Open Access / Open Science

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ICT Proposers' Day

Bratislava, 26-27 September 2016

- Open science
- European policy context
- Open access

- **Open science**
- **European policy context**
- **Open access**

What is open science?

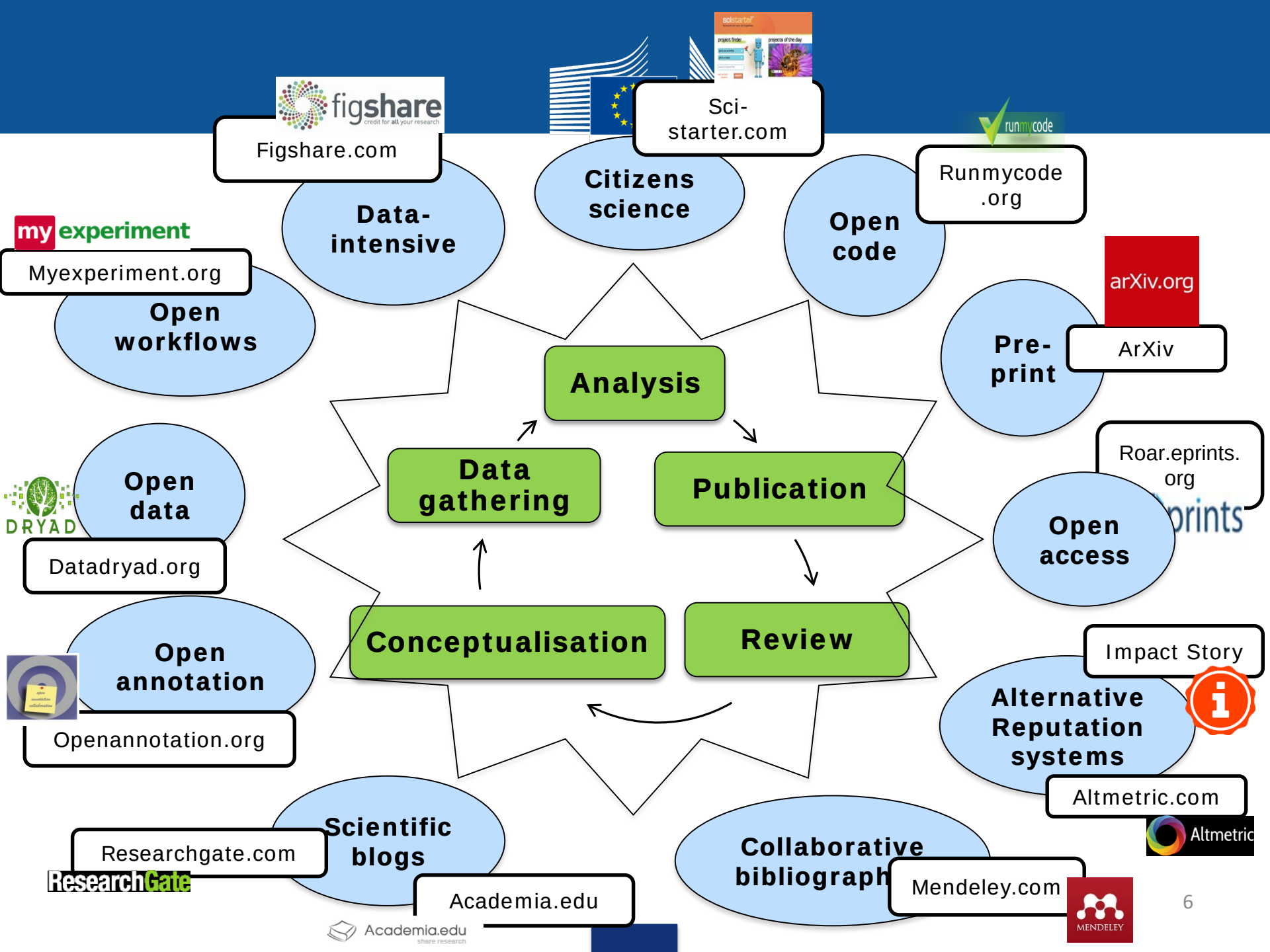
Open science is the transformation and opening up of science, research and innovation through information and communication technologies.

Open science elements

- Open access to publications, data & processes (including open source, open software)
- Citizen engagement, citizen engagement, crowdfunding
- Policy feedback / evidence-based policy-making
- Science communication
- Alternative ways of measuring research outputs
- Incentives and rewards for open science practices
- Awareness-raising and education
- Contribution of science to innovation
- **E-Infrastructure for open science**

Aim: catalyse a change in culture !

for researchers, research organisations and industry


Figshare.com
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Expected benefits of open science

- **Good for science**: efficiency, verifiability, transparency, interdisciplinarity
- **Good for the economy**: access to and re-use of scientific information by industry, innovation
- **Good for society**: broader, faster, transparent & equal access for citizens, increased societal impact of science and research

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Open Science Players

Andrus Ansip, Vice-President, Digital Single Market

Günther Oettinger, Commissioner for Digital Economy and Society

Carlos Moedas, Commissioner for Research, Science and Innovation

Carlos Moedas: Three Os (June 2015)

- **Open Innovation**
- **Open Science**
- **Open to the world**

Digital Single Market Strategy (May 2015)

DSM: "Market in which free movement of goods, persons, services and capital is ensured and where individuals and businesses can seamlessly access and exercise online activities."

One of ten **Juncker priorities**

One of the DSM pillars: focus on maximising growth potential of the digital economy by building a **data economy**

Themes: Copyright, including text and datamining (TDM), open science, free flow of data, European open science cloud

European Cloud Initiative (April 2016)

COM(2016)178

Problems addressed:

- data not always open
- lack of re-use framework
- lack of interoperability
- fragmentation of infrastructure
- lacking High Performance Computing (HPC)

ECI pillars:

- 1. European Open Science Cloud
- 2. European Data Infrastructure
- 3. Widened user base (e-gov & industry)

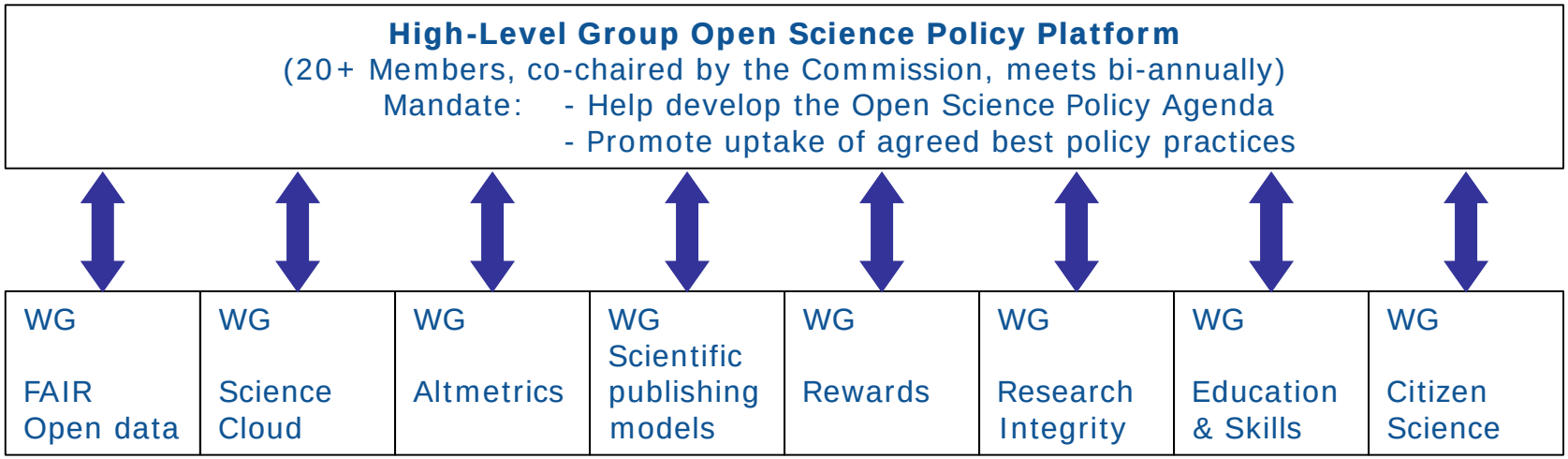
Member States: Council Conclusions on open science (May 2016)

Member States support open science

The Council:

- ACKNOWLEDGES that **open science has** the **potential** to increase the quality, impact and benefits of science and to accelerate advancement of knowledge by making it [...] better understandable by society and responsive to societal challenges [...]
- AGREES to further promote the mainstreaming of **open access to scientific publications** by continuing to support a transition to immediate open access as the default by 2020
- "the underlying principle for the **optimal reuse of research data** should be: 'as open as possible, as closed as necessary'".

Open Science Policy Platform



High Level Group members:

http://ec.europa.eu/research/openscience/pdf/ospp_nominated_members.pdf#view=fit&pagemode=none

Announced 27 May 2016

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Open Access (OA)

OA to what?

- peer-reviewed scientific publications (free online access)
- research data (access and re-use)

Why open access?

- To optimise the impact of publicly-funded research

Open Access in the R&I Framework Programme

- Horizon 2020 mandate on OA to publications
- Horizon 2020 Pilot on open access to research data
- New focus on data management
- Infrastructure projects to support policy (OpenAIRE)

Copyright reform

- Proposed exception for text and datamining

Open access as a driver for open science

OA to publications: from pilot to mandate

FP7: pilot

- Pilot in **7 areas** with **'best effort**' obligation
- **Green OA:** 6/12 month embargo periods
- **Gold OA:** costs eligible during project duration

Horizon 2020: mandate

- **Obligation** to provide OA in **all areas**
- **Green OA:** 6/12 month embargos
- **Gold OA:** costs eligible during project duration
- **Deposit** required even if gold OA
- Aim to deposit **underlying data** (→ link to research data policy)
- FP7 **post-grant** (gold) Open Access publishing funds pilot www.openaire.eu/postgrantoapilot
- Authors encouraged to retain **copyright**/grant licences instead

Model Grant Agreement art. 29.2

Pilot on Open Research Data (H2020)

- Launch: December 2013 with Horizon 2020
- Basis: open access to publications (mandate in Horizon 2020)
  - Requirement: aim to deposit underlying data
  - Text is data
- 2014-15 H2020 Work Programme: 7 areas (with opt-in possibility)
- 2016-2017 H2020 Work Programme: 9 areas (with opt-in possibility)
- As of 2017: all H2020 areas in the ORD Pilot, opt-out only (2016 announcement)

Pilot on ORD: requirements

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)

Approach: as open as possible, as closed as necessary (opting out is possible)

Model Grant Agreement art. 29.3

Resources

H2020 Guidelines (revised 2016):

Open access (publications, data):
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-pilot-guide_en.pdf

Data management:
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/oa_pilot/h2020-hi-oa-data-mgt_en.pdf

Key resource:

OpenAire

https://www.openaire.eu/

Thank you!

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