



The EC policy on Open Science

CHIST-ERA Workshop on Open Science in Transnational Research
March 6th, 2020

Alea López de San Román, Open Science unit, DG R&I

Why do we need Open Science?

Open Science means **sharing knowledge and tools as early as possible**, not only between researchers and between disciplines, but also with society at large

Open Science has the potential to increase:

- **Quality and efficiency of R&I**, if all the produced results are shared, made reusable, and if their reproducibility is improved;
- **Creativity**, through collective intelligence and cross-disciplinary research that does not require laborious data wrangling;
- **Trust in the science system**, engaging both researchers and citizens.

Main priorities and challenges

Improve the practice of R&I

- Freely accessible scientific publications
- Early sharing of all research outputs
- All data FAIR
- Reproducible results
- Societal engagement and responsibility

Develop proper enablers

- Infrastructures (including EOSC)
- Rewards and incentives for Open Science practices in research system and appropriate metrics
- Skills and education, including for research integrity



Commissioner Gabriel

Hearing at the European Parliament, Sept. 30th, 2019

- “The **Open Science** issue is [...] an issue that is dear to my heart”
- “Today, more than ever, we need researchers to **share the results** of their projects [...] and to **capitalize on the research of others**”
- “I will insist on having **data** that are [...] **reusable, accessible, of quality**”
- “Today, we still have a lot to do. I think, for example, in the context of the **European Research Area**, how to encourage researchers who support open science, who support this [...] by making efforts that others do not”

Who are we?

- **A policy maker**

We propose EU legislation

We invite Member States to act

- **A funding agency**

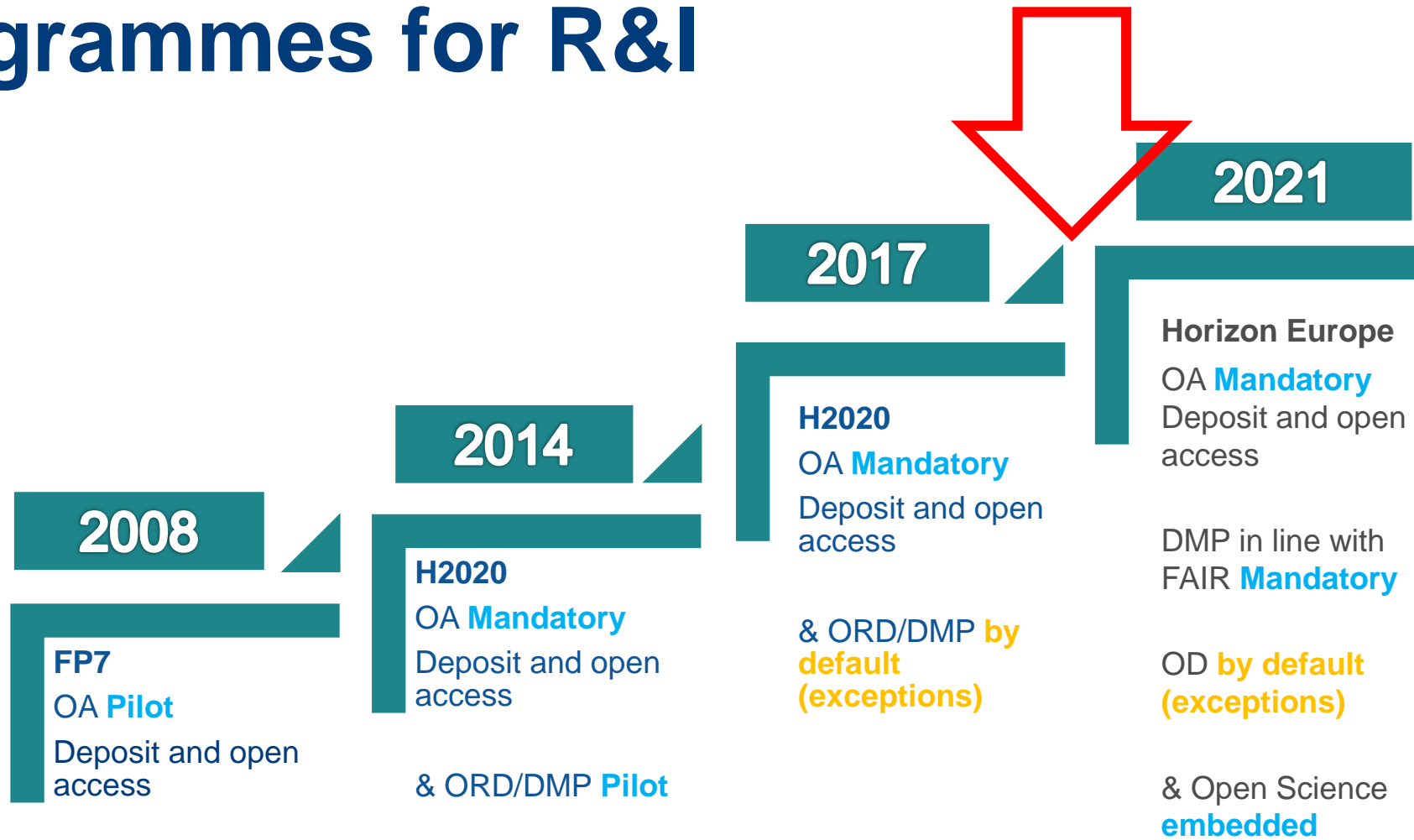
We set our own rules for EC-funded scientific research and innovation

- **A capacity builder**

We fund projects that support our policy

Open Science in the R&I Framework Programmes

The evolution of the EU funding programmes for R&I



Horizon Europe goes beyond OA (publications & data)

to embrace & incentivise Open Science as
modus operandi for science

Articles setting Open Science obligations in Horizon Europe

- **Article 2** defines open access and Open Science
- **Article 10** sets the obligations for Open Science with regard to Open Access, RDM, FAIR and other open science practices. It also sets the principle of reciprocity in Open Science
- **Article 35** foresees further obligations in terms of IPR, Data Management Plans, FAIR and use of European Open Science Cloud and certain exceptions (“as open as possible as closed as necessary”)

But...

We do more than funding research!

- Open Research Europe publishing platform
- European Open Science Cloud
- EU legislation

The Open Research Europe publishing platform

- Help H2020 beneficiaries and their researchers comply with the open access mandate without paying APCs during and after the grant
- Improve uptake of OA in H2020
- Promote OA as THE mode for publishing from now on
- Support open science and lead by example
 - ✓ Early sharing of research (pre-prints + peer-reviewed articles)
 - ✓ Open peer-review+ post publication commenting
 - ✓ New generation metrics
- Explore business models in OA publishing and sustainability

European Open Science Cloud



**EUROPEAN OPEN
SCIENCE CLOUD**

- The European Open Science Cloud (EOSC)—European Cloud Initiative Communication, 2016—is an **enabler of Open Science**
- EOSC will be a **trusted** and **open distributed** system for the scientific community, providing **seamless access to data** and **interoperable services** addressing the **whole research data lifecycle**
- EOSC design principles: **co-creation, research-led, community-driven, scalable, incremental and iterative, continuous engagement, consultation & user testing.**

President U. von der Leyen

World Economic Forum, Davos, Jan. 22nd, 2020

- “We are creating a **European Open Science Cloud** now”
- “It is a **trusted space** for researchers to **store** their data and to **access** data from researchers from **all other disciplines**”
- “We will create a **pool of interlinked information, a web of research data**”



Open Science in the EU legislation

- Revised [Recommendation on access to and preservation of scientific information](#) (2018)
 - Setting the landscape for OS with a view to tackle disparities
 - Also covers infrastructure, metrics, rewards, skills...
- Revised [EU Copyright Directive](#) (2019)
 - Provides for an exception for research organisations to carry out Text and Data Mining (data analytics)
- Revised [Open data and the re-use of public sector information Directive](#) (2019)
 - Applies to publicly funded research data that are publicly available through repositories
 - ‘As open as possible, as closed as necessary’

Thank you



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

