alternative metrics**
- **Text and Data Mining & Copyright issues**

A transition from *publishing* results to *releasing* results?
Joining forces

Website of the European Commission on open access
  • http://ec.europa.eu/research/science-society/open_access

Draft Science with and for Society call 2014-2015
Draft e-Infrastructure call 2014-2015

Contacts in DG RTD
  • jean-francois.dechamp@ec.europa.eu
  • daniel.spichtinger@ec.europa.eu

Contacts in DG CONNECT
  • celina.ramjoue@ec.europa.eu
  • carlos.morais-pires@ec.europa.eu

@OpenAccessEC