Towards Open Science

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Open Science and Research Initiative

• **Ministry of Education and Culture** initiative for the promotion of information availability and open science

• On going 2014 - 2017

• Scope includes publications, research data, and methods

• Guidelines like using Creative Commons licensing

• See more at www(openscience.fi)
Open Science and Research vision

Vision 2017:
Open research leads to surprising discoveries and creative insights

- Reinforcing the intrinsic nature of science and research
- Strengthening openness-related expertise
- Ensuring a stable foundation for the research process
- Increasing the social impact of research
Initiative collaboration structure

Strategy group with members from universities, polytechnics, research institutes, ministries, funding bodies, etc.

Open science and research forum convenes annually in the autumn

Expert group

- Workshops and targeted surveys
- Special working groups
- Service providers
- Management of the enterprise architecture
Changing the mindset

• Education and awareness raising
  ○ Seminars
  ○ Lectures
  ○ MOOC
  ○ Handbook
  ○ Online journal
  ○ Videos, presentations, flyers

• More than 50 participating organizations

• Cooperation with funders

• Building services
Working Groups

• Infrastructures
• Rights Management
• Open Access Publishing
• Service Development
• Preservation
• Rights Metadata
• Data modeling

Reports

• Annual Evaluations
• Indicators
• OA International Survey
• Impact
• Business Architecture
• Model for Open Access
• Preservation International Survey
Some of the national guidelines

• Create user centred services to promote openness and good life cycle management for data
• Build modular, layered services that support reuse and openness
• Promote Creative Commons licensing
• Promoting Open Access (not hybrid)
• Develop legal framework (IPR, GDPR)
Driving change through service development

DMPTuuli – Planned data management

Store your research data

IDA – Safely stored research data

Describe and find research data

A tool for describing data

Etsin – Discoverable research data

Share and utilise open data

AVAA – Open research data

Developing services ensure digital preservation
Working to ensure preservation of research data
A set of tools designed to be used in developing, documenting and publishing interoperability descriptions such as re-usable information components and application profiles. It offers a one-stop service for openly published data descriptions and vocabularies. These semantically coherent data models help planning information management in information exchange operations (integration, interface, service bus) or database and software development.

http://iow.csc.fi/
Ministry of Education and Culture supports ORCID implementation in Finland through central coordination in CSC, including

- **Communications and cooperation** with Finnish universities, funding organizations, publishers and other related bodies ([tutkijantunniste.fi](https://tutkijantunniste.fi))
- **Support** for organizations in integrating ORCID in their systems and processes
- Coordination of a **consortium** membership of Finnish organizations
- Implementation a **national connect service** where a researcher can join his/her ORCID to Haka)
RDA Recommendations that make data work

“Create - Adopt - Use”

✓ Adopted code, policy, specifications, standards, or practices that enable data sharing
✓ “Harvestable” efforts for which 12-18 months of work can eliminate a roadblock
✓ Efforts that have substantive applicability to groups within the data community but may not apply to all
✓ Efforts that can start today

17 flagship recommendations & outputs with over 75 cases of adoption in different domains, organisations and countries
• establish the governance framework for the EOSC and contribute to the development of European open science policy and best practice;

• develop a number of pilots that integrate services and infrastructures to demonstrate interoperability in a number of scientific domains; and

• engage with a broad range of stakeholders, crossing borders and communities, to build the trust and skills required for adoption of an open approach to scientific research.
Six key national agencies and bodies within Europe responsible for the development of infrastructure and services to support the use of ICT within education and research.

“Enable open scholarship by supporting an information infrastructure on an international level.”
ROADMAP

Open science and research leads to surprising discoveries and creative insights: Open science and research roadmap 2014–2017