



Ministry of Higher Education
and Science

Danish Agency for Science,
Technology and Innovation

Status and plans in Denmark

Implementation of Open Access to Scientific Data

Open Science

Open Science covers the work of implementing Open Access to research publications, as well as preserving and ensuring access to research data.

- Open Access to peer-reviewed scientific articles
- Open Access to research data



Open Access to Scientific Articles New Danish Strategy!

Danish National Strategy on Open Access to Scientific Articles

- Announced on European Science Open Forum (ESOF) in Copenhagen 24th of June 2014
- Minister for Higher Education and Science **Sofie Carsten Nielsen** presents the strategy at NordForsk-session: Scientific Impact and Open Access



Foto: NordForsk/Terje Heiestad

Danish National Strategy on Open Access

Vision

To create *free access* for all citizens, researchers and companies *to all research articles* from Danish research institutions financed by public authorities and/or private foundations.



Danish National Strategy on Open Access to Scientific Articles

Targets

To achieve by 2017 via digital archives – repositories – unimpeded, digital access for all to *80 per cent* of Danish peer-reviewed scientific articles from Danish research institutions published in 2016.

To achieve from 2022 and onwards unimpeded, digital access for all to *100 per cent* of all Danish peer-reviewed scientific articles from Danish research institutions published from 2021 and onwards.



Status and targets Open Access - peer-reviewed articles (Level 1 and 2)

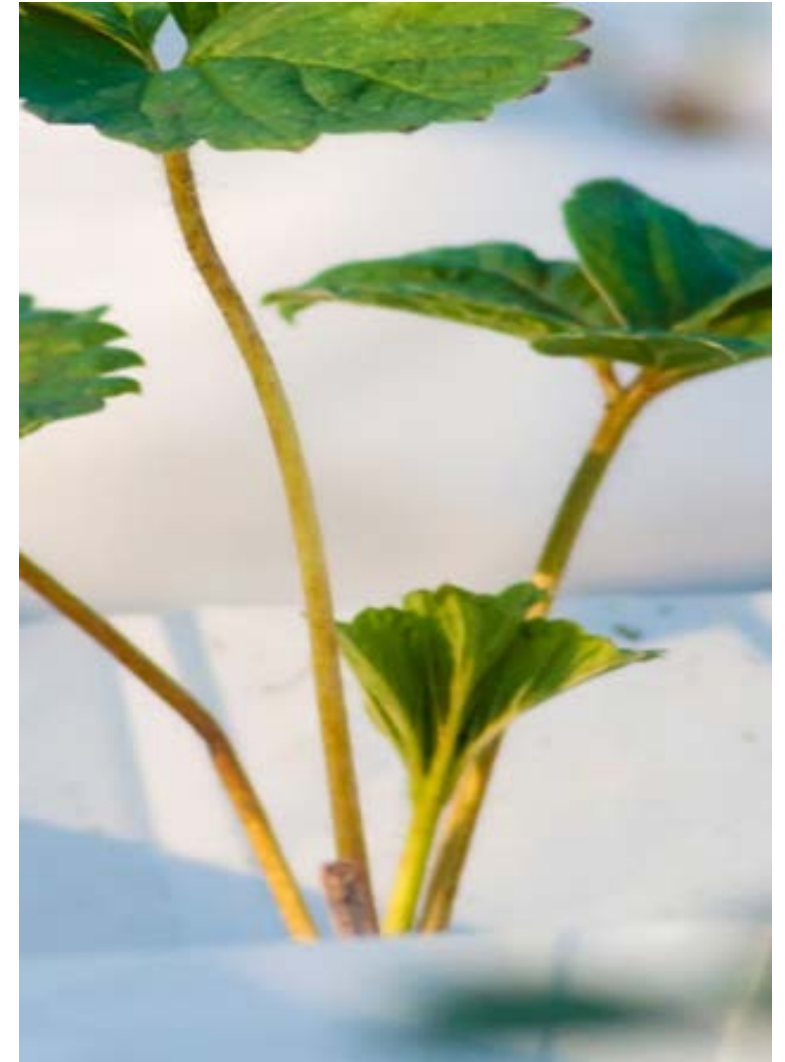
	2011	2017	2022
Production	18.651	18.651 (projection)	18.651 (projection)
Legal Open Access according to Sherpa-Romeo	8.000 (43 %)	? Depends on the Publishing Houses	? Depends on the Publishing Houses
Realised Open Access	71 % of the Open Access potential is un- used!	14.920 (80 %)	18.651 (100 %)

What are the benefits?

- **Public service:** Our public service will be improved, for instance through improved access by doctors, teachers and so on
- **Industry competitiveness:** The ability to innovate and hence, the competitive position of the companies will also improve
- **Quality of and transparency in research:** Impact both on the integrity and the quality of research, including the appearance of new models of peer review
- **Cross-disciplinary research** and exchange of knowledge and ideas across professional boundaries and scientific fields at the universities will be easier
- **The visibility of researchers** and universities will be reinforced



Danish National Strategy on Open Access



How to do it?

- National Steering Committee on Open Access appointed by the Minister:
 - Coordinate the implementation and development of the strategy
 - Main tasks directed at improving infrastructure and incentives
- Primarily, **Green Open Access**



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Open Access to Research Data

No policy, yet!

Open Access to research data

- Denmark joined in on the European Council of Minister's conclusion on *Scientific information in the digital age; access, dissemination and preservation* in 2008
- However, no policy on access to research data has been adopted yet
- Step by step approach is adopted:
 1. Open access to articles
 2. Open Access to data

Open Access to Research Data

What are the benefits?

- Sharing of data thereby strengthening cross-disciplinary research
- Testing of the reliability of results
- Reuse and combination of data, thus increasing research productivity



Open Access to research data

Challenges

- Definition – do we agree on that?
- Should Open Access to data be free of charge or as cost-effective as possible?
- Who should bear the costs of opening up datasets for all?
- How do we create incentives for researchers to open up their data sets?
- What about integrity of and quality of data.



Open Access to research data

What are the challenges? (2)

- Legal aspects: who owns the data? How is accountability ensured?
- An effective infrastructure for sharing data must be build up in order to collecting and storing the data
- User-friendly platforms must be taken into consideration and agreed on.



Open Access to research data

Though, some initiatives have been initiated:

- Growing awareness among research library community and universities, e.g. *University of Copenhagen* (White Paper on Dealing with Research Data, 2014)
- Grantees from The Danish Research Council for Independent Research must hand over datasets to the *Danish National Archives* (is not enforced rigorously, though)

Open Access to research data

Though, some initiatives have been initiated (2):

- The Danish National Archives has an online platform for researcher data and an advisory service to facilitate the reuse of data.
- All researcher datasets generated through Statistics Denmark (registry data) are accessible online through Statistics Denmark after a period of time.

Open Access to research data

Though, some initiatives have been initiated(3):

- Research infrastructures funded by the Ministry of Higher Education and Science are open to all Danish researchers. In principle, it also includes the data which is generated from the research infrastructure
- ERAC Task Force on open Access to research data



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Thank you for your attention!

Please find the Danish National Strategy on Open Access to scientific articles on our website: <http://ufm.dk/en/research-and-innovation/cooperation-between-research-and-innovation/open-science/open-access-to-research-publications/engelsk-version-national-strategy-for-open-access.pdf>