RDM Roadmap@Edinburgh - an institutional approach

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IASSIST, Cologne, 30 May 2013
Background

Edinburgh Data Audit Framework (DAF) Implementation Project (May – Dec 2008)

A JISC-funded pilot project produced 6 case studies from research units across the University in identifying research data assets and assessing their management, using DAF methodology developed by the Digital Curation Centre.

4 main outcomes:

- Develop online RDM guidance
- Develop RDM training
- Develop university research data management policy
- Develop services & support for RDM (in partnership IS)
Drivers

- RDM policy* containing 10 aspirational statements affirming both the researchers’ and the University’s responsibilities, e.g.
  - PI responsible for RDM
  - University will provide RDM support and training
  - University will provide RDM services (such as back-up, storage, deposit)
  - Data retained elsewhere will be registered with the University
  - RDM plans must ensure that data are available for access and re-use under appropriate safeguards

- In 2011, RCUK issued a set of Common Principles on Research Data Policy which push for data to be made openly available with as few restrictions as possible. Most funding bodies have issued data policies, however the extent and coverage of these varies greatly.

* http://www.ed.ac.uk/schools-departments/information-services/about/policies-and-regulations/research-data-policy
An RDM Policy Implementation Committee was set up by the Vice Principal Knowledge Management Prof. Jeff Haywood to implement recommendations:

- Membership from across IS
- Charged with delivering services that will meet RDM policy objectives
- Iterate with researchers to ensure services meet the needs of researchers

The Vice Principal also established a Steering Committee led by Prof. Peter Clarke comprising members of Research Committee from the 3 colleges, IS, DCC and Edinburgh Research and Innovation (ERI).

Their role is to:

- Provide oversight to the activity of the Implementation Committee
- Ensure services meet researcher requirements without harming research competitiveness
EPSRC expects funded projects to have developed a roadmap aligned with EPSRC’s RDM expectations by 1st May 2012, and to be fully compliant with these expectations by 1st May 2015.

The Executive Summary of the Information Services Plan, 2012-13 states, “Research data management & storage – policies, training, curation, preservation, baseline 0.5Tb/user,” is a major IS-led project for the year.

The Edinburgh RDM roadmap was set out as a high level plan for its delivery, noting objectives, outcomes, deliverables and target dates for an 18-month period.

A new timeline has been agreed by the implementation committee to take into account delayed funding consisting of Phase 0 planning period (May – Sept. 2013) followed by 3 x six monthly phases up to April 2015.
Costs!

- The roadmap follows up a business case submitted to the University IT Committee in Summer 2012 by Jeff Haywood which estimated one-off and recurrent costs.

- Last month the Vice Principal announced that funding would be in the order of £2 million split between infrastructure and RDM support and technical personnel.

- Currently the Roadmap does not include itemised costs. Details are currently being discussed by the Implementation Committee.
Data Management Support

General consultancy and support service throughout the research process – addresses policy points 1, 2, 4

Example services might include:

• Tailored awareness and advocacy activities
• Online Data Management guidance
• Training (online / F-2-F)
• Data Management consultancy
Support and services for planning activities that are typically performed before research data is collected or created – addresses policy points 3, 4

Example services might include:

- Bespoke Data Management Planning (DMP) support
- Customised Data Management Planning tool
Facilities to store data that is actively used in current research activities, to provide access to that storage, and tools to assist in working with the data – addresses policy points 5, 8

Example services might include:

- Accessible cross-platform Data Store
- File Access Services (e.g. Dropbox-like)
- Data Synchronisation (e.g. mobile devices)
- Web-based Collaboration tools
- Structured Data Version Control (WebDAV)
- Central Database service
Data Stewardship

Tools and services to aid in the description, deposit, and on-going management of completed research data outputs – addresses policy points 6, 7, 9, 10

Example services might include:

• Data archive service (vault)
• Data asset register
• Data repository (enhanced)
• PURE Current Research Information System integrated with other systems
# Data Stewardship

Tools and services to aid in the description, deposit, and ongoing management of completed research data outputs.

Addresses RDM policy clauses 6, 7, 9, 10.

Responsible: Data Library and Digital Library

<table>
<thead>
<tr>
<th>Objective</th>
<th>Outcomes</th>
<th>Actions</th>
<th>Deliverables</th>
<th>Target date</th>
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<tbody>
<tr>
<td>7. To develop a data repository for enhanced deposit and discovery of data collections generated by University researchers</td>
<td>Number of new data collections added to the repository&lt;br&gt;Metrics show increased use of data collections in repository</td>
<td>Pilot use of Edinburgh DataShare by 2-3 research groups to identify user requirements&lt;br&gt;Develop repository according to user requirements using available software and protocols where possible.</td>
<td>Case studies and use cases based on piloted research groups&lt;br&gt;Enhancements made to data repository</td>
<td>Phase 0&lt;br&gt;Phase 1</td>
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<td>8. To provide a registry of research data assets in support of the University RDM policy</td>
<td>Researchers will have a system for recording the location and description of their data assets&lt;br&gt;The University will have a record of its data assets linked to research project information</td>
<td>Scoping exercise to determine capture and maintenance mechanisms, software, standards, metadata, usability&lt;br&gt;Analyse results of scoping exercise and agree system specification</td>
<td>Scoping report&lt;br&gt;Data asset registry implementation&lt;br&gt;Registry populated with a subset of current projects</td>
<td>Phase 0&lt;br&gt;Phase 1&lt;br&gt;Phase 2</td>
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Potential pitfalls a University could fall into:

To wrongly assume there can be a one size fits all requirements checklist

- Requirements are too diverse and in detail are incompatible across disciplines / sub-disciplines (size, volume, format, space, time)

To wrongly assume that all data is Edinburgh centric and needs to be stored in a university repository

- For much large scale science this is inappropriate & impossible

To wrongly assume that all data is the same.

- Raw data – probably need to preserve – but maybe not open access as it would be practically unusable - e.g. 100 Pbytes from SKA telescope
- Processed data – probably more useful to make open access
Summary of Current Activity

• Awareness Raising in Colleges/Schools

• DataShare Pilots - 3 sets of “communities and collections” set up to determine how the data repository meets the needs of Edinburgh researchers

• MANTRA training module for early career Researchers

• RDM Training for Liaison Librarians

• Data Asset Register

• Overall Architecture & Workflow (storage, hardware, security...)
Questions!

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Acknowledgements:

- Dr. Cuna Ekmekcioglu (VP’s office)
- Sarah Jones (DCC)
- Stuart Lewis (Digital Library)
- Kerry Miller (DCC)
- Tony Weir (ITI)