



“Nuances in de roadmap naar  
Open Science”



# OPEN SCIENCE



# SPARC.ORG

“dissemination of results of research is an essential, inseparable component of the research process”

# Wikipedia

**Open science** is the movement to make scientific research, data and dissemination accessible to all levels of an inquiring society, amateur or professional.

# Opendefinition.org

“Open means **anyone** can **freely access, use, modify, and share** for **any purpose** (subject, at most, to requirements that preserve provenance and openness).”

# Panton Principles

Science is based on building on, reusing and openly criticising the published body of scientific knowledge.

For science to effectively function, and for society to reap the full benefits from scientific endeavours, it is crucial that science data be made open.

<http://pantonprinciples.org/>

<http://openeconomics.net/principles/>

- Open by default
- Privacy and confidentiality
- Reward structures and data citation
- Data availability
- Publicly funded data should be open
- Usable and discoverable

# Reasons

- Reproducibility
- Knowledge as a public good
- public engagement and trust
- Potential new uses of data
- Better resources for education and training





A rectangular white sign with a red border is mounted on a brick wall. The sign features the word "STOP" in large, bold, red capital letters at the top. Below it, the words "Restricted" and "Access" are written in smaller, bold, black capital letters, stacked vertically. The sign is secured to the wall with four metal brackets and screws. In the background, a modern building with a grid of windows is visible under a clear blue sky. A yellow traffic light is partially visible behind the sign.

**STOP**

**Restricted  
Access**



Burton, Gideon: <http://www.flickr.com/photos/wakingtiger/3157622608/> (CC BY-SA)

# OA

- Is about access, not quality (same peer review proces)
- Not an obligation to publish
- No interference with commercial exploitation



# BELGIUM

# Memorandum SA&S

- **Geen uitholling van de wettelijke uitzonderingen**

De werkbaarheid van deze uitzonderingen moet worden gegarandeerd en er is nood aan een 'fair use'-exceptie naar Amerikaanse model. In het kader hiervan kunnen open access en datamining mee in overweging worden genomen.

- **Ondersteuning voor open access en datamining in het onderzoek**

onderzoek gefinancierd met publieke fondsen altijd in open access beschikbaar wordt gesteld.

dat uitgevers verplicht worden hun digitale publicaties voor datamining open te stellen.

# Communication

- Open access working group
- NPR
- Openaccess.be



# EUROPE



# OA Mandate in Horizon 2020

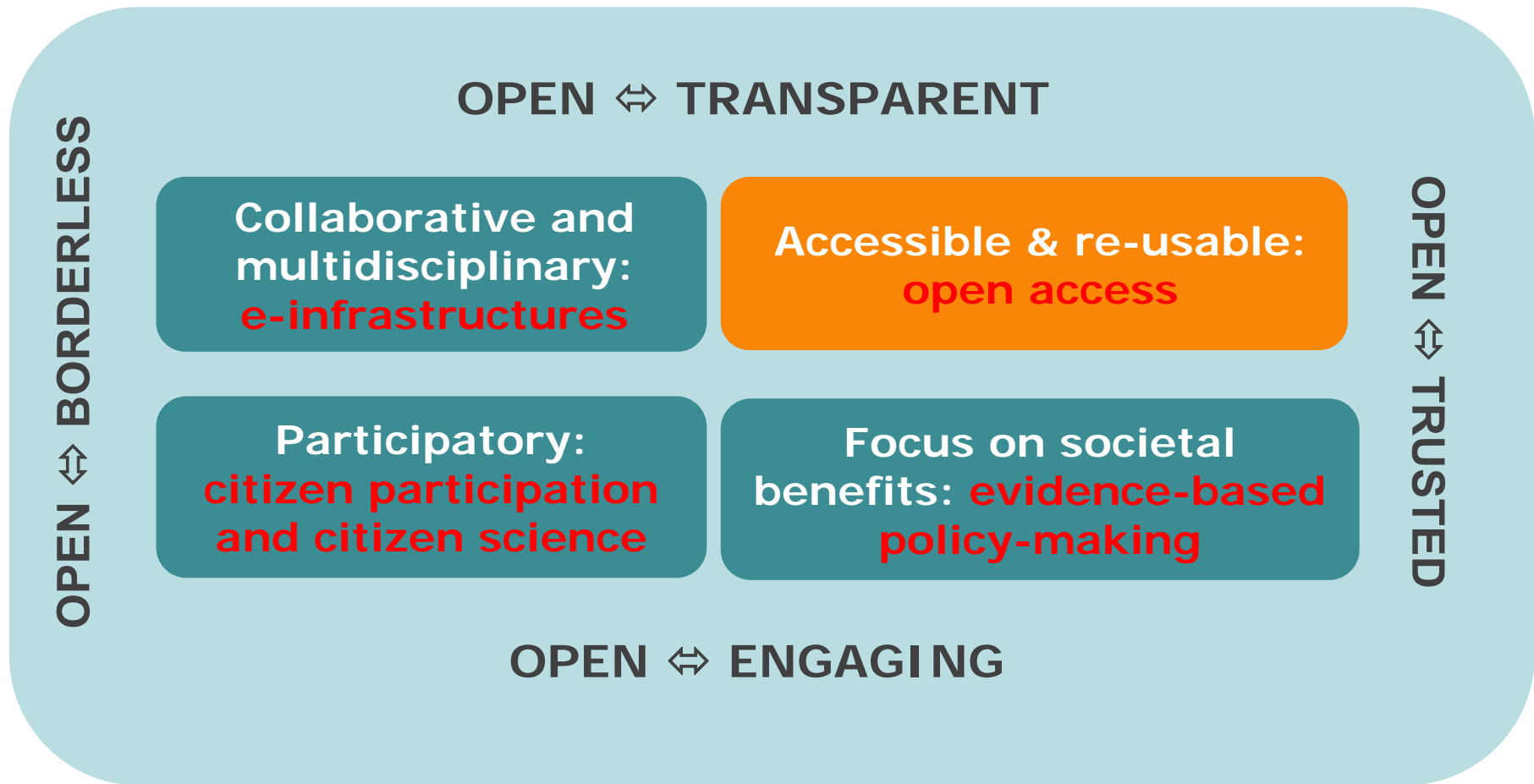
- Open access as a principle
- Peer-reviewed publications (and metadata)
- All scientific areas
- Both green and gold (but always in a repo)
- Allowed embargos: 6/12 months
- *OA publishing costs*
  - Eligible cost during the grant
  - Piloting a mechanism for open access publishing after the end of the grant agreement

# Pilot for research data

- Data (including associated metadata) underlying publications
  - Other data (incl. metadata) as specified in the DMP
  - Taking into account restraints (but described in DMP)
  - DMP mandatory
  - Opt-out for various conflicts
- 
- Pilot is flexible
  - Need to analyse: input for future steps



# Open Digital Science: building blocks



# Some supporting projects

# PASTEUR4OA

## Open Access Policy Alignment Strategies for European Union Research

Aims to support the European Commission's Recommendation to Member States of July 2012 that they develop and implement policies to ensure Open Access to all outputs from publicly-funded research.

<http://www.pasteur4oa.eu/>

# Recode

## Policy RECommendations for Open Access to Research Data in Europe

leverage existing networks, communities and projects to address challenges within the open access and data dissemination and preservation sector and produce policy recommendations for open access to research data based on existing good practice.

<http://recodeproject.eu>

# OpenAIRE

## Open Access Infrastructure for Research in Europe

E-infrastructure to facilitate access to the entire Open Access scientific production of the European Research Area, providing cross-links from publications to data and funding schemes.

<http://openaire.eu>

# Datacite

## Aims to:

establish easier access to research data on the Internet

increase acceptance of research data as legitimate, citable contributions to the scholarly record

support data archiving that will permit results to be verified and re-purposed for future study.

<http://www.datacite.org>



# RDA

## Research Data Alliance

builds the social and technical bridges that enable open sharing of data.

The RDA vision is researchers and innovators openly sharing data across technologies, disciplines, and countries to address the grand challenges of society.

<http://rd-alliance.org>

# IMPACT

EWI-focus, 17 september 2014

# New ways of evaluation

- Altmetrics: involve social media (zotero, Mendeley, CiteULike, twitter, scholarly blogs)
- Digital open repositories for data: track downloads
- Impact based on articles, raw science, nanopublication, self-publishing (blogging, annotations, ...)
- Unlike the JIF, altmetrics reflect the impact of the article itself, not its venue.
- Unlike citation metrics, altmetrics will track impact outside the academy, impact of influential but uncited work, and impact from sources that aren't peer-reviewed
  
- => diverse picture of science

# Impact



<http://altmetrics.org/manifesto/>



# TOOLS

# Copyright licences

- Creative commons CC version 4.0  
<https://creativecommons.org/version4>  
The 4.0 licenses are ready-to-use around the world, without porting.
- Open Data Commons  
Handles database rights better  
<http://opendatacommons.org/licenses/>
- Licences Guide DCC  
[www.dcc.ac.uk/resources/how-guides/license-research-data](http://www.dcc.ac.uk/resources/how-guides/license-research-data)

# DMP

## Writing a data management plan

- Mantra

<http://datalib.edina.ac.uk/mantra/>

- DMP online:

<http://www.dcc.ac.uk/resources/data-management-plans>

# Data repositories

- Zenodo
- Dryad
- Figshare
- DANS
- VLIZ Marine data archive



# ID-management

ORCID: registry of unique researcher identifiers

Elsevier Scopus and Thomson researcher ID  
cooperate

<http://orcid.org>



Inge Van Nieuwerburgh

OpenAccess Belgium

<http://openaccess.be>

[info@openaccess.be](mailto:info@openaccess.be)

Ghent University Library

[Inge.VanNieuwerburgh@UGent.be](mailto:Inge.VanNieuwerburgh@UGent.be)