



The Importance of Open Science for University Research

Robert-Jan Smits, President of the Eindhoven University of Technology

Science in Transition

Key messages Stakeholder Consultation (2014)

“The evolution of the way in which scientific development is performed is inevitable”

“The changes impact the modus operandi of the entire research cycle, from the inception of research to its publication, as well as the way this cycle is organized”

Science: The Drivers of Change

- Exponential growth of data, big data
- Availability of digital technologies to mine these data
- The enormous growth of the global science community offering increased opportunities for cooperation
- The increased demands from society for transparency, 'bang for the buck', quick solutions, respect of ethics, involvement in agenda setting

Ways forward



Open Science: Advantages

- Faster circulation of new ideas
- Better return on R&I investments
- More support and ownership in society
- More funding
- More mutual respect and understanding
- Less scientific misconduct

Open Science Agenda: Priorities

- Open Access publications
- Open Access data
- Global cooperation on societal challenges: SDGs
- Research Integrity
- Citizen science
- Rewards and incentives
- New Metrics

Open Science Agenda: Priorities and Actions

Priorities

- Open Access Publication
- Open Access data
- Global Cooperation
- Research Integrity
- Citizen Science
- Rewards and Incentives
- New Metrics

Actions

- Plan S
- European Open Science Cloud
- Horizon Europe
- Update European Code on Research Integrity
- Sharing of Best Practices, Recommendations
- Definition of Guidelines and Training
- Definition of alternative indicators for measuring scientific output (other than citations and JIF)

Amsterdam Call for Action on Open Science (2016)



Open Science Agenda: Priorities and Actions

Priorities

Actions

- Open Access Publication → Plan S
- Open Access data → European Open Science Cloud
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Plan S

Plan S

**Making full and
immediate Open
Access a reality**



Open Science Agenda: Priorities and Actions

Priorities

- Open Access Publication



Actions

Plan S

- Open Access data



European Open Science Cloud

- Global Cooperation



Horizon Europe

- Research Integrity



Update European Code on Research Integrity

- Citizen Science



Sharing of Best Practices, Recommendations

- Rewards and Incentives



Definition of Guidelines and Training

- New Metrics



Definition of alternative indicators for measuring scientific output (other than citations and JIF)

European Open Science Cloud



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Horizon Europe

Horizon Europe

THE NEXT EU RESEARCH & INNOVATION
PROGRAMME (2021 – 2027)



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European Code of Research Integrity (2017)



The Importance of Open Science for University Research, 18 October 2019 - Lausanne, Switzerland

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Sharing of Best Practices and Recommendations



EUROPEAN
CITIZEN SCIENCE
ASSOCIATION

Open Science Agenda: Priorities and Actions

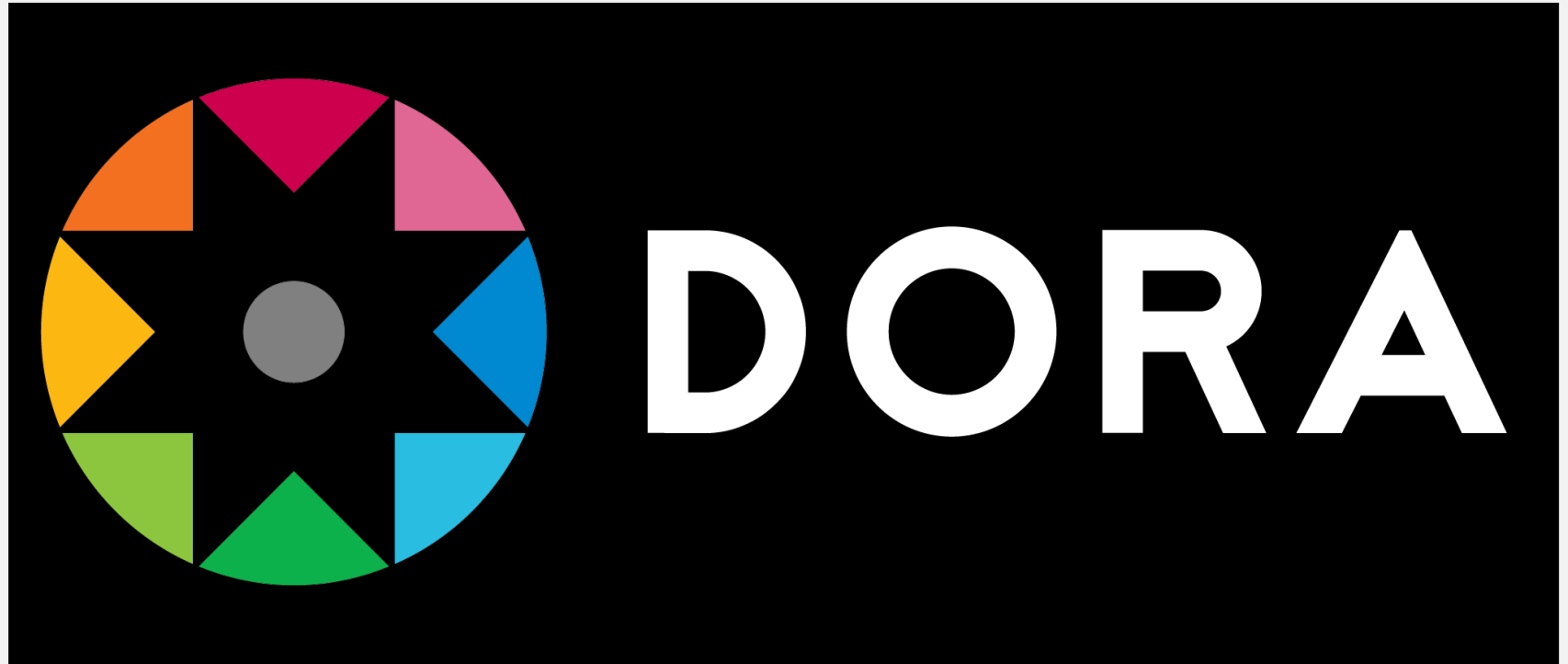
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Definition of Guidelines and Training (2013)



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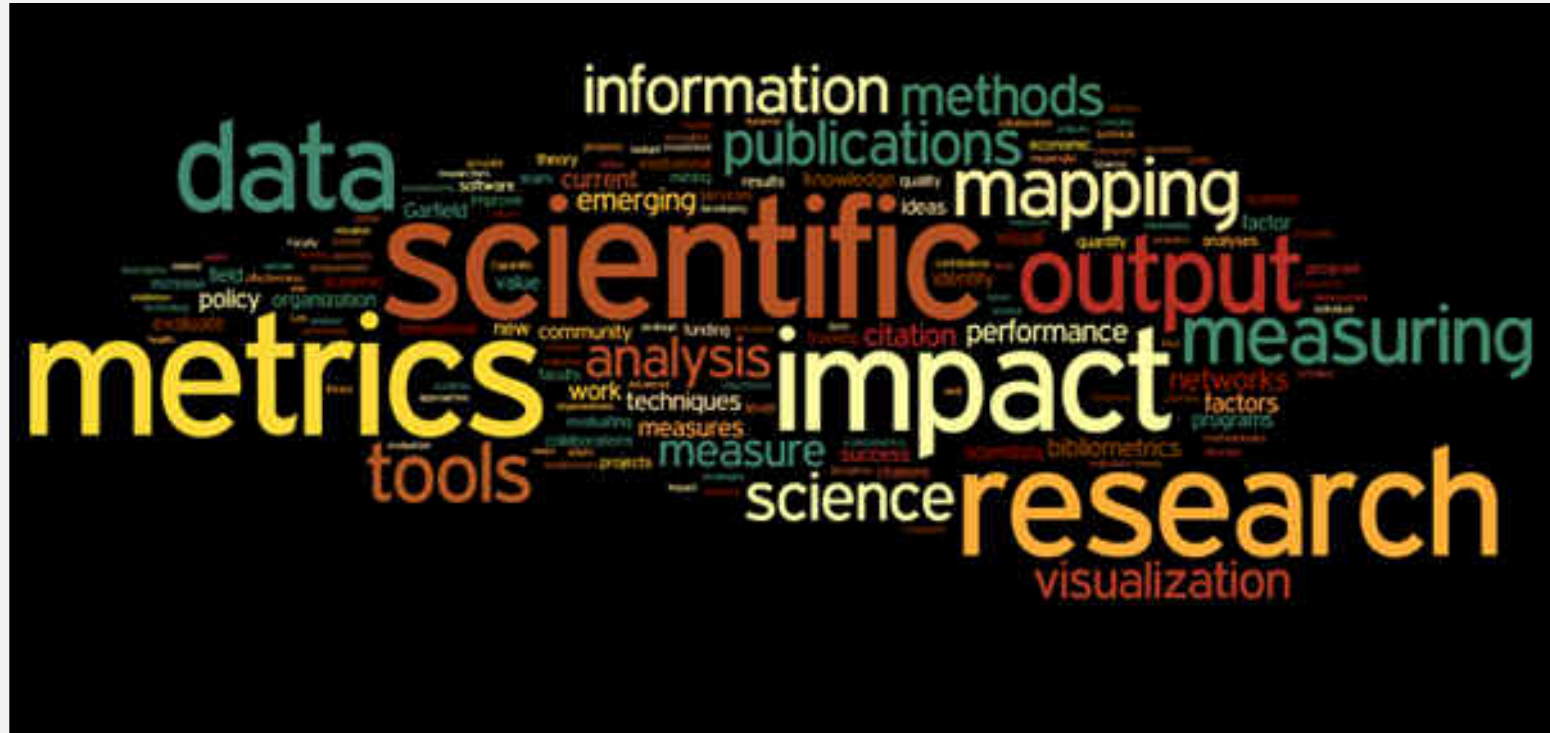
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Definition of alternative indicators (....)



Open Science Agenda: Progress made

HIGH

Open Access Publication
Research Integrity

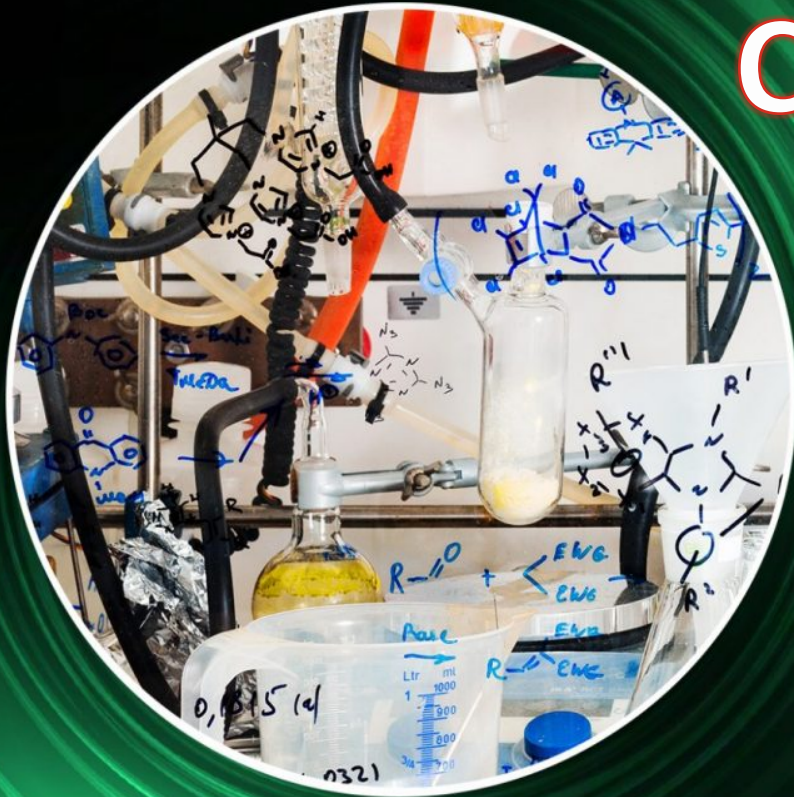
MEDIUM

Global cooperation
Citizen Science
Open Access Data

LOW

Rewards and Incentives
New Metrics

Congratulations to EPFL!



50 years



Thank you for your attention!

Robert-Jan Smits, President of the Eindhoven University of Technology