Research Data Management: The Sweets & Carrots of Open Science

Everything you always wanted to know, but were afraid to ask
VU Library, Amsterdam - Seminar on RDM - 22-11--2017
What to expect?

• General introduction to RDM
• The National Coordination Point Research Data Management in the Netherlands (LCRDM)
• Some examples to get started and keep going
How about You & Research Data Management?
Open Data requirements in H2020

HORIZON 2020 GRANTEES ARE REQUIRED

take measures to ensure open access to the data underlying their scientific publications

provide open access to any other research data of their choice

Horizon 2020 grantees are encouraged to also share datasets beyond publication

PROJECTS MUST HAVE

DATA MANAGEMENT PLAN (DMP)
To make data that emerges from NWO-funded research as accessible and reusable as possible, NWO has decided to implement the data management policy in all NWO funding instruments with effect from 1 October 2016.
Journals require supporting data...

http://www.nature.com/authors/policies/availability.html
So, what do you think?
These new requirements sometimes meet with immediate reactions

This is not my priority

People will steal my results!

My data is not interesting

The person who had the data left

Data management is a waste of time (and money)

It would take me 5 years to find all my data!
The EU General Data Protection Regulation (GDPR) is the most important change in data privacy regulation in 20 years - we're here to make sure you're prepared.

TIME UNTIL GDPR ENFORCEMENT UTC
189:15:31:26
Days Hrs Mins Secs

GDPR Portal: Site Overview Quick Links
Or even closer to home...

Research Data Management policy
Faculty of Social Sciences

Reader’s guide
This memorandum describes the data management policy of the Faculty of Social Sciences (FSW) at Vrije Universiteit Amsterdam (VU). It provides a practical and specific application of the more general policy framework and guidelines that apply, such as the VU policy memo on “Research Data Management” (1), the VSNU’s Netherlands Code of Conduct on Scientific Practice (2), the Standard Evaluation Protocol (SEP 2015-2021) (3), and the Personal Data Protection Act (8). This memorandum should be read as an extension of these guidelines, considering that these more general policy frameworks and guidelines apply in full to FSW research.
No sticks but carrots
Definition of RDM

The whole process by which the required data is acquired, validated, stored, protected, and processed, and by which its accessibility, reliability, and timeliness is ensured to satisfy the needs of the data users, within the framework of the research code of the organization and the law.
Why RDM? - The data

- Research becomes more and more data intensive
- The amount of data grows rapidly
- Data become more and more complex
Why RDM? – The Research

• Reproducibility: -> documenting research & permanent access to data:
• reuse of data -> efficiency & integrity
Why RDM? - Society

- **National Plan Open Science**: Open Access; Reuse of Data; Evaluation & stimulation of Data intensive Research; Support of Researchers
- **European Open Science Cloud**: FAIR data; Data Stewardship; infrastructure to support & develop OS & Open innovation in Europe & beyond.
What was happening?

Many RDM initiatives and collaborations already underway at the various universities and research institutions in the Netherlands, but:

- Fragmentation and overlap in RDM activities and approaches
- No coherence in RDM policy development, research support and service development
- Re-inventing the wheel; not taking advantage of expertise and experiences within the own sector and between various stakeholders (inside and outside the institution)
- No view on current state of RDM in NL
Support the most effective use of data in research & education by strengthening the knowledge pooling and knowledge sharing on all aspects of research data management for the benefit of:

- Research
- Researcher and research community
- Research institution
- Research funder
Approach National coordination

To enhance and support:

- Collaboration
- Coordination
- Knowledge Sharing

on RDM policy and practice at a national level

• with an international link
• in synchronisation with all stakeholders involved
• making use of existing tools and initiatives
The goal:

• Obtaining a good overview of existing initiatives;
• Sharing successful approaches and results and promoting their re-use;
• Identifying gaps, putting them on the agenda and preparing administrative decisions.

To: Help Research Supporters to Support Researchers with their Research Data Management Before, During, After the Research
The Absolute Necessity for RDM
FAIR data & Open Science

Good RDM leads to data which is:

- Findable
- Accessible
- Interoperable
- Reusable

Open where possible, closed if necessary

Open support

Open access
open research
open data
LCRDM approach

Quickscan (2015-2016): 80 plus interviews with RDM experts and stakeholders

Roadmap (Dec. 2015)

5 focal points

Each focal point → working group

- Legal Issues & Ownership
- Facilities & Data Infrastructure
- Financial Aspects of RDM
- Research Support & Advise
- Engagement
Working Groups: How do they work?

- One or two Chairs
- Working Agenda with short term, mid term, longer term goals and concrete topics to work on
- Representatives from all stakeholders
  - Universities
  - University Medical Centers
  - Research Institutions KNAW, NWO, TNO
  - Financers
  - University of Applied Sciences

Mission LCRDM

To prepare, facilitate and monitor the development and implementation of RDM Policy for scientific research in the Netherlands, in close cooperation with the professional field, and to ensure the exchange of knowledge and experience on a national level so that the Netherlands can achieve an efficient and effective development and implementation of research data management.
Working Groups

With VU colleagues:
Maurice Vanderfeesten; Jolien Scholten; Mark Bruyneel;
Petra Tolen; Tom Paffen; Myrte Dujardin

Research Support & Advise

Financial Aspects

Engagement

Legal Aspects & Ownership

Facilities & Data Infrastructure
Results 15-17: Community Building

- Support organisation (SURF)
- Working groups in place: 72 members, dealing with 17 topics on 5 RDM aspects, creating over 40 products: inventories, advices, tools, models, reference cards etc. to be delivered in 2016-2017
- Visible, knowledgeable and efficient RDM community has been build, under the LCRDM umbrella
- Working group members benefit from two way relevance:
  - profiling & bringing in expertise from own institution
  - using expertise from outside into own institution
Products

- GDPR Maturity Model
- Reference Architecture Discussion Model
- Services and Facilities Catalogue
- Wiki RDM Glossary
- GDPR Advisory for Practical Approach
- GDPR Internet Consultation – for VSNU
- Reference Cards – Privacy: Why, How, What?
- Review VSNU Code of Conduct use of personal data in scientific research
- GDPR Advisory for Practical Approach
- Conference Publication Symposium
- Designing & Shaping Open Science (2016)
- Inventory DMP Tools
- Wiki Inventory RDM Training
- Mind Map Shades of Open
- Engagement Meetings
- Inventory DMP Reviewers (via Questionnaire)
- Position Paper Incentives
- Legal Contract Templates
- Inventory DMP Support (Tips & Trends)
- Wiki Expert Network (Ethical/Legal)
- Inventory FAIRness
- Data Repositories in NL (TU Delft)
- Position Paper Ownership of Data
- Position Paper Financial Aspects of RDM
- Advice on Software Sustainability
- RDM Training MOOC
- Overview Common Elements Curriculae
- Overview Use Cases Incentives
- Advise on Profiles Related Training Portfolio's
- Reference Architecture Discussion Model
- Information Material Incentives
- RDM Status Measurement – Interviews
- Decision Tree Privacy Related Research & Data Sharing
- Overview RDM Requirements Funders
- Template Informed Consent & Example
- Privacy by Design Guidance
- Services and Facilities Catalogue
- Template Informed Consent & Example
- Advise DMP Tooling
- Landelijk Coördinatiepunt Research Data Management
What’s in it for me?
Een landelijke aanpak van research data management

Werkgroepen
Faciliteiten & dataninfrastructuur
Juridische aspecten & zeggenschap
Financiële aspecten
Onderzoeksstersturing & advies
Bewustwording / engagement

RDM wiki & platform

Nieuws
07 NOV Consultatieversie Herziene VSnU Gedragscode Persoonlijke Data beschikbaar
07 NOV 2e Netwerkbijeenkomst Working on Data Stewardship? Meet your Peers! 1 december in Utrecht
09 OKT 24 en 26 oktober consultatierondes VSnU Gedragscode Persoonsgegevens

Blog

Landelijk Coördinatiepunt Research Data Management
Hoe gaan we om met de explosie van data in onderzoek en onderwijs in Nederland? Hoe slaan we alles zorgvuldig op zodat het toegankelijk blijft voor hergebruik, ook op lange termijn? Hoe borgen we wetenschappelijke integriteit?

Het Landelijk Coördinatiepunt Research Data Management faciliteert een landelijke aanpak van research datamanagement. De focus ligt op vijf kernvragenstukken.
Some examples

https://www.lcrdm.nl/rdm-praktisch
Research Data is like Candy
RDM makes it more attractive
To stay in touch ...

Ingeborg Verheul  
Coordinator National Coordination Point Research Data Management (LCRDM)  

E: Ingeborg.verheul@surfsara.nl  
W: www.lcrdm.nl  
T: @lcrdm.nl

This presentation contains elements of LCRDM presentations of Jacquelijn Ringersma, Henk van den Hoogen, Kees den Heijer, Annemie Mordant, Marta Teperek