



REPUBLIC OF ESTONIA
MINISTRY OF EDUCATION
AND RESEARCH

Open Science in Estonia

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Overview

- Open Science in R&D policy context
- The present situation regarding Open Science in Estonia
- What are the current policy actions and where are we heading?



Open Science in R&D policy

- Open Science can contribute to a number of strategic goals. In the Estonian R&D policy it has goal of widening access to research results and data, therefore initiate more (re)use of the results by the researchers, entrepreneurs and the general public.
- The wider impact of OS would be
 - Bringing research and the society closer together.
 - Strengthen the impact of research and innovation.



The present situation (I)

- **Green Open Access mandate** for the publications in the main research funding instruments
 - Estonian Research Council grants
 - Institutional core funding
- **No general mandate for open research data.** Estonian Research Council requires a Data Management Plan for the grant applications.
- There are a few specific sectoral R&D programmes that require both open publications and data:
 - A national R&D programme for **language technology** and
 - A national R&D programme for **digital humanities**.



The present situation (II)

- A few good examples of high level bottom-up initiatives in research infrastructure or general competence:
 - *Natural history archives and information network* in life sciences has built impressive digital infrastructure for maintaining, curating, analysing and publishing their data.
 - *Estonian Scientific Computation Infrastructure (ETAIS)* is a joint infrastructure that brings together a vast majority of HPC and data preservation capabilities.
 - For nearly two decades, *The University of Tartu Library* has been a flagbearer of promoting Open Access / Science and the competences related to it.
 - DataCite, OpenAIRE, Research Data Alliance.



Current actions: updating legislation

- A thorough renewal of „**Organisation of Research and Development Act**“ – a legislative framework for R&D in Estonia.
- So far Open Access / Science was not included.
- The new Act (~2023+) will most likely have **an Open Science mandate that will refer to research results in general, meaning both publications and data.**
- Secondary publishing right is also under discussion.



Current actions: strategic planning 2021-2035

- 2021-2035: a new **strategy for R&D, innovation and entrepreneurship.**
- Open Science, promoting the wider use of research results, is one of the goals or actions of the strategy.
- In order to bring Open Science to life, legislation and the strategy are very important, but the level of depth is rather general. To elaborate on the more specific subtopics of Open Science, a supporting document for the strategy is needed.



Current actions: Estonian Open Science Framework

- The framework, that could also be called the Estonian Open Science policy, is a supporting document for the general strategy for R&D, innovation and entrepreneurship and sets *five goals* for the R&D funded by the public sector:
 - Publications are freely available.
 - Data is freely available following FAIR-principle.
 - Researchers, entrepreneurs, and the wider society is aware of the essence and the benefits of Open Science.
 - The necessary infrastructure will be provided.
 - Open Science will be taken into account in funding decisions and research assessment.



Current actions: Estonian Open Science Framework

- Open Science goals often rely on infrastructure. The framework pays special attention to infrastructure needs:
 - **HPC (under a separate action plan, but in coordination):**
Estonian Scientific Computation Infrastructure
 - **Data management, preservation and the necessary training:**
a proposed Open Science competence centre that is built upon existing resources (competence, infrastructure). Top-down / bottom-up initiative.
 - Estonian research infrastructure roadmap. Many roadmap objects are linked to ESFRI objects and EOSC. Bottom-up initiatives.



Conclusion

- Many new developments in R&D strategic planning in general, including Open Science.
- Successful implementation of Open Science requires support on many levels: Act > strategy > policy framework > action plan.
- Research ecosystem goes way beyond the borders of one state, therefore sufficient cross-border harmony in policy approach is needed.





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Thank you!

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