



# Open scientific data for all: A legal blueprint

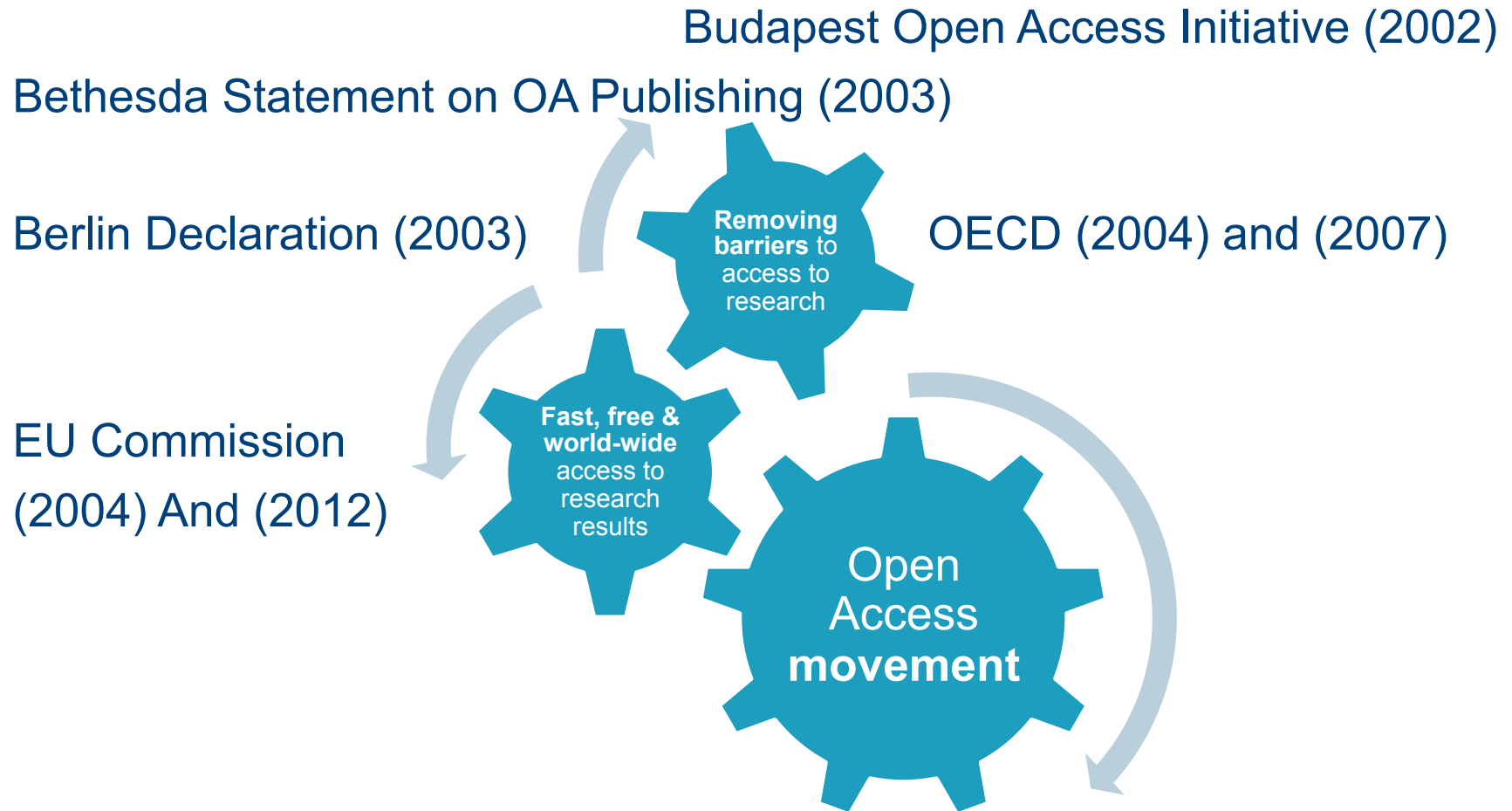
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1. What is Open Access?
2. Scientific Data
3. Legal barriers
  1. Privacy and data protection
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4. Conclusion



# Open Access ?



*“Open Access (OA) literature is digital, free of charge, and free of most copyright and licensing restrictions”*

# Benefits

## FOR SCIENCE

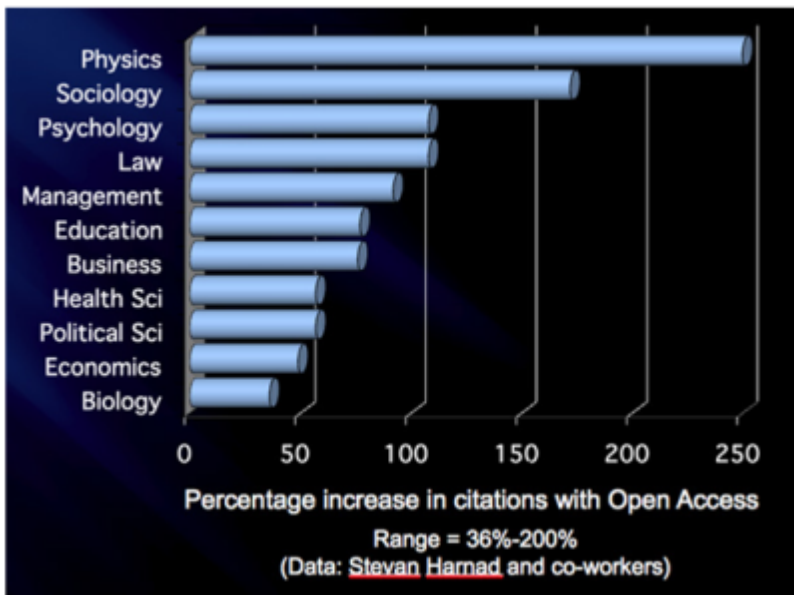
- Improved and faster access and dissemination
- Avoid duplication of efforts
- Accelerate innovation
- Enhanced opportunities for multi-disciplinary research and inter-institutional collaborations
- Citation benefits (2010 Study)

## FOR BUSINESSES

- Increasing returns on investment in discovery and commercialization
- New industries built on publicly accessible data

## FOR CITIZENS

- “Informed citizen” makes better choices



[http://www.openoasis.org/index.php?option=com\\_content&view=article&id=560&Itemid=391](http://www.openoasis.org/index.php?option=com_content&view=article&id=560&Itemid=391) (2010)

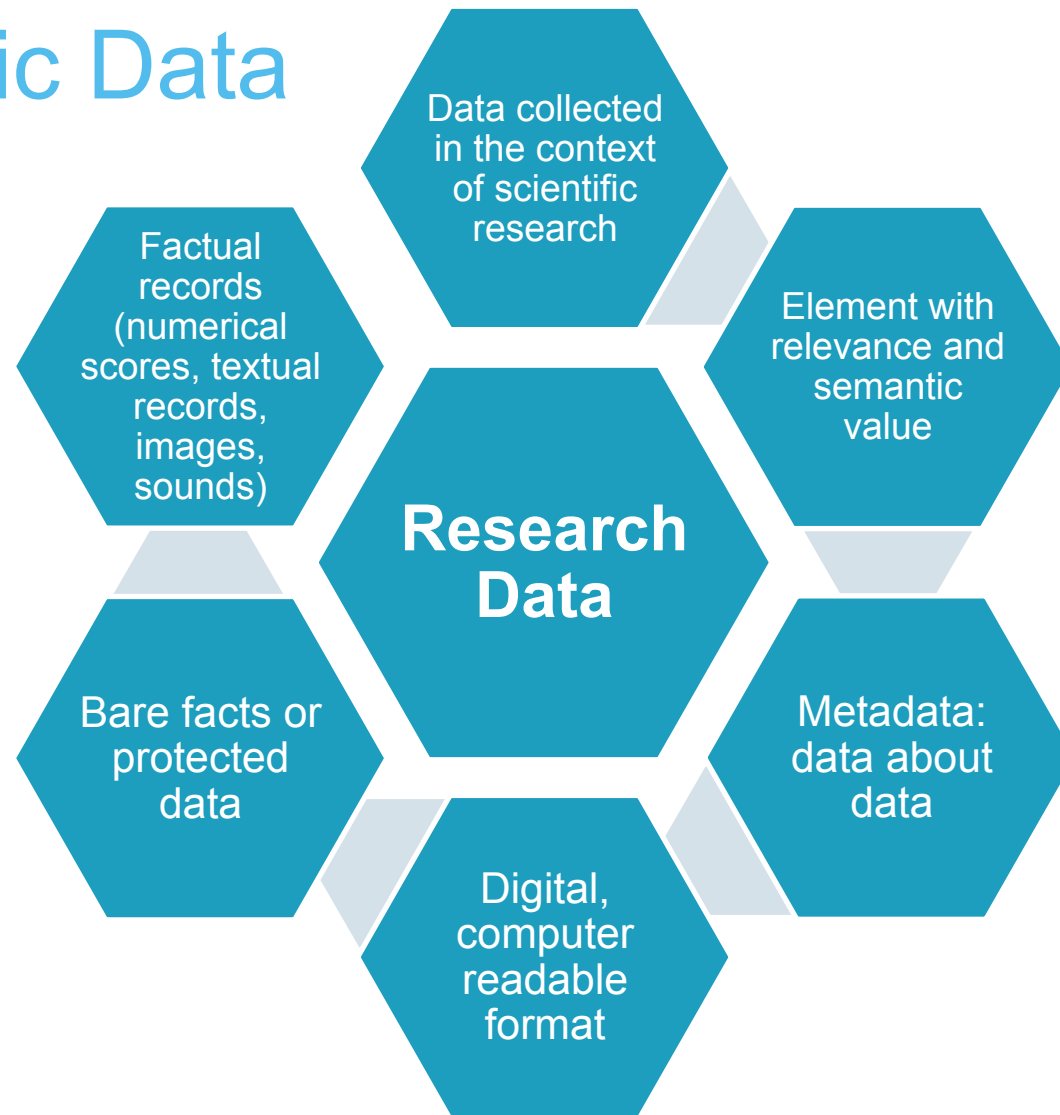


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# Scientific Data



# Barriers to Open Scientific Data

Cultural barriers

Accessibility

Technical barriers

Legal barriers

Price tag

Ethical issues

Data Preservation

“MY data”

Awareness

Data management

Social barriers

Sustainability

“Data-hording”

Lack of financial models

Organizational barriers



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- The background of the slide is a photograph of a wall. At the top, there is a red rectangular sign with the word "ENJOY" in white capital letters. Below the sign, the wall is covered in various graffiti tags in different colors and styles. The text of the slide is overlaid on this background.
1. What is Open Access?
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Access?

ENJOY THE RULES

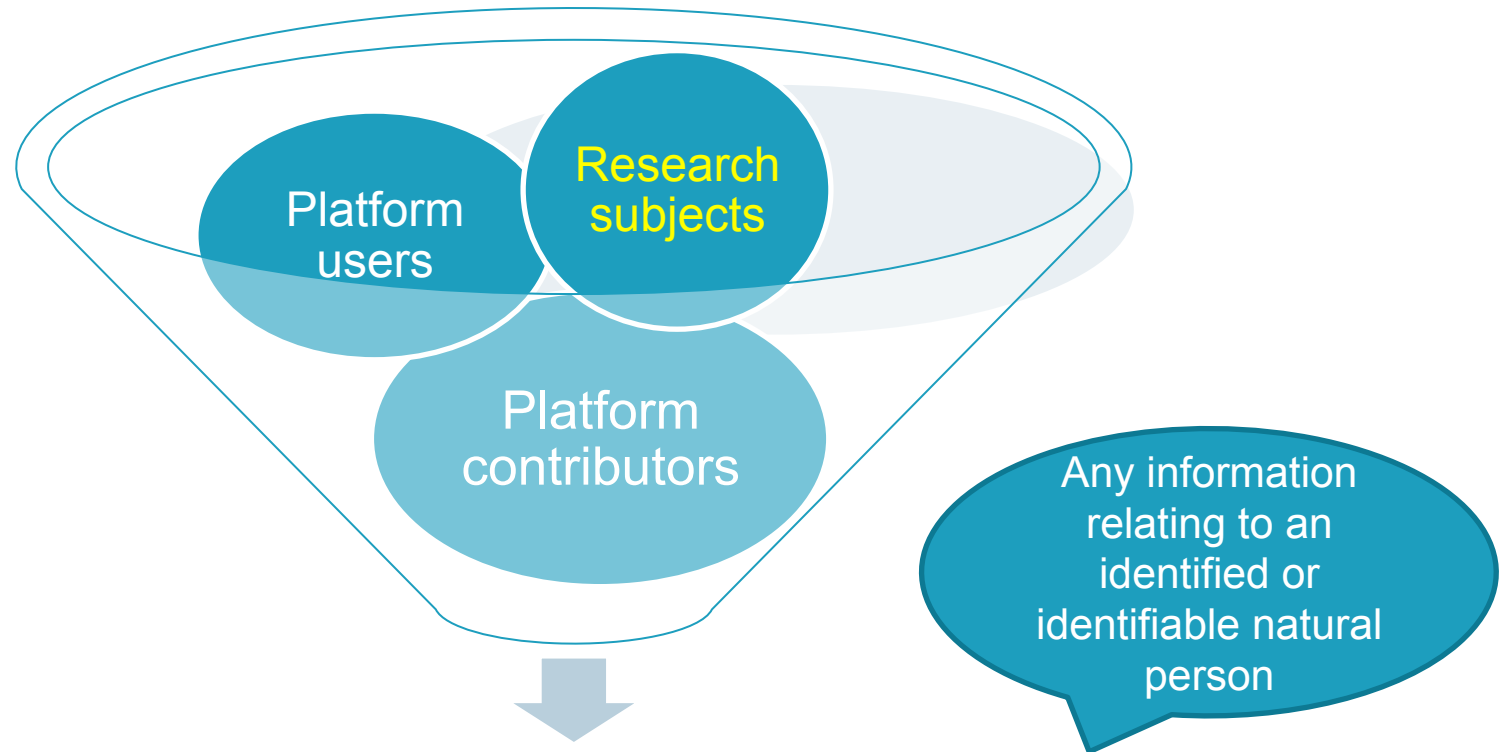


S  
d data protection  
I Property Rights



# Privacy and Data Protection

- European Charter of Fundamental Rights
- European Union Data Protection Framework: Directive 95/46



- National Data Protection Framework

# Privacy and Data Protection

## **Anonymisation**

“Any information relating to a natural person where the person cannot be identified whether by the data controller or by any other person, taking into account of all the means likely reasonable to be used either by the controller or by any other person to identify that individual.”

## **Re-identification**

*Jig-sawing identification* : the phenomenon where clever adversaries –with the help of powerful search technology and increased computing power- can re-identify or de-anonymize the data subjects hidden in the database

## **Pseudonymisation**

The direct identifier is removed, but the individual is still indirectly identifiable, e.g. by linking different sets of data or by using corresponding lists for identifiers and their pseudonyms or two-way encryption algorithms.

# Privacy and Data Protection

Anonymity  
impossible to  
achieve?

At which stage?

Size of population?

Trustworthiness of people with key?

**Effective Pseudonymisation?**  
Data remains traceable.

Risks of external hack?

Ability to link individual records

size of datasets involved?

Utility of the data?

**Scope of Directive**



# Intellectual Property Rights

- Copyright regime – Directive 96/9
  - Originality in structure, selection and wording of data
  - Copyright holder
- *Sui Generis* Database protection – Directive 96/9
  - Substantial investment in obtaining, verification or presentation of its contents
  - Database right holder

On a case by case basis

Different in all MS

Copyright for selection, arrangement and organization



Database right for substantial investment

# Licensing Framework

Do you own the data?

Grant a license



CC0

Open Data  
Commons

Creative  
Commons

Open  
Government  
Licenses

Digital Peer  
Publishing  
License

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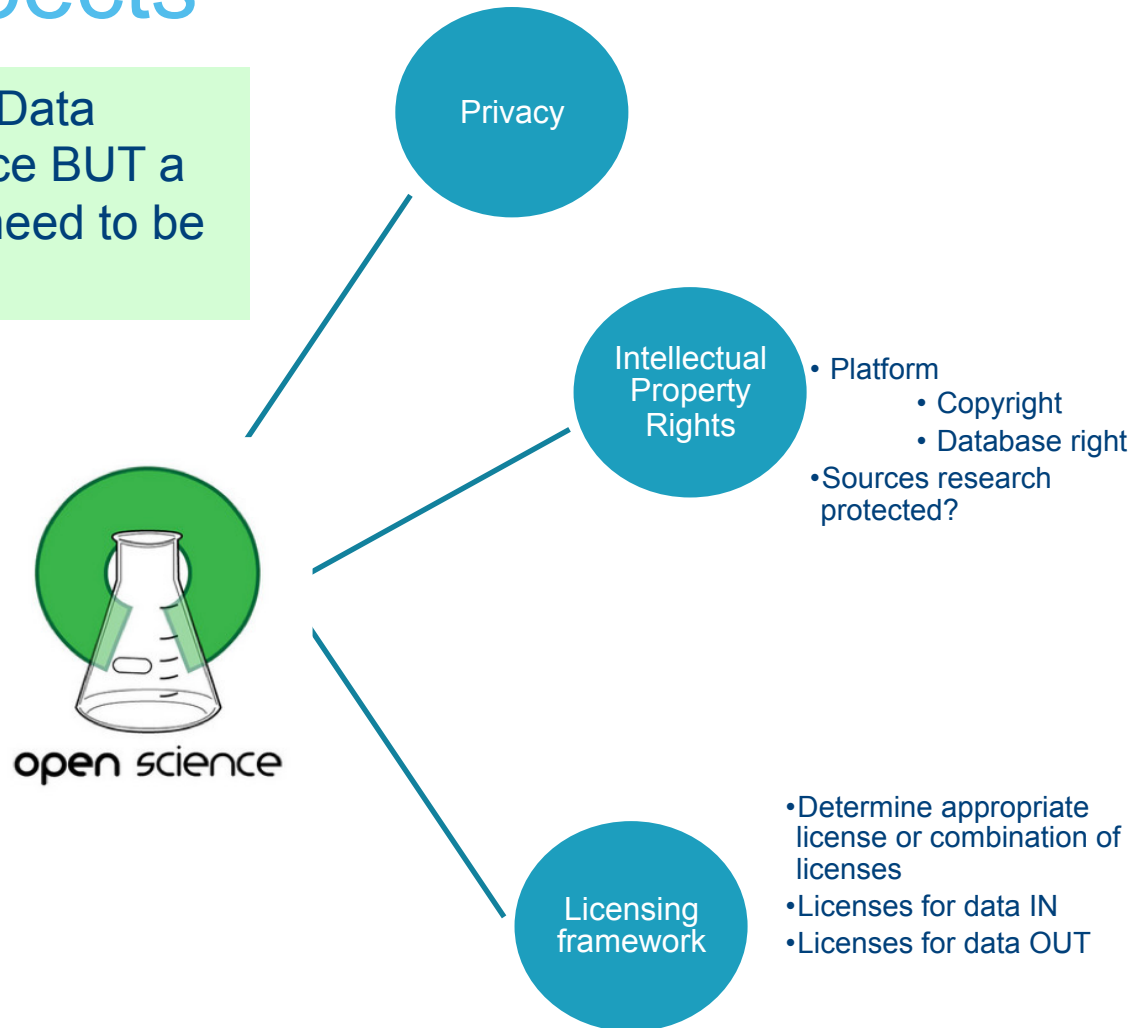
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# Legal aspects

Concept of Open Data gaining prominence BUT a myriad of issues need to be resolved





# Contact

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