Institutional Research Data Management at Newcastle University

Newcastle University[1]

Lindsay Wood, Simon Kometa, Paul Thompson and Megan Quentin-Baxter on behalf of *iridium* project (**http://research.ncl.ac.uk/iridium**)

Background

- effective institutional management of research data assets retention and discoverability is required by Funding Councils[2] and to maintain University reputation and competitiveness
- the University is addressing these research data management (RDM) drivers initially through the Jisc-funded *iridium* project from October 2011 to June 2013
- key project outputs and on-going development of the business case proposal for their sustainability are reported

Key outputs

RDM requirements gathering from our research community and assessment of RDM tools has provided an evidence base for our project recommendations.[3] Key outputs are:

Draft RDM policy: Policy has been put forward for open consultation supported by a Code of Good Practice.[4] Research data management planning (RDMP) for the entire project lifecycle[5] is emphasised.

RDM pilot tools: Outputs have been proof-of-concept tools, technical specifications and evaluation of fitness for purpose (Figures 1a-e).

RDM support: Guidance materials have been authored to deliver the human support aspects of policy implementation and end user understanding of pilot tools. These include workshop materials, online training and tools documentation that are delivered through a specific RDM support website (Figure 1f).

RDM business case: Drafting will be completed by the end of April 2013 and will cover policy drivers, strategic direction alignment, options/benefits, dependencies, impacts, financial implications and timescales.

Overall, resulting from project, there is a greater institutional understanding of the RDM domain and the scale of the challenges.

Sustainability of outputs

- embedding RDM training within staff induction/development programmes and postgraduate training modules will be recommended
- overall researchers have vocalised a desire for institutional guidance on and support for RDM
- increased national demand for more transparency of publicly funded research outputs
- business case will outline sustainability and 'cost of not doing'

RDM infrastructure legacy

- recommendations on the transition of project outputs to a cohesive RDM infrastructure will be made in the project final report, outlining continuation of the draft policy, tools and human support infrastructure development, together with a roadmap for implementation within the business case
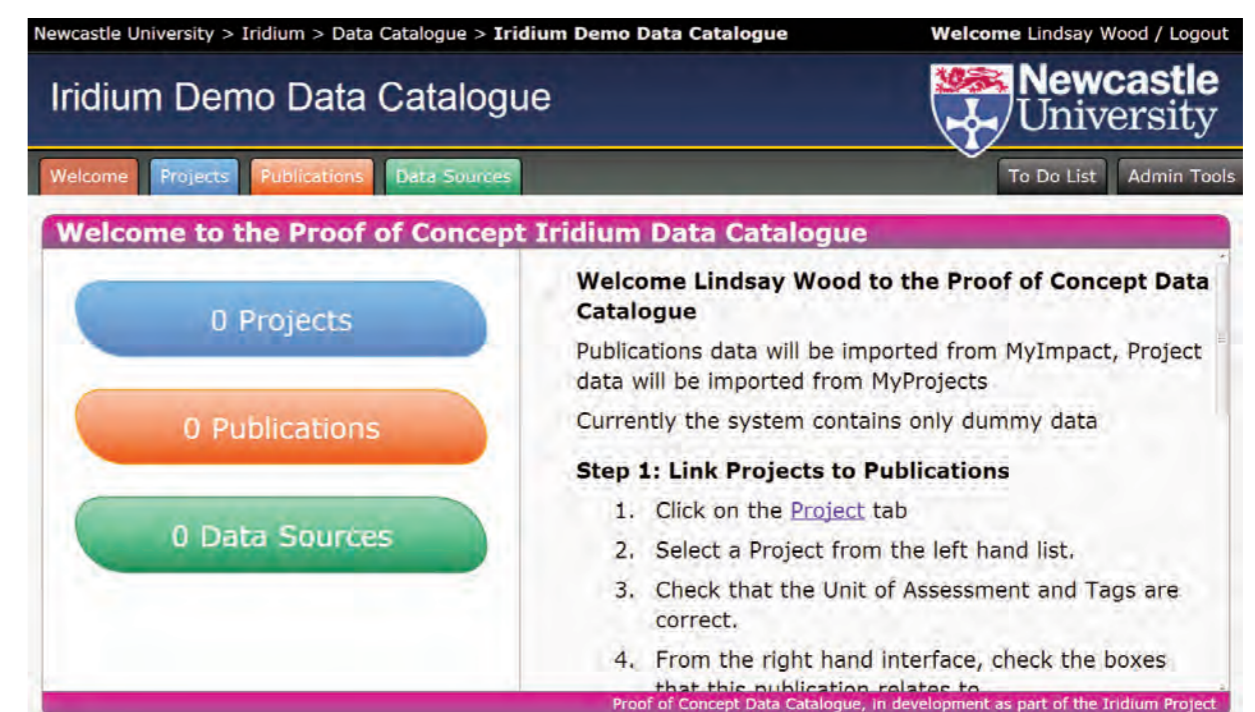- considerable RDM expertise among project team members

Figure 1a. The Research Data Catalogue supports the policy implementation such as data location, access mechanisms linked to publications, internal discoverability and embargo periods.
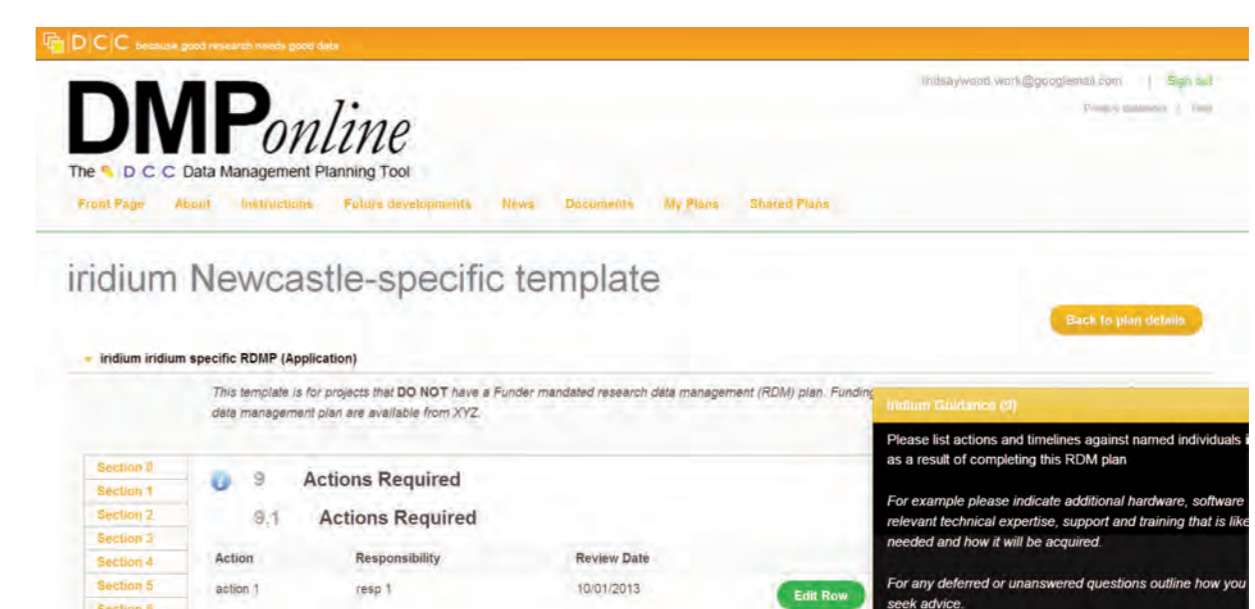

Figure 1b. A Newcastle-specific RDMP template within the DCC DMP Online tool[6] facilitates researcher compliance with policy and alignment to good practice.
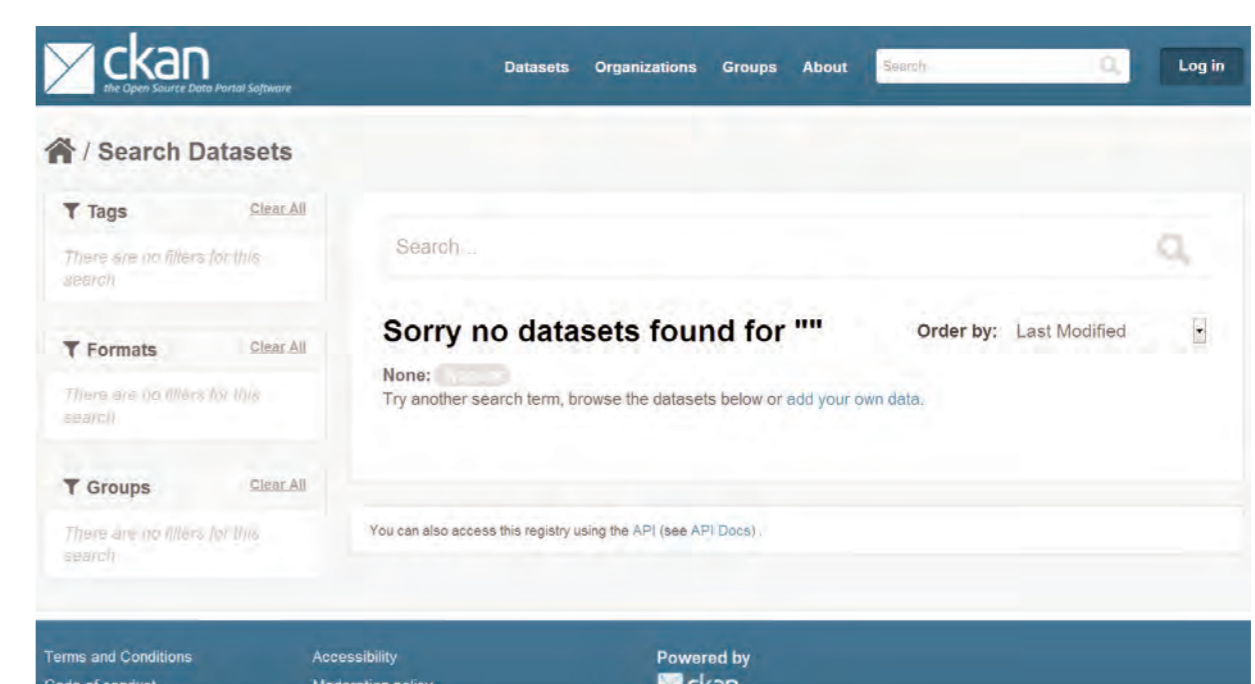

Figure 1c. CKAN fitness-for-purpose as: i) an active research data repository for individual research groups and ii) data portal for the Research Data Warehouse[7] was evaluated.
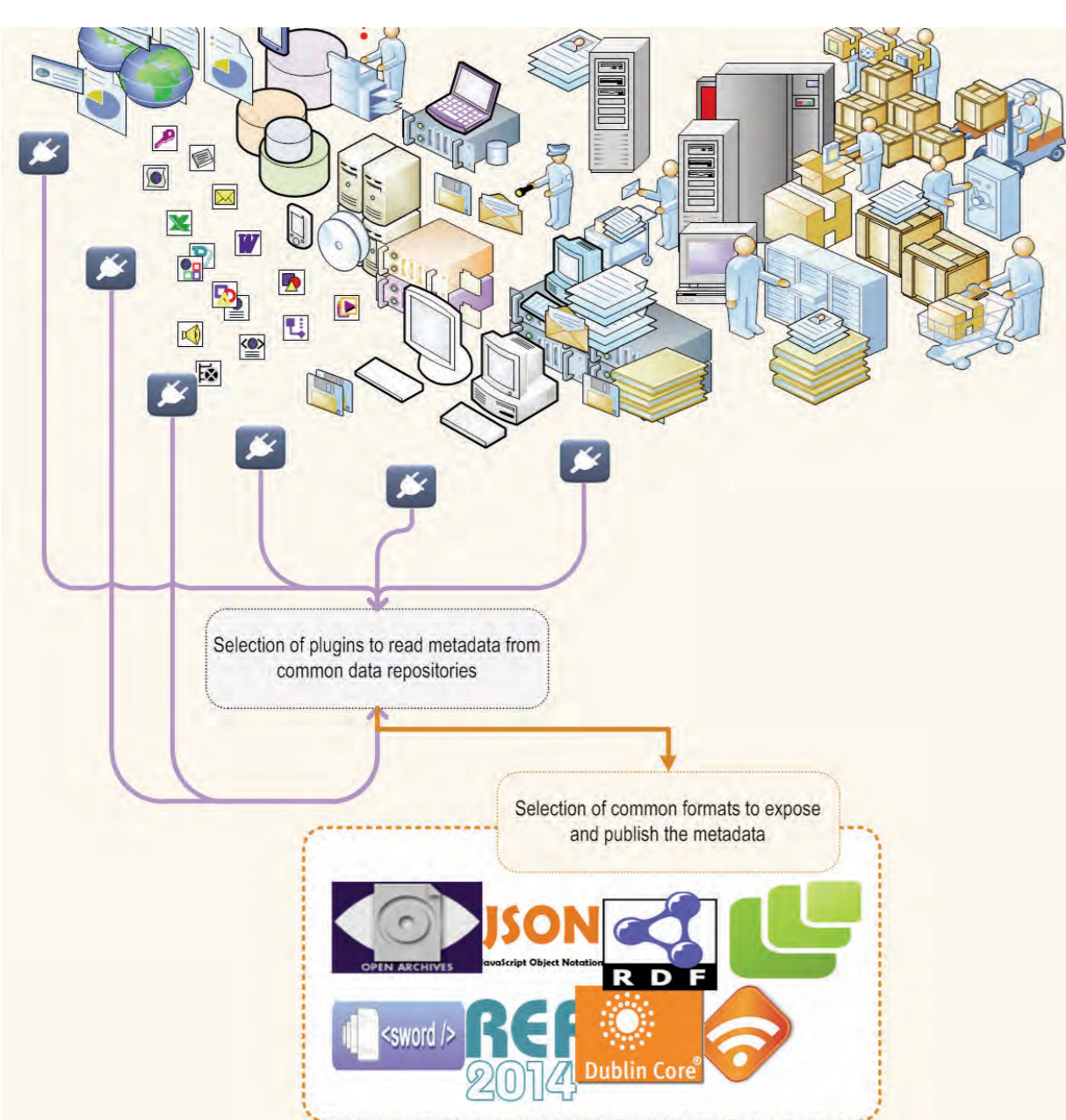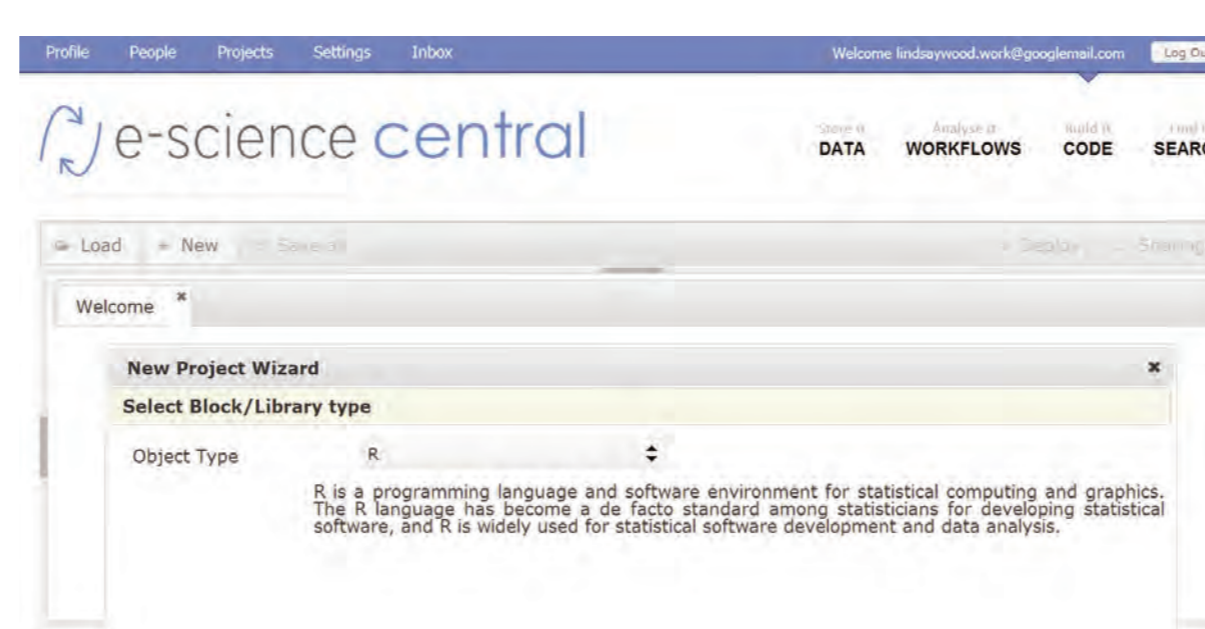

Figure 1d. e-Science Central[8] modifications for wider institutional usage implemented.
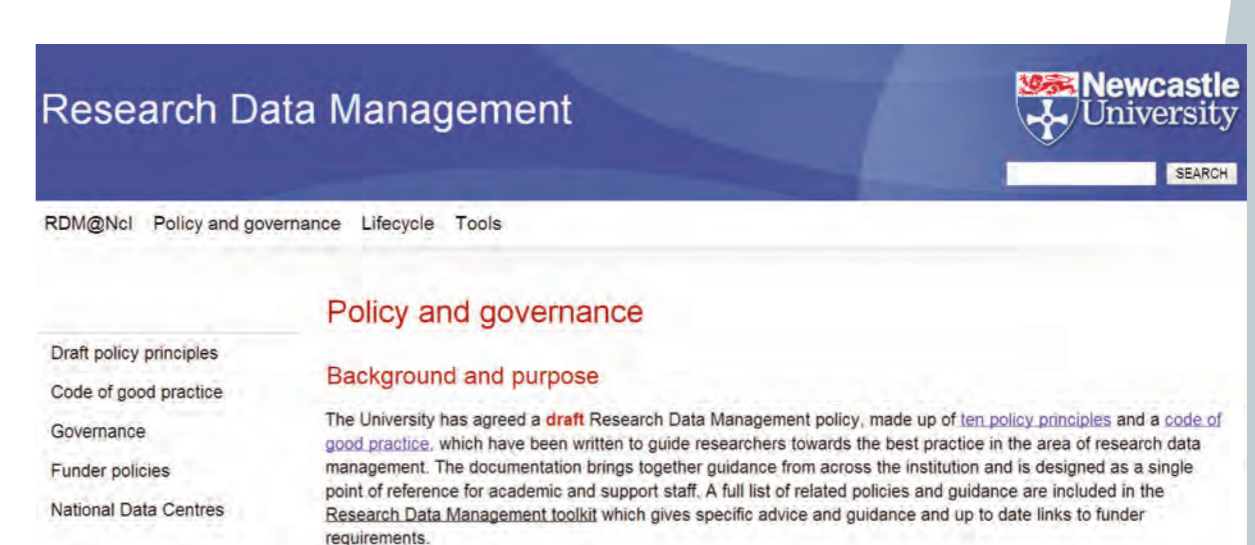
Figure 1f. Dedicated research data management support website.[10]

Figure 1e. Technical protocols for research data (and its metadata) transfer between interoperable systems evaluated (i.e. SWORD2[9]).

References

1. University Research Office, the Digital Institute, the University Library, Information Systems & Services and MEDEV, School of Medical Sciences Education Development (**http://research.ncl.ac.uk/iridium**)
2. **http://www.epsrc.ac.uk/about/standards/researchdata/Pages/default.aspx**
3. **http://research.ncl.ac.uk/iridium/outputs/**
4. **http://www.ncl.ac.uk/res/resources/Polices%20Forms%20and%20Guidance/Policies.htm**
5. **http://www.dcc.ac.uk/resources/curation-lifecycle-model**
6. **https://dmponline.dcc.ac.uk/**
7. **http://www.ncl.ac.uk/itservice/filestore/researchdatawarehouse/**
8. **http://www.esciencecentral.co.uk**
9. **http://swordapp.org**
10. **http://research.ncl.ac.uk/rdm/**
    All accessed March 2013.