JISC inspiring innovation

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The Jisc Managing Research Data Programme

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JISC considers it a priority to support universities in improving the way research data is managed and, where appropriate, made available for reuse.

- Research funder policies, legislative frameworks, good practice, open data agenda
 - The outputs of publicly funded research should be publicly available.
 - The evidence underpinning research findings should be available for validation
 - Greater return on investment through reuse of research data
- Good data management is good for research
 - More efficient research process, avoidance of data loss, research benefits of data reuse
- Alignment with university missions.
 - Universities want to provide excellent research infrastructure.
 - Universities want to have better oversight of research outputs.

What is driving the research data agenda? Research Funder Policies

- Build on OECD principles: http://www.oecd.org/sti/sci-tech/38500813.pdf
- Related to OA: the outputs of publicly funded research should be publicly available.
- All major UK research funders now have data management and sharing policies.
- US funders require DMPs (NSF) and promote data sharing.
- US Office of Science and Technology Policy Memorandum 'Expanding Public Access to the Results of Federally Funded Research': http://www.whitehouse.gov/blog/2013/02/22/expanding-public-access-results-federally-funded-research
- EC Horizon 2020 will require Data Management Plans.
- Evidence of benefits of data reuse and greater return on investment.

Curation policies and support services of the main UK research funders

Research Funders	Policy coverage		Policy stipulations					Support provided			
	Published outputs	Data	Time limits	Data plan	Access / sharing	Long-term curation	Monitoring	Guidance	Repository	Data centre	Costs
Arts and Humanities Research Council	•	•	•	•	•	0	0	•	0	0	0
Biotechnology & Biological Sciences Research Council	•	•	•	•	•	•	•	•	•	0	•
Cancer Research UK	•	•	•	•	•	•	•	•	•	0	0
Engineering and Physical Sciences Research Council	•	•	•	0	•	•	•	0	0	0	•
Economic and Social Research Council	•	•	•	•	•	•	•	•	•	•	0
Medical Research Council	•	•	•	•	•	•	0	•	•	0	0
Natural Environment Research Council	•	•	•	•	•	•	•	•	•	•	0
Science and Technology Facilities Council	•	•	•	•	•	•	•	•	•	0	0
Wellcome Trust	•	•	•	•	•	•	•	•	•	•	•

Terminology clarifications

Published outputs: a policy on published outputs e.g. journal articles and conference papers Data: a data policy or statement on access to and maintenance of electronic resources Time limits: set timeframes for making content accessible or preserving research outputs Data plan: requirement to consider data creation, management or sharing in the application Access / sharing; promotion of OA journals, deposit in repositories, data sharing or reuse Curation: stipulations on long-term maintenance and preservation of research outputs Monitoring: whether compliance is monitored or action taken such as withholding funds Guidance: provision of FAQs, best practice guides, toolkits, and support staff Repository: provision of a repository to make published research outputs accessible Data centre: provision of a data centre to curate unpublished electronic resources or data Costs: a willingness to meet publication fees and data management / sharing costs



See related guidance at: www.dcc.ac.uk/resources/policy-and-legal/overview-funders-data-policies

Version 2.2, compiled by Sarah Jones, DCC, February 2012

DCC Overview of Funder Data Policies: http://www.dcc.ac.uk/resources/
policy-and-legal/overview-funders-data-policies

What is driving the research data agenda? Legal and Ethical Frameworks

- Data Protection Act and other controls on sensitive information.
 - See guides from UKDA http://www.data-archive.ac.uk/create-manage/consent-ethics
- Freedom of Information and Environmental Information Regulations
 - Qualified exemption for programmes of research under Scottish FOIA will be applied to rest of UK.
 - Notable cases: UEA, QUB, Stirling (dropped)
- UK Research Integrity Office Code of Practice for Research: http://www.ukrio.org/what-we-do/code-of-practice-for-research/
- Research Integrity Concordat: http://www.hefce.ac.uk/whatwedo/rsrch/rinfrastruct/concordat/

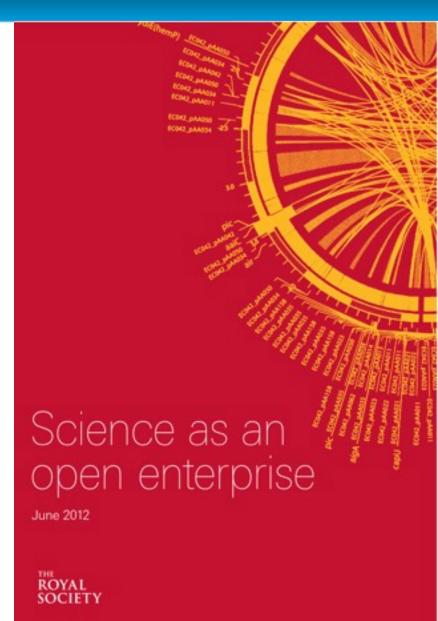
Improving data management and data sharing

- Addressing two related challenges
- Good data management is good practice
 - Avoidance of data loss.
 - Effective research: file naming, annotation etc: how do you find your data, how do you understand it?
 - 'The first person with whom you share your data is your future self'!
- Data sharing / data publication is good for research
 - Verification of research findings / Deterrence of fraud
 - Reproducibility of research / Science as a self-correcting process
 - Benefits of data reuse: asking new questions of old data: return on investment
 - Metastudies/systematic review: greater statistical value of integrated results.
 - Integration of data in interdisciplinary research: the grand challenges require multiple data sets



Royal Society Science as an Open Enterprise Report, 2012

- 'how the conduct and communication of science needs to adapt to this new era of information technology'.
- 'As a first step towards this intelligent openness, data that underpin a journal article should be made concurrently available in an accessible database. We are now on the brink of an achievable aim: for all science literature to be online, for all of the data to be online and for the two to be interoperable.'
- Royal Society June 2012, Science as an Open Enterprise, http://royalsociety.org/ policy/projects/science-public-enterprise/ report/



- Jisc Managing Research Data Programme: developing capacity and good practice
 - First MRD Programme, 2009-11: http://bit.ly/jiscmrd2009-11
 - Selected outputs from the first programme: http://bit.ly/jiscmrd2009-11-outputs
 - Second JISC MRD Programme, 2011-13: http://bit.ly/jiscmrd2011-13
 - Programme Manager Blog: http://researchdata.jiscinvolve.org/
- Digital Curation Centre: 'because good research needs good data'
 - Advice, guidance, advocacy, training in RDM: http://www.dcc.ac.uk/
 - How to Guides: http://www.dcc.ac.uk/resources/how-guides
- Janet Brokerage: Collaborative purchasing, B2B brokerage.
 - Suite of services (generic research tools, cloud storage): https://www.ja.net/products-services/janet-brokerage











Institutional RDM Infrastructure Services

17 projects

Encouraged to reuse outputs from first programme and elsewhere. Mix of pilot projects and embedding projects. Holistic institutional approach to RDM.

RDM Training 5 projects

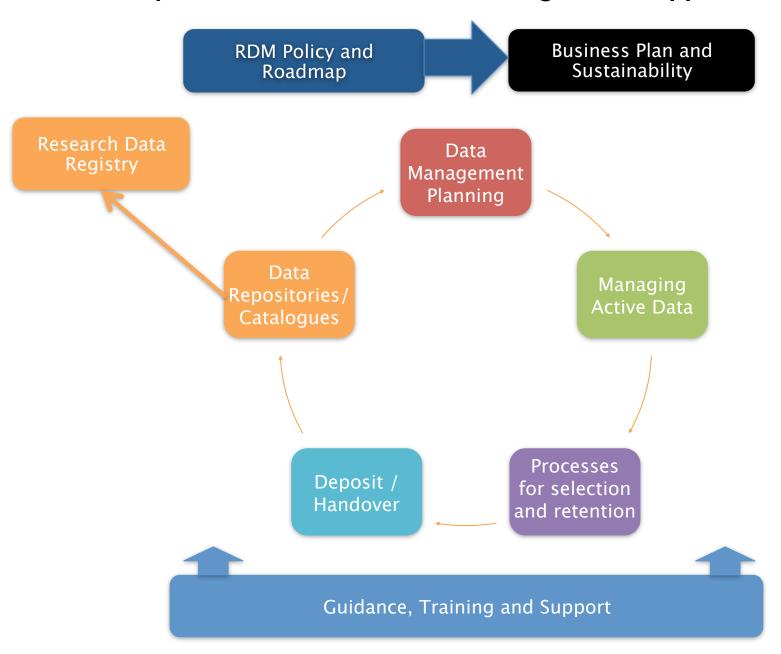
RDM
Planning
10 projects

Ownership: High level ownership of the problem, senior manager on steering committee.

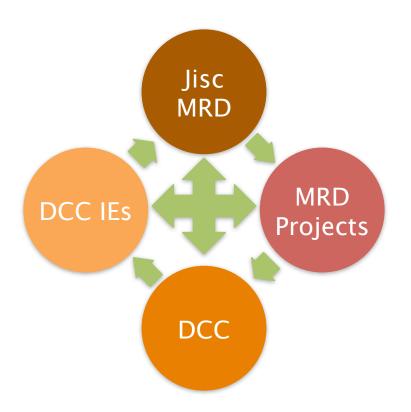
Sustainability: Large institutional contributions. Develop business cases to sustain work.

Data
Publication
3 projects

Components of research data management support services



How to Develop RDM Services



A Digital Curation Centre 'working level' guide



How to Develop Research Data Management Services - a guide for HEIs

Sarah Jones, Graham Pryor and Angus Whyte

Please cite as: Jones, S., Pryor, G. & Whyte, A. (2013). How to Develop Research Data Management Bervices - a guide for HEIs', DCC How-to Guides. Edinburgh: Digital Curation Centre. Available online: http://www.dcc.ac.uk/resources/how-guides.



Digital Curation Centre, March 2013 This work is licensed under Creative Commons Attribution BY 2.5 Scotland



Summaries of existing practice

- We've just skipped a number of slides here, which illustrate the range and extent of institutional support for this.
- Mixture of RDM guidance for researchers
- ...and experience of institutional repositories.
- Contact Norman or Simon if you'd like to follow this up.

Development of Institutional RDM Capacity

The Royal Society **Science as an Open Enterprise** report recommended that the JISC Managing Research Data Programme 'should be expanded beyond the pilot 17 institutions within the next five years.'

[Royal Society 2012, Science as an Open Enterprise, p.73]

- JISC Managing Research Data Programme: http://bit.ly/jiscmrd2009-11
- JISC MRD Programme Blog: http://researchdata.jiscinvolve.org/wp/
- Jisc MRD Programme List: https://www.jiscmail.ac.uk/cgi-bin/webadmin? A0=JISCMRD
- RESEARCH-DATAMAN Discussion List: https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=RESEARCH-DATAMAN
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