

# Open Access to Research Data - Status, Issues and Outlook

A report requested by the Nordic Council of Ministers

Sverker Holmgren  
NordForsk

Director of the Nordic e-Science Globalisation Initiative

*“ÄK-U beslutade att ge NordForsk i uppdrag att initiera en kunskapsöversikt inom Open Access till forskningsdata, som beskriver utvecklingen i de nordiska länderna och EU, och identifierar möjliga gemensamma ramar (juridiska, tekniska, ekonomiska etc.), samt implikationerna av dessa för OA till forskningsdata. NordForsk ska tidigt första kvartalet 2016 [mars 18 (!)] återrapportera kunskapsöversikten till ÄK-U, samt redovisa policyimplikationer.”*

# Why was the task given to NordForsk?



- NordForsk Workshop, Feb. 2013, Brussels (within the EC ERA: Science Europe, EARTO, EUA, LERU, NordForsk)
- NeGI/NordForsk Workshop, Aug. 2014, Reykjavik (Status reports from Nordic countries + external guests, including researchers, data initiatives, Research Data Alliance, the EC)
- NordForsk Strategy 2015-2018  
one of the nine principles: *Ensuring Open Access.*
- Pilot implementations in NeGI calls
- Nordic eScience Action Plan 2.0



# An overall remark...

Inseparable: Data management - Sharing of data – Open Access to data – Open Science (Open Access to research results)

Open Science - transforming and opening up research through the use of ICT.

Objectives:



- Making research more efficient, transparent and reproducible – **improved quality**
- Enable more extensive and faster interaction between research and society – **improved impact**

Policies, processes and resources have to be present to guarantee open (usually free) access to scientific publications, research data (raw and processed), software, methods and educational material.

Four enabling components:

- definitions, policies, rules and standards
- e-infrastructure and e-science tools
  - enabling discovery and easy access/use
- funding schemes
  - providing support for access and storage/archiving/maintenance/...
- system for credit to researchers
  - benefits for researchers that provide their results openly

# Researchers still have some doubts...

- Those data are mine!!!!!!!!!!!!
- What's in it for me?
- I am still analyzing the data!
- I do not have the resources needed!
- I cannot trust data produced by someone else!
- My findings will be discredited !



- Fully open access to research data can sometimes not be implemented.
  - personal data
  - data where access is regulated by contracts
  - ...
- However, well-structured processes and efficient resources for maintaining and sharing research results within a potentially distributed and persistant research community are still needed
  - development of the procedures and resources for data management and data sharing are essential also here

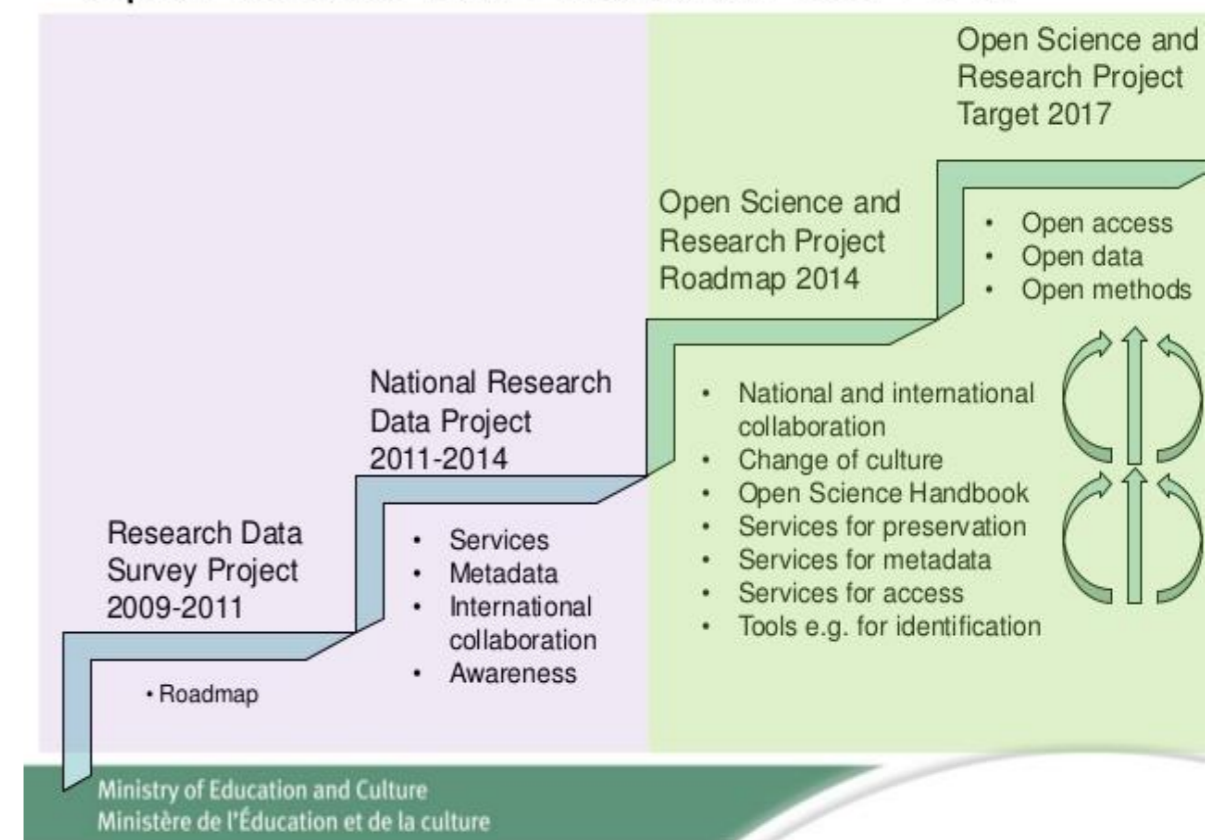
# Finland – A flagship initiative!



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- Goal set by Ministry: Leading in the openness of science and research by 2017
- Open Science and Research Roadmap launched in 2014
- Handbook and Data Management Guide
- Sequence of implementation projects
- Follow-up and evaluation actions
- Established e-infrastructure
- Academy of Finland: Data management plan required, including plan for dissemination. Recommendation: Store data using national/international e-infrastructures. Reporting from projects includes data management and availability

## Open Science and Research 2009-2017



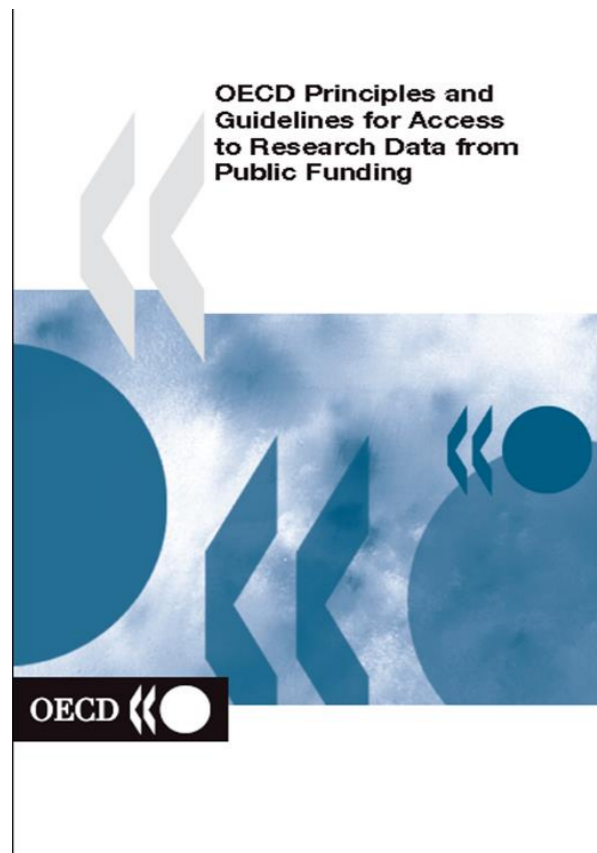


# Norway – First initiative in 2008



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- Political goal: implement OECD principles (2007)
- Initiative stopped, the task seemed overwhelming!



# Norway – New initiative in 2013

- Goal: Establish and implement a policy for Open Access to research data from research funded by the Norwegian Research Council
- Knowledge base: Survey among 1500 Norwegian researchers
- Implementation:
  - Call pilots in 2014
  - Adapted funding mechanisms
    - Extra funding for "particularly high operating costs"
  - Guide for researchers



# Norwegian Research Council policy



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- Open Access to data by default, but exceptions
  - legal requirements
  - confidentiality obligations
  - commercial use, if agreed in the contract
  - cost of OA is larger than the benefit
- Recommendations and best practices, no hard rules
  - lack of infrastructure
  - lack of system for citations
- Costs for Open Access to data may be included in project budgets
- The policy will be reviewed



# General findings on Open Access to research data



- Nordic countries often started of early, but progress can now sometimes be considered as slow
- A large number of actors, of different types and at different levels, all producing reports and recommendations
  - A need to agree on terms and concepts (“*Big Data*”)
  - A need to analyse, consolidate and conclude w.r.t. recommendations ... “alignment” !?
- The recent report *ERAC Opinion on Open Research Data* contains a lot of valuable discussion and information!
- The NordForsk Report also contains a discussion on terminology

- The importance of structured data management, data management plans and data access policies
  - even when OA is not possible/not implemented
  - throughout the life-cycle of research projects – change of mind-set among several types of actors
  - Data Management Plans and Data Access Policies
- The need to acknowledge diversity
  - one-size-fits-all-solution fails!
- The need to understand the researchers perspective - barriers and enablers
  - uptake will depend on anchoring in the research communities

- The need for deciding on what data to store and preserve
  - economic and practical realities matter
  - data connected to publications is not enough
  - only data is not enough
  - an evidence-based discussion on the value of data is needed
- The need to define the legal framework
  - who owns research data collections?
  - ownership might come with both opportunities and responsibilities
- The need for defining roles, mandates and interfaces
  - historically often a single actor: research group/community
  - specialised actors can increase quality and cost-effectiveness

- The need for defining funding streams and governance structures
  - “we are not going to pay”-discussions
  - a need for holistic discussions and leadership
- The need to understand the role of research funders
  - the power of “money talks”
  - leadership is expected
- The need to understand the role of academia.
  - academia is part of society
- The need for sustainable data infrastructure.
- The need to be active on the international arena.

# A few recommendations



- Continued exchange of knowledge and ideas at the Nordic level – focussing on a holistic approach
  - Could result in "alignment"
- Pilot "experiments" on Open Access are needed
  - Start with "easy cases"





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# Thank you for your attention!

<http://www.nordforsk.org/>

[Sverker.Holmgren@nordforsk.org](mailto:Sverker.Holmgren@nordforsk.org)