



## Road2Openness -Open Science self-assessment Tool

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STIFTERVERBAND

#### **Speaker Disclosure**

#### **Relevant financial relationships:**

- Road2Openness project funded by Stifterverband für die Deutsche Wissenschaft
- Visiting Fellow at QUEST center, Berlin Institute of Health, Germany
- Former positions as Research Fellow at Hanse-Wissenschaftskolleg in Delmenhorst, Germany and as Postdoctoral researcher at the University of Oxford, UK

#### **Relevant nonfinancial relationships:**

- Serve on the British Neuroscience Association Advisory Board for "Credibility in Neuroscience"
- Former member of the steering committee of Reproducible Research Oxford and the Open Science working group at the Wellcome Centre for Integrative Neuroimaging

Views presented here are my own and do not necessarily reflect the views of other organisations I work with.



### R2O Team



**Dr Verena Heise** Open Science researcher | trainer | consultant



#### Dr Ulrich Herb Head of Department Publ

Head of Department Publication and research support, Saarland University and State Library



#### **Dr Nils Hachmeister** CEO Data Science Center, Bielefeld University

in



#### **Damian Paderta** Web Geographer, Digital Consultant



**Dr Patrick Figge** Assistant Professor, University of Passau



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Johanna Schwan Programme manager, innOsci



# About the project

**Open Practices in higher education**: How can we *support* open pioneers to develop broad impact in their *institutions* to strengthen the *societal impact* of science?

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#### **Supporting pioneers**





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## **Supporting institutional leaders**

- WHAT is Open Science?
- WHY should we care about Open Science?
- WHO should be involved in implementation?
- HOW to implement Open Science practices?





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#### **Road2Openness - What it is**



Freely available online for anyone to use anonymously

#### Stage 1

- Information about Open Science practices
- **Self-assessment** of institutional Open Science practices, training, infrastructure

#### Stage 2

- Information to plan institutional development



#### **Road2Openness - What it isn't**

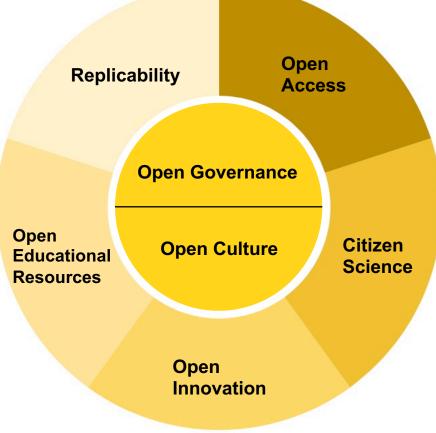


- No external audit
- Not for objective comparison
- Not a ranking
- We do not have access to the entered data

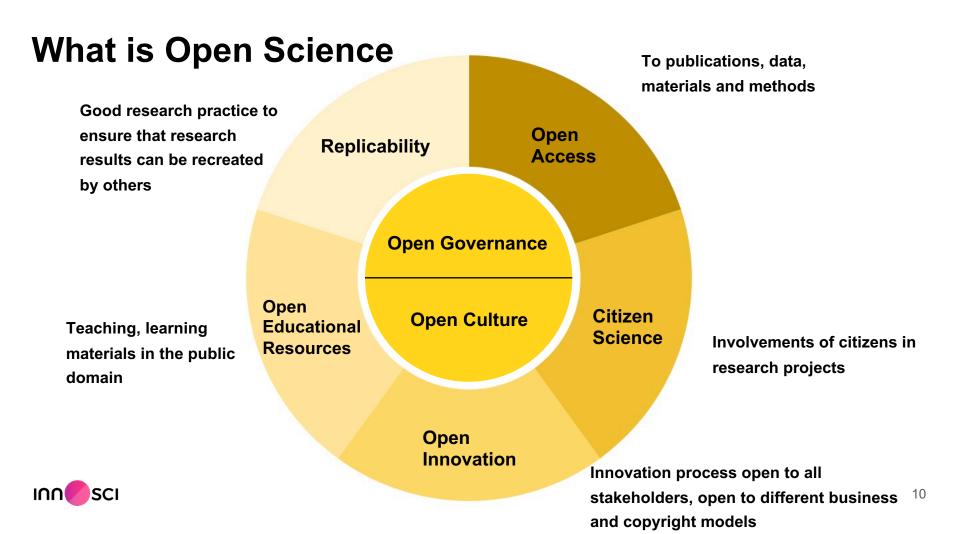
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## What is Open Science







#### What is Open Science

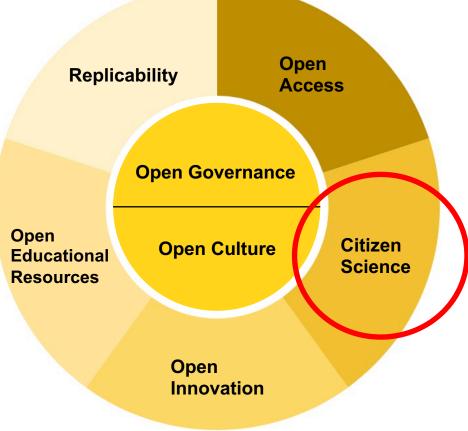
Transparent and participatory decision-making processes, structures, responsibilities



Incentivising Open Science practices and responsible research assessment



## What is Open Science





#### **Stage 1 - Citizen Science**

- WHAT: Active involvement of citizens in research at all different stages of projects, from developing a research question to study design, data acquisition and analysis, communication of research results.
- WHY: Depending on the research stage, involvement of citizens can lead to higher relevance of research questions or it can enable some projects that require distributed large-scale data acquisition or analysis. Involvement of citizens can also lead to improved societal trust in research results.



## **Stage 1 - Citizen Science - Strategy**

Please select the statement that most closely resembles the status of your institution

A) The institution does not currently have a Citizen Science strategy.

B) The institution is currently planning to develop a Citizen Science strategy

**C)** The institution has a Citizen Science strategy or Citizen Science is included in other strategies (such as an Open Science or Public Engagement strategy).



## **Stage 1 - Citizen Science - Training**

Please select the statement that most closely resembles the status of your institution

A) Citizen Science is not included as part of student training.

**B)** Citizen Science is included as part of student training but optional.

C) Training in Citizen Science is compulsory for all students.



#### **Stage 1 - Citizen Science - Infrastructure**

Please select the statement that most closely resembles the status of your institution

**A)** There is no institutional Citizen Science platform and no central institutional website to promote projects on external platforms.

**B)** There is no institutional Citizen Science platform but a central institutional website to promote projects on external platforms.

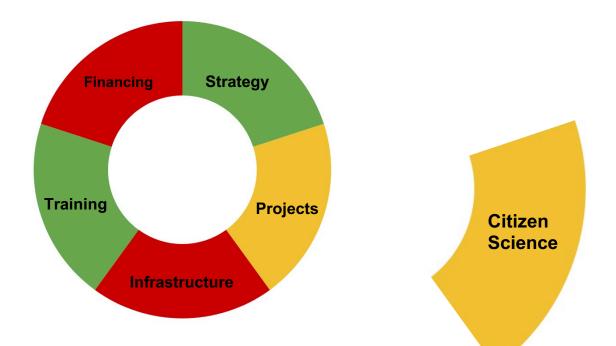
**C)** There is an institutional Citizen Science platform to run and promote Citizen Science projects.



#### Stage 1 - Output Open Replicability Access **Open Governance** Open Citizen **Open Culture** Educational Science Resources Open Innovation



### Stage 1 - Output

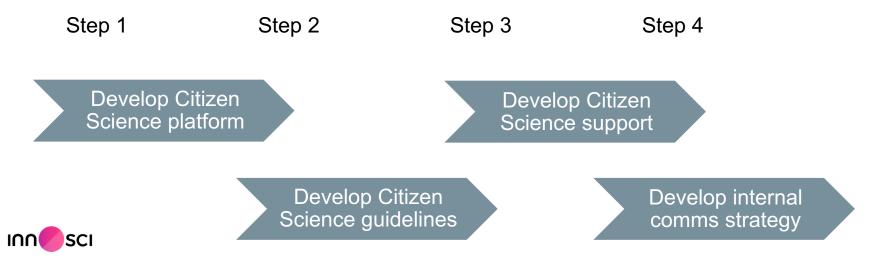




#### Stage 2 – Roadmap for development

**Citizen Science - Infrastructure** 

Which of the following topics are you interested in (please drag and drop)? (Selection based on answers in Stage 1)



#### **Stage 2 – Roadmap for development**

**Citizen Science - Infrastructure** 

Which of the following topics are you interested in (please drag and drop)?

(Selection of topics based on answers in Stage 1)



Develop Citizen

Science platform



Develop internal comms strategy

#### Stage 2 – Roadmap for development

Develop Citizen Science guidelines

#### Based on good practice examples

- WHAT: Possible content
- HOW: Process of developing guidelines
- WHO: Which stakeholders could be involved

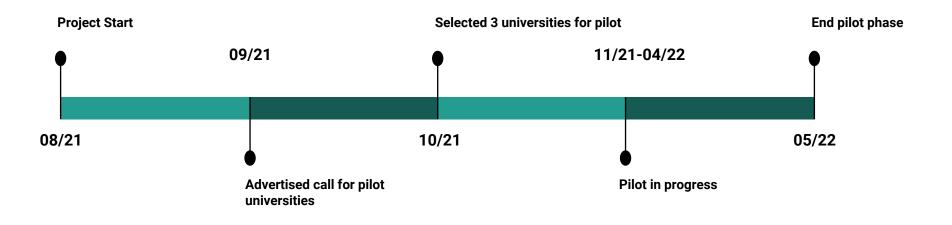


#### **Road2Openness - Does it work?**





#### **Road2Openness - Timeline**





## What have we learned so far?

University leadership:

- Open Science definition: Open Access publishing plus Open data
- Interested but scale of the challenge often unclear
- Distributed responsibilities for different OS themes, it takes a village to find out more about OS activities

Open Science community:

- There are open science experts at all of the pilot universities
- Very little networking within OS themes or across them
- Culture of openness difficult to create in current academic system
- Need to create intrinsic motivation for working openly (not top-down requirements)
- $\Rightarrow$  Successfully started the conversation
- $\Longrightarrow$  Need new infrastructures to keep conversation going
- $\Longrightarrow$  Need to focus on "Why" Open Science is useful





## **Open questions**

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- Does R2O work as a stand-alone tool? How user-friendly is it?
- At what level does it work best (whole institution vs faculties/ departments)?
- How easy/ difficult is it to compile overview of university's OS activities for selfassessment?
- Do we provide the right level of information to develop a roadmap?
- Can we create top-down engagement through R2O?



#### **Open questions**







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## **Future Outlook**



- Provide institutional Open Science case studies
- Offer audit services ("Open Science Award") alongside self-assessment
- Offer consultancy services alongside self-assessment
- Ask institutions to donate their anonymised data for (academic) research purposes
- Collaborate with projects developing automated openness indicators
- $\Rightarrow$  provide a not-for-profit service for research performing organisations



## How can you get involved?

- Check out our website (only in German so far, sorry!): <u>https://road2openness.de</u>
- Get in touch: info@road2openness.de
  - Help with community feedback on tool content
  - Info when we release R2O officially
  - Potential collaborations
  - Help with funding 🙂

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## Thanks for your attention!

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