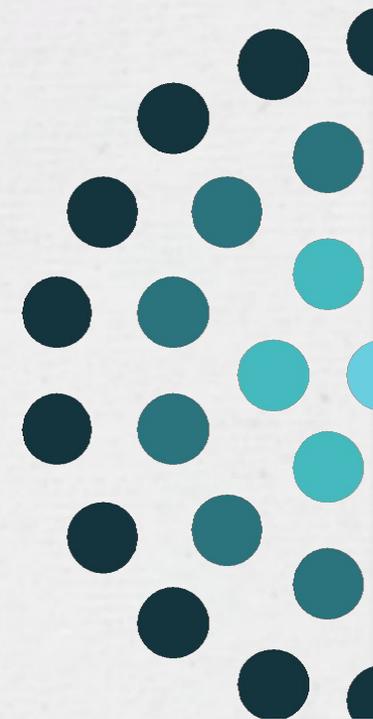


# Let us put ORBIT on practice



FIRST WINTER SCHOOL 2025

Bankya

04-07 February 2025

**Albena Antonova**

FMI, Sofia University

A



SOFIA UNIVERSITY  
ST. KLIMENT OHRIDSKI



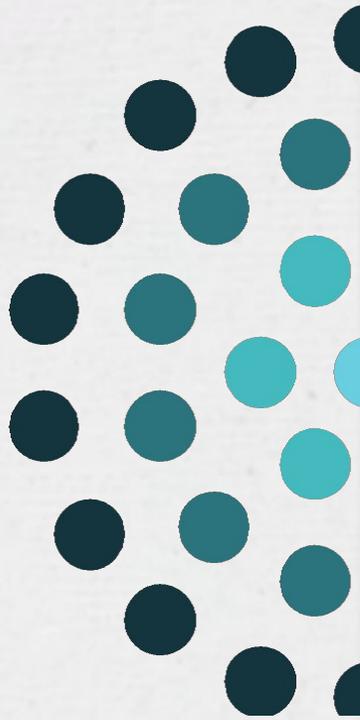
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# AGENDA

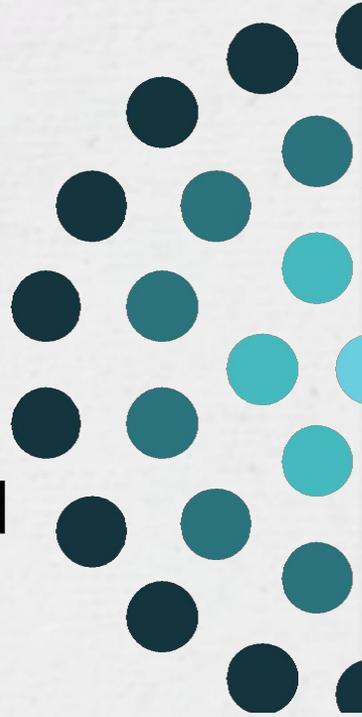
- **Sum-up activity: challenges and benefits for implementing OS on practice**
- **Skills self-assessment**
- **Group work: My ORBIT project framework**
- **Mentoring programme**



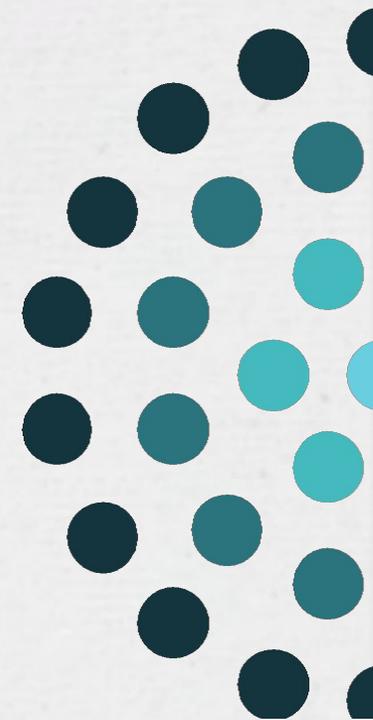
# Sum-Up activity



- What are the main challenges and benefits for implementing OS on practice personally for you?
- Choose 2 elements
- Discuss in groups and rank



# THE EUROPEAN COMPETENCE FRAMEWORK FOR RESEARCHERS



[https://research-and-innovation.ec.europa.eu/system/files/2023-04/ec\\_rtd\\_research-competence-presentation.pdf](https://research-and-innovation.ec.europa.eu/system/files/2023-04/ec_rtd_research-competence-presentation.pdf)

# Where is Open Science in Research Comp?



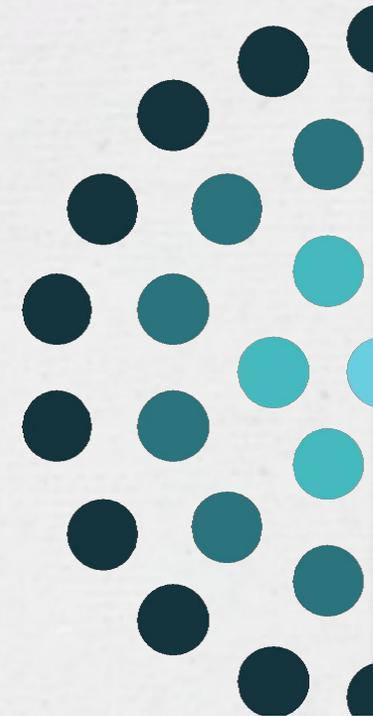
# Where is Open Science in Research Comp?



# Self Assessment

- Please explore the following 8 skills from the list.
- Please rank how relevant/important is it for you from 1-5?
- Please rank your current level of mastering it from 1-5?
- Think about strategies how to improve your skills in this domain?

<https://rb.gy/eudox3>



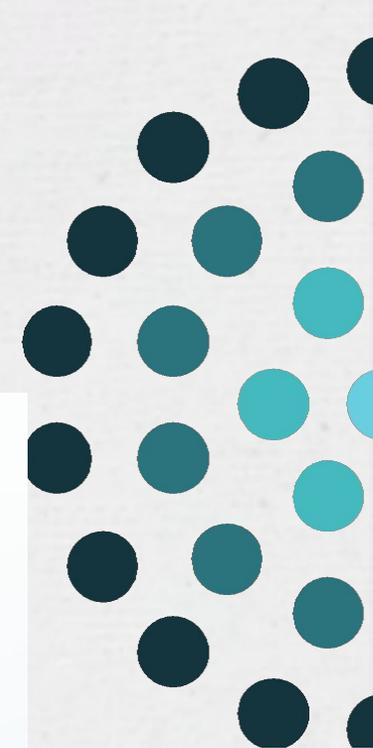


# How important/relevant is this for you?

## 5. Promote open access publications

Develop a strategy to publish your research and identify the appropriate publication channel(s) to implement that strategy. Use open publication strategies when possible. Be familiar with the use of information technology to support research, and with the development and management of CRIS (current research information systems) and institutional repositories. Provide licensing and copyright advice, use bibliometric indicators, and measure and report research impact.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
<ul style="list-style-type: none"><li>• Is familiar with CRIS (current research information systems) and the pros and cons with open and closed access publication channels.</li><li>• Produces publishable material and actively seeks appropriate outlets for it.</li></ul>	<ul style="list-style-type: none"><li>• Disseminates in a range of publication outlets and actively seeks open access alternatives.</li><li>• Assists peers in their use of information technology supporting research.</li><li>• Tracks own research impact with appropriate tools.</li></ul>	<ul style="list-style-type: none"><li>• Actively encourages peers to select open access alternatives when appropriate.</li><li>• Advises peers on licensing and copyright issues.</li><li>• Tracks the institutions research impact with advanced tools.</li></ul>	<ul style="list-style-type: none"><li>• Is a role model within the research community regarding open access publishing.</li><li>• Designs guides for managing licensing and copyright issues, and the tracking of research impact.</li></ul>



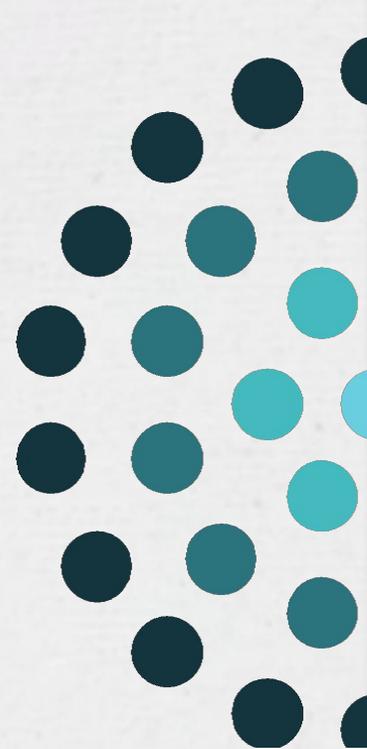


# How important/relevant is this for you?

## 1. Manage research data

Produce and analyse research data originating from qualitative and quantitative research methods. Store and maintain the data in research databases. Support the re-use of research data and be familiar with data management principles, including FAIR (Findable, Accessible, Interoperable, and Reusable) principles. Make data as open as possible, and as closed as necessary.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
<ul style="list-style-type: none"> <li>Identifies sources of information, and assesses if data is trustworthy, valid, reliable and pertinent.</li> <li>Knows how to store and organise data in an accessible way digitally.</li> <li>Uses, transforms, and analyses non-sensitive research data transparently and in accordance with legal and privacy requirements.</li> </ul>	<ul style="list-style-type: none"> <li>Organises data sets to be findable, accessible, interoperable, and reusable (FAIR), and to be easily stored and retrieved in a structured environment.</li> <li>Trains and empowers other team members to work with data in a structured, transparent, and accessible way.</li> </ul>	<ul style="list-style-type: none"> <li>Applies data analysis tools, understands legal and ethical issues linked to the use of data, and integrates data management plans.</li> <li>Transforms, organises, and analyses data in a research context, and applies metrics to evaluate the success of data initiatives.</li> <li>Promotes FAIR principles within own academic community.</li> </ul>	<ul style="list-style-type: none"> <li>Creates relevant data sets from different sources, and develops effective methods making data more comprehensible for research.</li> <li>Proposes new processes and practices in managing data, information and digital content in a structured digital environment.</li> <li>Is known as influential advocate of FAIR principles.</li> </ul>



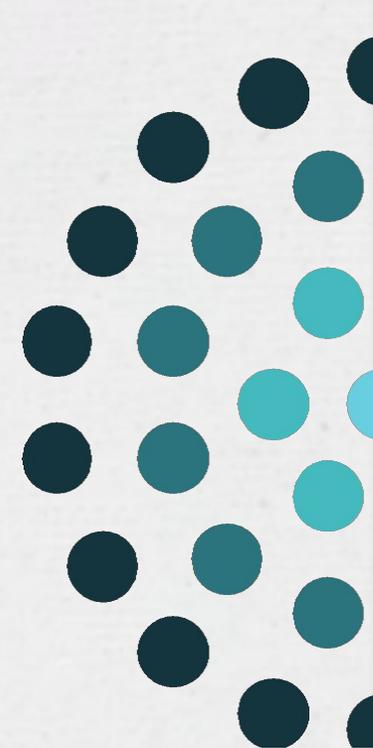


# How important/relevant is this for you?

## 3. Manage intellectual property rights

Deal with the private legal rights that protect the products of the intellect from unlawful infringement.

- Understands basic concepts of data ownership rules as they apply to own research.
- Knows what copyright, IPR, and licensing are, and seeks advice from more experienced researchers.
- Is familiar with the protection of research outputs, open and wider access, and the different licenses related to own research activity.
- Advises peers and less experienced researchers and is the reference person about intellectual property.
- Values the relevance of closed and open access of research outputs to researchers and the wider society.
- Engages with the local technology transfer office to facilitate the commercialisation of intellectual property where appropriate.
- Leads the development of new procedures for IP protection within the HE sector and professional associations/bodies.
- Successfully protects and commercializes own research outputs.



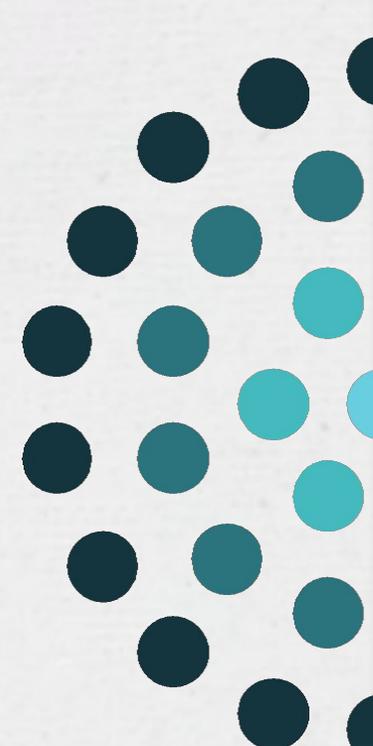


# How important/relevant is this for you?

## 4. Operate open-source software

Operate Open-Source software, beyond licensed software, knowing the main Open-Source models, licensing schemes, and the coding practices commonly adopted in the production of Open-Source software.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
<ul style="list-style-type: none"> <li>• Understands the value of open-source software.</li> <li>• Is aware of pros and cons of operating open-source software</li> <li>• Writes open-source codes under supervision.</li> </ul>	<ul style="list-style-type: none"> <li>• Understands and makes use of relevant open-source licenses.</li> <li>• Knows and uses the most relevant open-source repositories in own research area.</li> <li>• Writes open-source codes using common open-source coding practices.</li> </ul>	<ul style="list-style-type: none"> <li>• Trains students and staff in developing open-source software.</li> <li>• Promotes the use of open-source software in own academic community</li> <li>• Participates as a developer in open-source projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Shapes national and international open-source policies.</li> <li>• Leads open-source projects of large scope.</li> </ul>



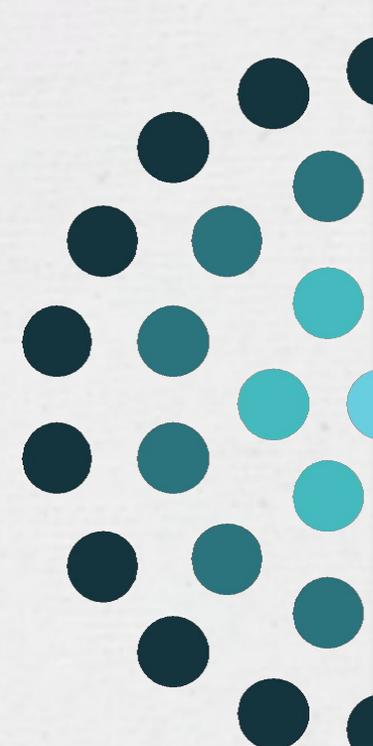


# How important/relevant is this for you?

## 6. Promote open innovation

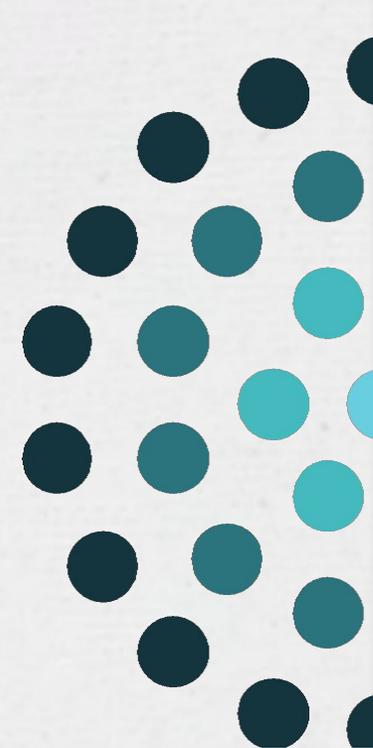
Apply techniques, models, methods, and strategies that contribute to the promotion of steps towards innovation through collaboration with external people and organizations.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
<ul style="list-style-type: none"><li>• Understands the role of innovation, creativity, and collaboration with external partners in research.</li><li>• Can engage in interdisciplinary research.</li><li>• Is open to collaboration with external partners.</li></ul>	<ul style="list-style-type: none"><li>• Develops new ways of collaborating with external partners on topics related to own research.</li><li>• Pursues interdisciplinary research.</li><li>• Identifies promising ideas which stem from external partners.</li></ul>	<ul style="list-style-type: none"><li>• Establishes collaboration platforms for research problems and co-creation activities.</li><li>• Leads innovative collaborations with external stakeholders from industry, public and third sectors.</li></ul>	<ul style="list-style-type: none"><li>• Challenges traditional viewpoints for how to practice research by steering it towards innovation generating external collaboration projects.</li><li>• Has a track-record of successful innovation projects developed in collaboration with external partners.</li></ul>





# How important/relevant is this for you?



## 2. Promote citizen science

Engage citizens in scientific and research activities and promote their contribution in terms of knowledge, time or resources invested.

- Understands that citizens are knowledge-holders with the ability to contribute to the research process in some areas of research.
- Knows the pros and cons of engaging or not engaging with citizens in research endeavours.
- Is inclusive and transparent in the research process and understands how best to engage with citizens in each specific context.
- Engages all categories of citizens in the research process and integrates them at specific stages of the research cycle.
- Is recognised for engaging with citizens in an inclusive, transparent and effective manner.
- Develops novel, reliable, and trustworthy protocols in own research area to include citizens in the research process.

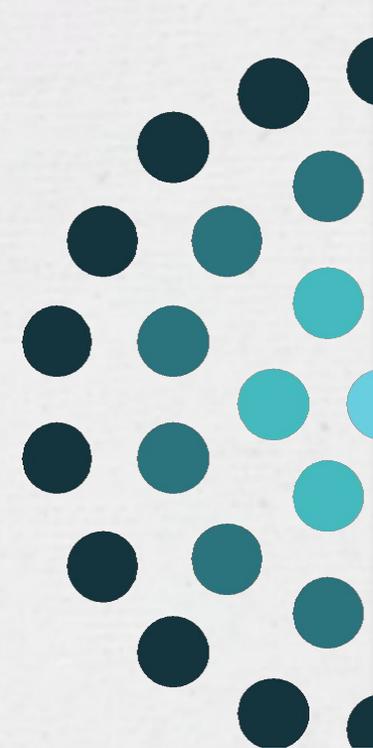


# How important/relevant is this for you?

## 4. Communicate to the broad public

Communicate about scientific findings to a non-scientific audience, including the general public. Tailor the communication of scientific concepts, debates, findings to the audience, using a variety of methods to different target groups, including visual presentations and various forms of written, spoken and digital communication.

FOUNDATIONAL	INTERMEDIATE	ADVANCED	EXPERT
<ul style="list-style-type: none"><li>• Understands and appreciates the value of engaging with the public.</li><li>• Listens with attention and speaks with intention.</li><li>• Knows the basics of non-scientific argumentation and the differences between scientific and non-scientific arguments.</li><li>• Presents own research at small-scale events.</li></ul>	<ul style="list-style-type: none"><li>• Recognises the mutual benefit of public engagement in research.</li><li>• Contributes to promoting the public understanding of own research area.</li><li>• Knows how to present the value of own research and the evidence it is based on, to a non-scientific audience.</li></ul>	<ul style="list-style-type: none"><li>• Creates a climate where public engagement activity is valued.</li><li>• Leads major public engagement projects.</li><li>• Contributes to shaping the public's conception of own research area.</li><li>• Uses different communication forms tailored for different audiences.</li></ul>	<ul style="list-style-type: none"><li>• Gives strategic support for the setup of public engagement campaigns</li><li>• Occupies specific public engagement post(s) or personal chair.</li><li>• Is renowned for communicating scientific concepts in a clear, charismatic, and attractive manner, using appealing communication tools for the target audience</li></ul>



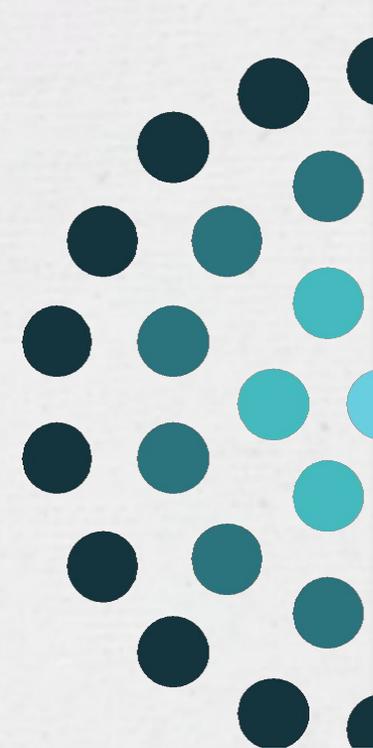


# How important/relevant is this for you?

## 5. Increase the impact of Science on Policy and Society

Increase the impact and use of research findings in policy making, by providing input to and maintaining professional relationships with policymakers and other stakeholders.

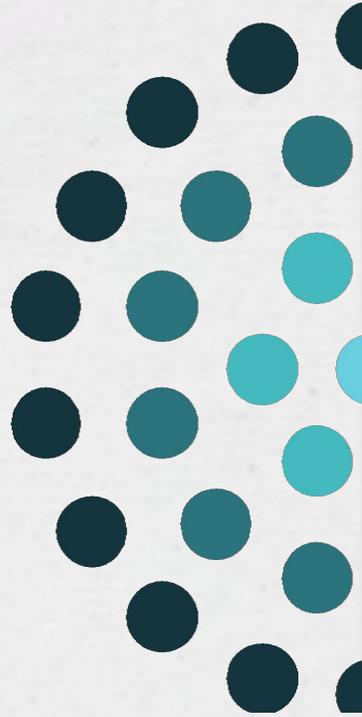
- Understands the policy-making processes relevant for own field of research
- Presents findings in a policy friendly format.
- Understands the wider contexts in which policies are situated.
- Recognises the mutual importance of policy making and research.
- Engages in dialogue with, government institutions, stakeholders, and other key organisations.
- Is aware of different approaches to knowledge brokering
- Contributes to science-for-policy outputs
- Writes science-for-policy outputs cited or used by policymakers
- Advises and supports colleagues in writing science-for-policy outputs
- Builds networks to inform policy making by evidence.
- Informs political priorities by presenting compelling evidence of challenges, or reframing of challenges.
- Is called upon as knowledge broker in crisis/urgent situations.
- Is called upon to work directly with high-level policy makers.



Discussing the results:



<https://rb.gy/eudox3>

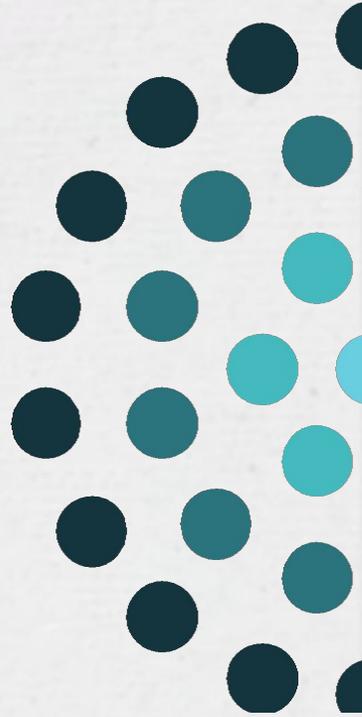


# Individual work: My data management plan

Consider the following elements and fill up in the self-assessment tool



<https://rb.gy/eudox3>

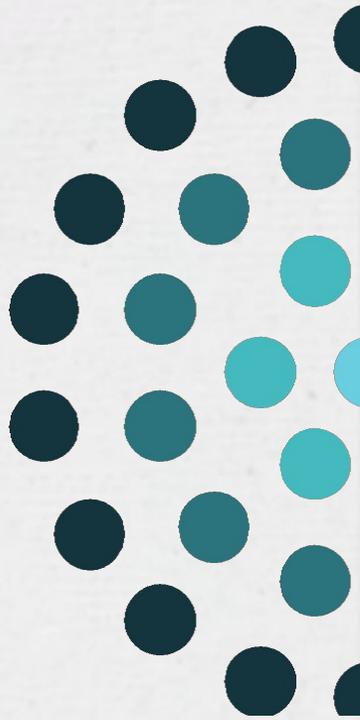


# Group work:

# My ORBIT project framework

4 Groups for discussing steps and strategies to set up :

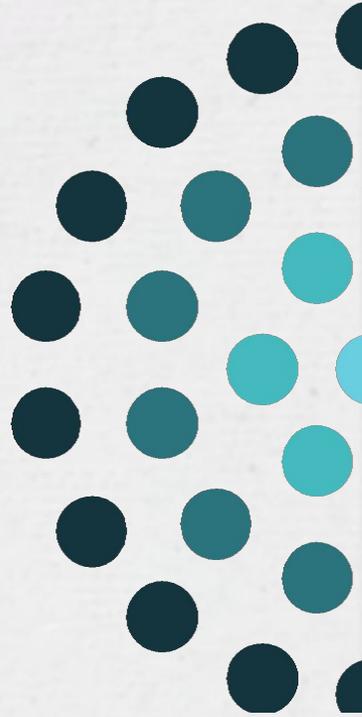
1. A personal open research plan
2. An open innovation proposal
3. A FAIR dataset deposited to EOSC
4. A citizen science project proposal



# Group work: My ORBIT project framework

## GROUP PRESENTATIONS

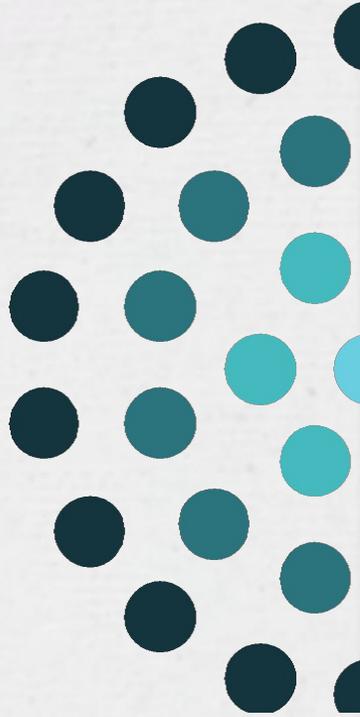
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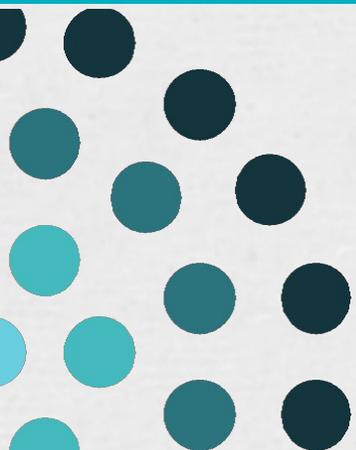
# Mentoring programme

Mentoring schedule, arranged between PhD students and lecturers: 3 meetings for completing your projects:

1. Matching mentors to PhD students – 20<sup>th</sup> February 2025
  2. First meeting - March 2025
  3. Second meeting - April 2025
  4. Final meeting – May 2025
- Poster submission: 10<sup>th</sup> of June 2025
  - Poster approval by Jury - 15<sup>th</sup> of June 2025
  - ORBIT Conference & Poster presentation – last week of June 2025



**THANK YOU**



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