Open Access to publications and research data in Horizon 2020

José Cotta
Head of Unit - C3.Digital Science
DG CONNECT

18/12/13 - ELIXIR Founding Ceremony and Launch Event
What do we understand by open access?

**Open access (OA) = online access at no charge to the user**
- to peer-reviewed scientific publications
- to research data

For publications: two main OA publishing business models

- **Self-archiving (Green OA)**: deposit of manuscripts / usually delayed OA provided by author / repositories
- **OA Publishing (Gold OA)**: costs covered (e.g. by 'authors') / immediate OA provided by publisher / publisher website

**OA is not an obligation to publish**

**OA is not at odds with patenting**

**OA publications go through peer review process**
OA in context: Dissemination & exploitation of research results

Research results
- Dissemination plan
- Data management plan

Decision to exploit / protect
- Patenting (or other form of protection)

Decision to disseminate / share
- Publications
- Depositing research data

Access and use free of charge
- Gold OA
- Green OA

Restricted access and/or use

And/or
Why open access (OA)?

**Goal:** to optimise the impact of publicly-funded research and innovation

**How?** Open access to publications and research data resulting from EU-funded research / e.g. H2020

**Expected impacts of open access:**
- Better science (build on previous results)
- More efficient science (avoid duplication & promote re-use)
- Economic growth (accelerated and open innovation)
- Improved transparency (involving citizens & society)
Policy Background

July 2012: 3 documents adopted

Communication: Towards better access to scientific information: Boosting the benefits of public investments in research **COM(2012) 401 final**

Recommendation to the Member States on access to preservation of Scientific Information **C(2012) 4890 final**

Work with the Member States

2013: Network of National Points of Reference (NPRs) on Scientific Information in Member States set up

Network to serve as a link to collaborate and inform between Members States and the Commission

December 2013: 1st Meeting of NPRs
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**
- Best effort basis
- 7 areas (>1800 projects to date)
- 20% of total FP7 budget (2007-2013)
- 6/12 months embargo

**European Research Council**
- 6/12 months embargo
- OA to primary data

**OpenAIRE**
- EU-funded portal giving access to repositories across Europe (implements FP7 Pilot)
- 45,000 publications, 19,000 OA, 25,000 still under embargo
Open access in Horizon 2020: where to look

- Regulation establishing Horizon 2020
- Rules for Participation
- Work Programme 2014-15
- Model Grant Agreement
- Annotated Model Grant Agreement
- 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
OA to publications mandate in H2020

Each beneficiary must 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 of the researchers choice (possibly OpenAIRE compliant)

- **Ensure OA** on publication or at the latest within 6/12 months

- **Aim to deposit** at the same time the research data needed to validate the results ("underlying data")

- **Ensure OA to the bibliographic metadata** that identify the deposited publication, via the repository
OA to publications mandate in H2020

Routes towards OA:

• OA publishing and self-archiving considered valid and complementary routes
• Deposit into a repository also in the case of OA publishing

Costs for OA publishing:

• Eligibility of OA publishing costs during the grant (as in FP7)
• Piloting a mechanism for open access publishing after the end of the grant agreement (call EINFRA-2-2014 – eInfrastructure on open access)

Licencing:

• Encouragement to authors to retain their copyright and grant adequate licences to publishers (e.g. Creative Commons)
Pilot on Open Research Data in H2020

Areas of the 2014-2015 Work Programme participating in the Open Research Data Pilot are:

- Future and Emerging Technologies
- Research infrastructures – part e-Infrastructures
- Leadership in enabling and industrial technologies – Information and Communication Technologies
- Societal Challenge: Secure, Clean and Efficient Energy – part Smart cities and communities
- 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

Projects in other areas can participate on a voluntary basis.
Pilot on Open Research Data in H2020

Types of data concerned:

• Data (including associated metadata) needed to validate the results presented in scientific publications ("underlying data")

• Other data (including associated metadata) as specified in data management plan

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 (using e.g. Creative Commons licences)

• 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)

Support & monitoring to be developed
Pilot on Open Research Data in H2020

Projects may opt out of the Pilot on Open Research Data in Horizon 2020 in a series of cases:

- 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)
Data management in Horizon 2020

- Data Management Plans (DMPs) mandatory for all projects participating in the pilot
- Other projects invited to submit a DMP if relevant for their planned research

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?
In summary

- **Open access**: means improving efficiency, quality and impact of publicly-funded research for society and innovation in Europe.

- **Open access to publications**: a general principle in H2020. Both self-archiving and open access publishing models promoted. Depositing underlying data as a new element.

- **Open access to data**: a pilot in H2020 will test and analyse experiences. Monitoring during H2020.

- **Open access** is not a goal in itself, but one key element in promoting better research and innovation through open digital science practices.
Thank you for your attention

jose.cotta@ec.europa.eu