

Research data: what is being done at national level

Kevin Ashley
Digital Curation Centre
www.dcc.ac.uk
[@kevingashley](https://twitter.com/kevingashley)
Kevin.ashley@ed.ac.uk



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because good research needs good data

Topics

- Policy
- International actions
- UK as example of national & institutional action
- Comparison with other countries

G8UK - Endorses OA Open Data Charter Policy Paper 18 June 2013



Policy paper

G8 Open Data Charter and Technical Annex

Published 18 June 2013

Contents

1. Principle 1: Open Data by Default
2. Principle 2: Quality and Quantity
3. Principle 3: Usable by All
4. Principle 4: Releasing Data for Improved Governance
5. Principle 5: Releasing Data for Innovation
6. Technical annex



Kevin Ashley - Austrian e-infra workshop

RCUK policy - The 1-minute version

- Research data are a public good – make openly available in timely & responsible way
- Have policies & plans. Data with long-term value should be preserved & usable
- Metadata for discovery & reuse. Link publications & data
- Sometimes law, ethics get in the way. We understand.
- Limited embargos OK. Recognition is important – always cite data sources
- OK to use public money to do this. Do it efficiently.

EPSRC policy points

- Awareness of regulatory environment
- Data access statement
- Policies and processes
- Data storage
- Structured metadata descriptions
- DOIs for data
- Securely preserved for a minimum of 10 years **from last use**

Compliance
expected by 2015

Elsewhere...

- Similar policies in Canada, USA, Germany, Netherlands, EC, Norway
- Also charitable funders
- Differ in detail and in compliance mechanisms

Policies at lower level

- University policies becoming common
- Make clearer how researchers are supported locally
- In UK – Concordat between universities & funders defines points of agreement, responsibility

Lessons on policy

- Funders more effective when university is a clear target of the policy (e.g. EPSRC)
 - Almost all just place responsibility on principal investigator
- Sanctions not necessary – yet
- Must be able to show that compliance can be tracked
- See Wellcome OA as an example



because good research needs good data

Accessibility

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- Digital Curation
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Policy and Legal

In this section

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[Curation Lifecycle Model](#)

Policy and Legal

[Overview of Funders' Data Policies](#)

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[MRC Data Plan FAQs](#)

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[Briefing Papers](#)

[How-to Guides](#)

[Standards](#)

[Publications](#)

[External Resources](#)

Policy resources

[Overview of Funders' Data Policies](#)

A table and short summaries comparing research funders' policies

[Funders' Data Policies](#)

Detailed overview of each funder's policy, stating requirement for data plans, expectations on data sharing and available support.

[Institutional Data Policies](#)

A table listing example of UK universities research data policies. Add your examples!

[Policy Tools and Guidance](#)

Annotated bibliography of: 1) tools and guidance for creating policies; 2) example policies; 3) publications; & 4) data management guidance.

[Preservation policy template](#)

Template to help repositories define preservation policies

[Data management plans & DMP Online](#)

Summary of what funders ask for in plans and the DCC's tool to help

DCC Policy Summary



INTERNATIONAL ACTION

2016-10-26

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UK • DATA ARCHIVE

THE UK'S LARGEST COLLECTION OF DIGITAL RESEARCH DATA IN THE SOCIAL SCIENCES AND HUMANITIES

HOME ABOUT US CREATE & MANAGE DATA DEPOSIT DATA HOW WE CURATE DATA FIND DATA NEWS & EVENTS

SEARCH OUR SITE GO

WHO ARE WE?

We are internationally acknowledged experts in the areas of acquiring, curating and providing access to data. We are a designated Place of Deposit for The National Archives

READ ON

What's new Data lifecycle Find data Who are we?

DEPOSITING YOUR DATA

Depositing your data with the Archive ensures that they will be professionally curated and accessible

DEPOSIT DATA

FINDING DATA TO USE

We can help you find data for research and teaching with our catalogue of over 5,000 data collections

OUR CATALOGUE

LATEST NEWS & EVENTS

European archiving standards Archiving digital research data for the long-term ...

ads ARCHAEOLOGY DATA SERVICE

ArchSearch + Data About Us Publications Policy + Guidelines Learning + Teaching Links Index

Latest News: RSS

November 2010: Grey literature library reaches 7000 reports.
 October 2010: ARENA2 demo video now available.
 October 2010: Limestone Cropmark Landscapes archive released.
 October 2010: ADS information and updates now on Twitter.

The Archaeology Data Service (ADS) supports research, learning and teaching with high quality and dependable digital resources. It does this by preserving digital data in the long term, and by promoting and disseminating a broad range of data in archaeology. The ADS promotes good practice in the use of digital data in archaeology, it provides technical advice to the research community, and supports the deployment of digital technologies.

Have a look at the ADS website redesign Beta Test Version

Have you seen?

Ave Valley Survey Project, Porto, Portugal

The digital archive for a survey carried out in Portugal between 1994-1997, containing database, geophysics and GIS data as well as many images. The archive is ...

Resources

- What's in ArchSearch
- ARCHway
- ARENA Archives and Portal
- HEIRNET Register
- Society of Antiquaries Library Catalogue

Projects

- Archaeotools
- VENUS
- ALSF
- OASIS
- All projects...

British Oceanographic Data Centre

NATURAL ENVIRONMENT RESEARCH COUNCIL

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Welcome to the British Oceanographic Data Centre

a national facility for preserving and distributing marine data

We hope you enjoy our web site and would appreciate your [comments](#). If you experience any difficulties, please contact our [Web Master](#).

About us	Data	Projects
What do we do? Do you want to contact us? Learn about our history and the information technology we rely on. more	We process, archive and distribute biological, chemical, physical and geophysical marine data. Find out how to download and request data, search our inventories and submit data to us. more	Explore the data management services we provide to our scientific colleagues during marine research projects. more
Partners	Products	Help and hints
Find out about the data management partnerships we have	Learn about our Web Services and software products. Find out how to order our digital	Learn how to use our web site. Read our content, copyright and

Home My BADC Data Search Community Help

About the BADC Login New User Registration Apply for datasets

British Atmospheric Data Centre

NATURAL ENVIRONMENT RESEARCH COUNCIL

About Us:

The British Atmospheric Data Centre (BADC) is the Natural Environment Research Council's (NERC) Designated Data Centre for the Atmospheric Sciences. The role of the BADC is to assist UK atmospheric researchers to locate, access and interpret atmospheric data and to ensure the long-term integrity of atmospheric data produced by NERC projects.

To find out more about the BADC, please follow the links on the sub-tab sections above.

Search for Data:

Search for: in: BADC • NERC Data Discovery Service

News

Latest on 20th October 2010: NERC Stakeholder Engagement - NERC Environmental Data Centres: do they meet your needs? BADC website and Services back in operational mode.

Research data centres are good value!

- See Jisc reports on ADS, BADC, UKDA:
- Returns on investment between 400% and 1200%

http://www.jisc.ac.uk/whatwedo/programmes/di_directions/strategicdirections/badc.aspx

- But sustainability is an issue
- OECD funding international study to address this problem

Things that are obvious, things that aren't

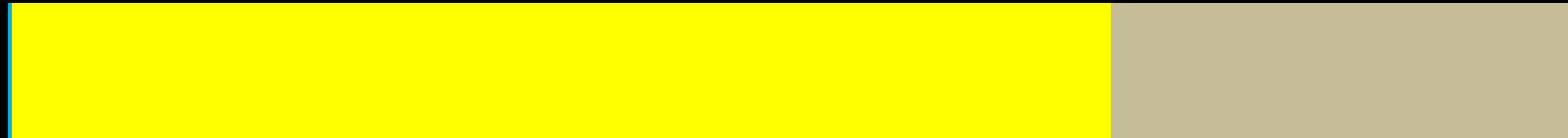
- Infrastructure not specific to research data – ORCID, ISNI, Fundref
- Identifiers – Datacite, Handles, etc
- Re3data

- Trans-european services: EUDAT, OpenAire, EOSC
- DMPonline
- RDA outputs – metadata catalogues, data fabric, etc.

THE UK NATIONAL MODEL

2016-10-26

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164 universities in UK*

71 (43%) > 5% research income

115 (70%) > £1m income from research

*2011 HESA data

DCC provides access to learning resources



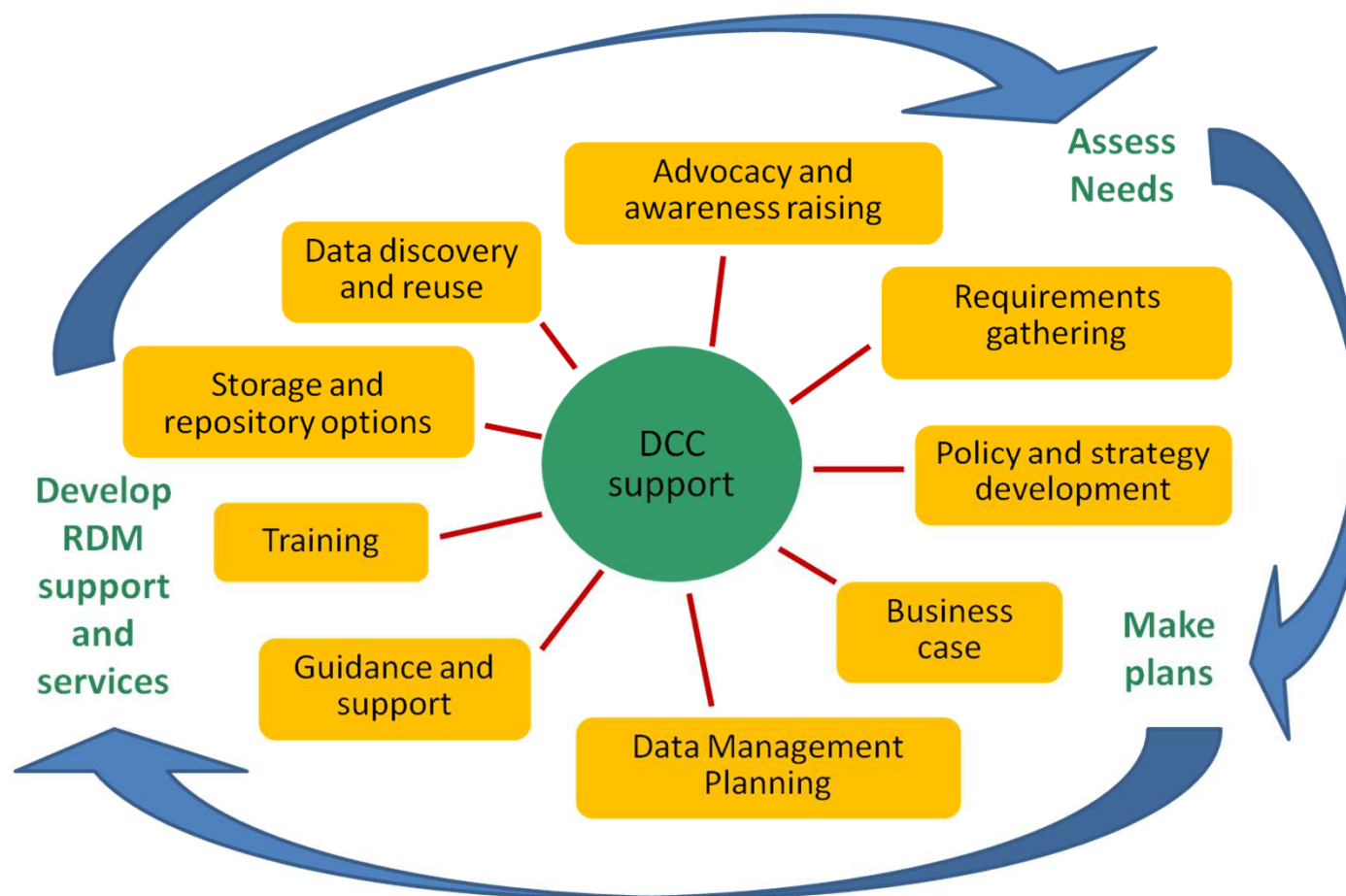
DCC provides access to tools

The screenshot displays the DMPonline website interface. In the top left corner, there is an orange square containing the 'DMP ONLINE' logo. To the right of the logo, a navigation menu includes buttons for 'Home', 'About', 'Roadmap', and 'Help'. Below the logo, the text reads 'Welcome. DMPonline has been developed by the Digital Curation Centre to help you write data management plans.' A video player is embedded on the page, titled 'Screencast on how to use DMPonline', showing a preview of the 'Create a new plan' form. On the right side of the page, there is a 'Sign in' section with two input fields for email and password, a 'Remember me' checkbox, a 'Sign in' button, and a link for 'Forgot your password?'. Below this is a 'Sign up' section with a plus sign icon and the text 'New to DMPonline? Sign up today.' The video player at the bottom of the screenshot shows a progress bar at 4:47.

<https://dmponline.dcc.ac.uk>



DCC consultancy services – the Institutional Engagement Programme



www.dcc.ac.uk/tailored-support



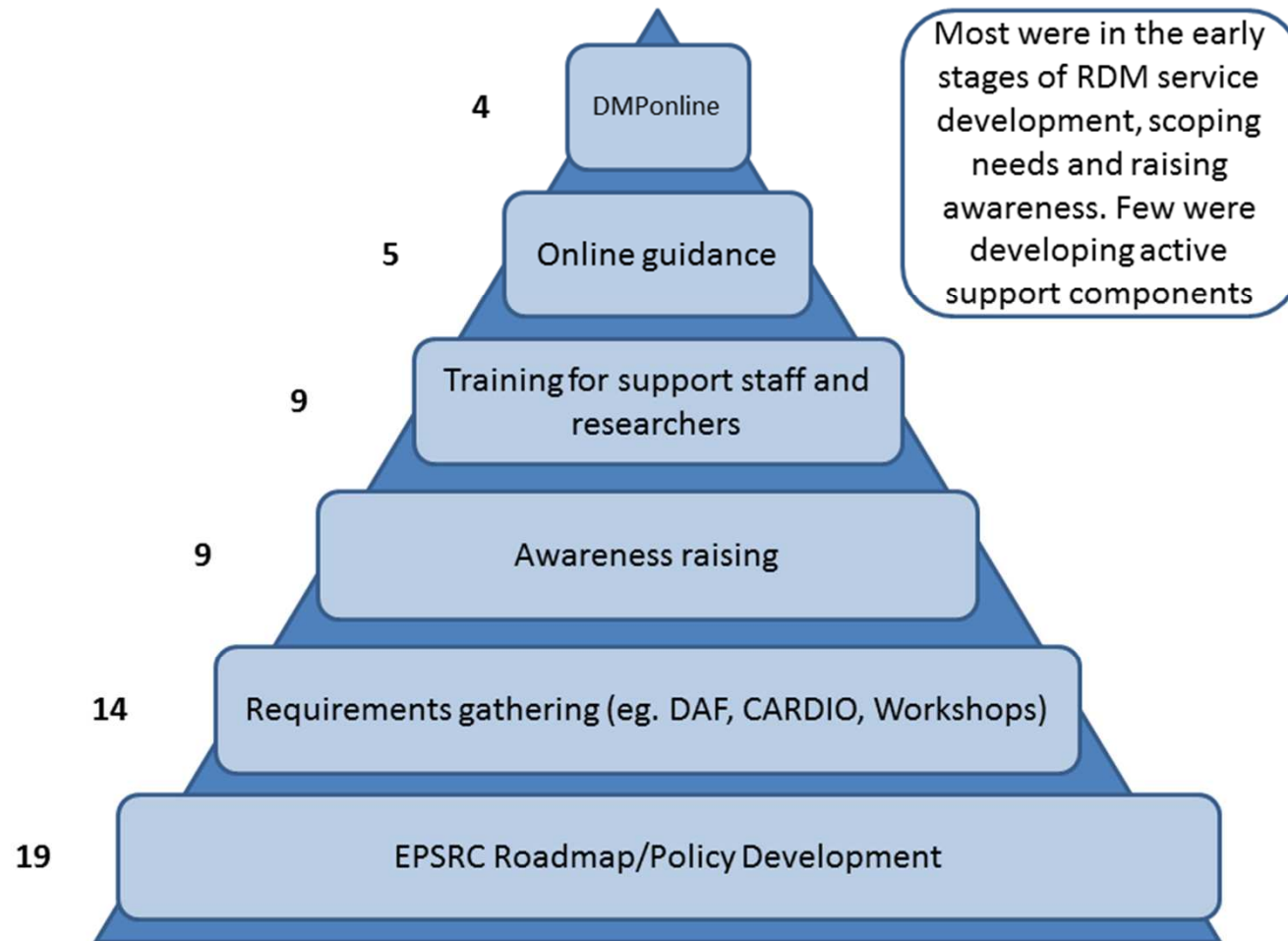
Some unis we worked with



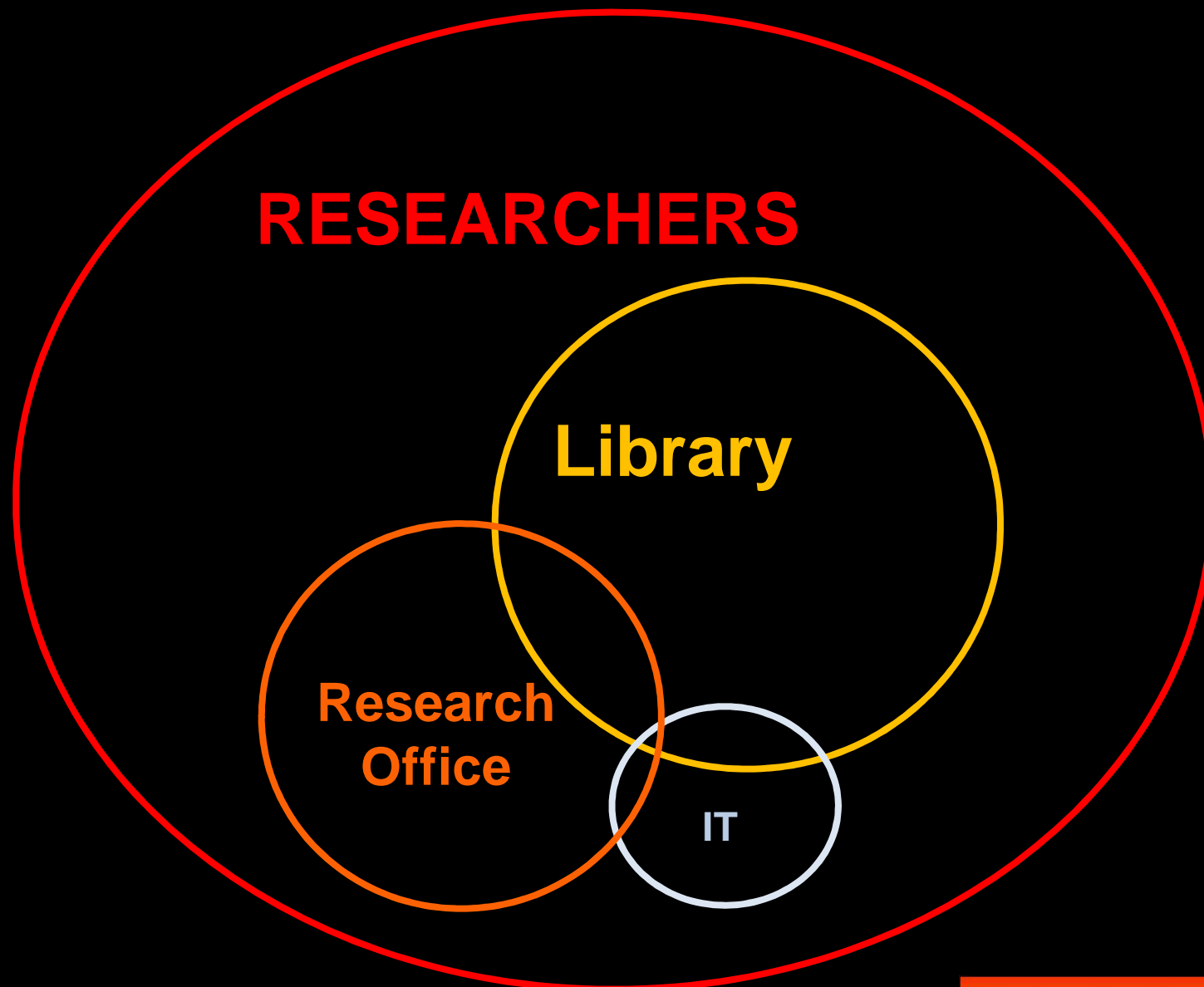
What else was happening?

- Engagement programme driven by report on UKRDS – UK Research Data Service (2010)
- Accompanied by two funded JISC programmes
- JISC funding helped organisations to start activity our advice recommended
- It also supported development of training materials
- Funder policy was being announced

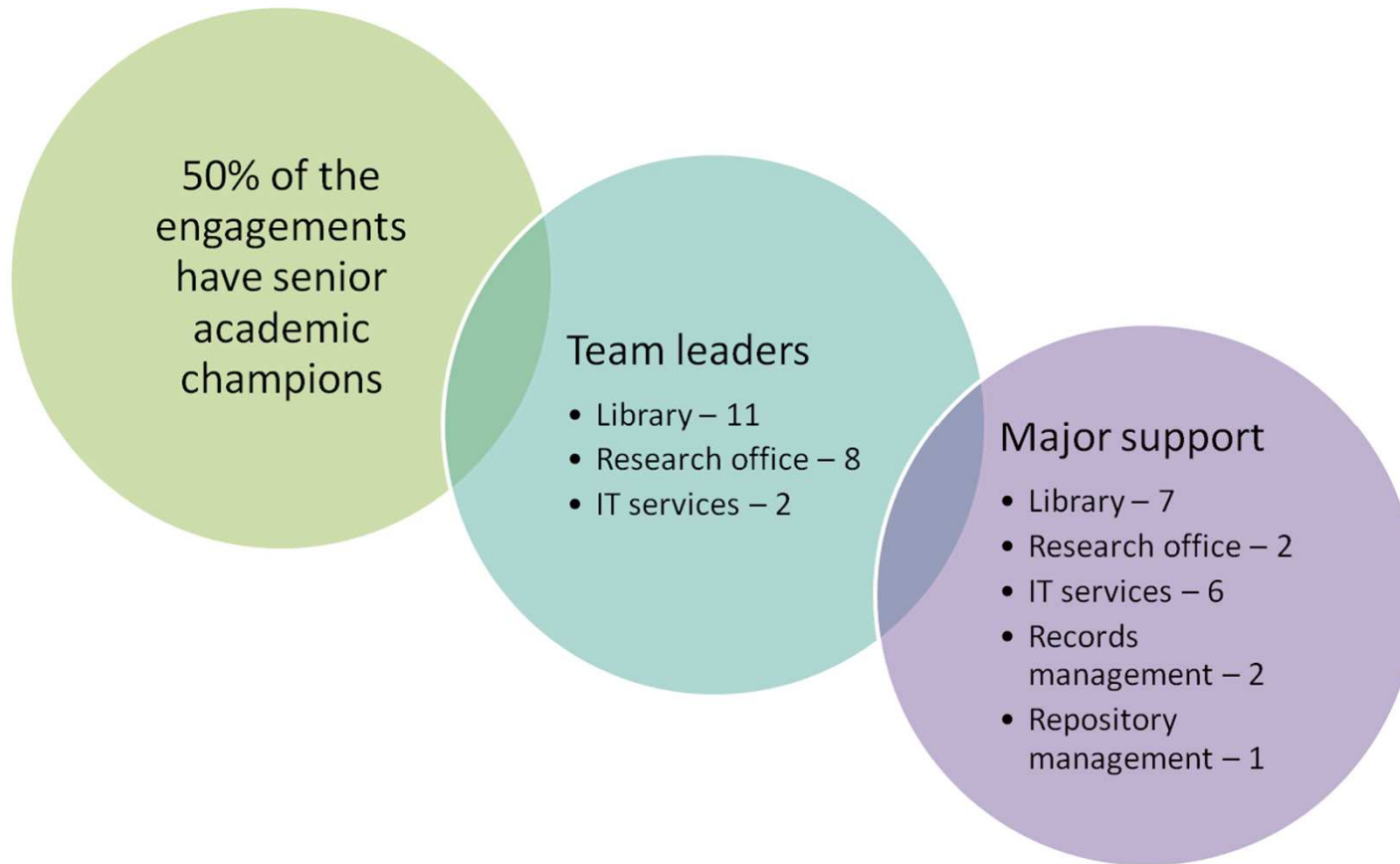
Support in the initial programme



Who (in the UK) is leading RDM work?



Roles of main uni participants

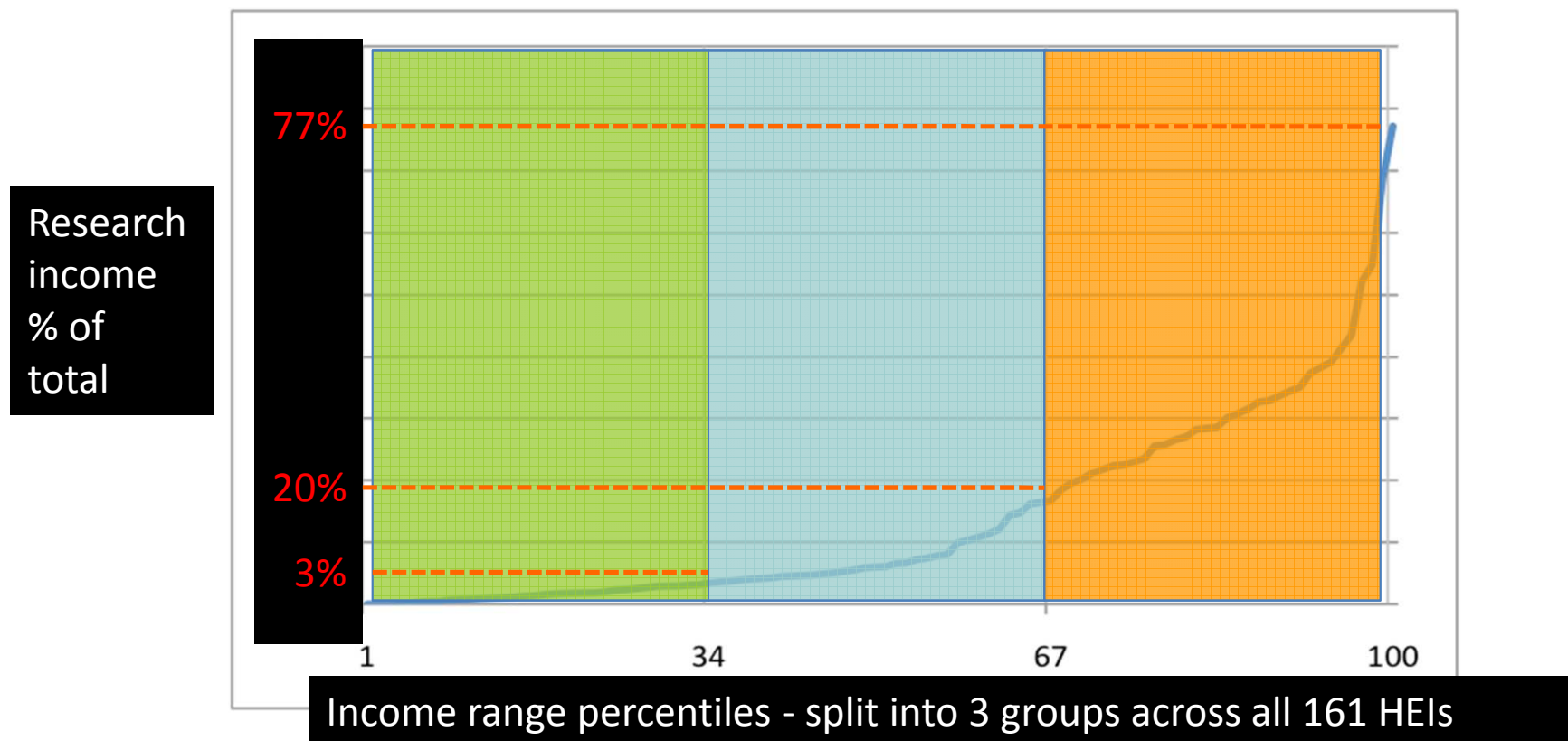
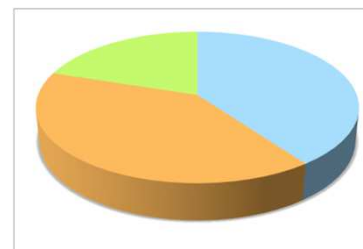


Some institutional roles

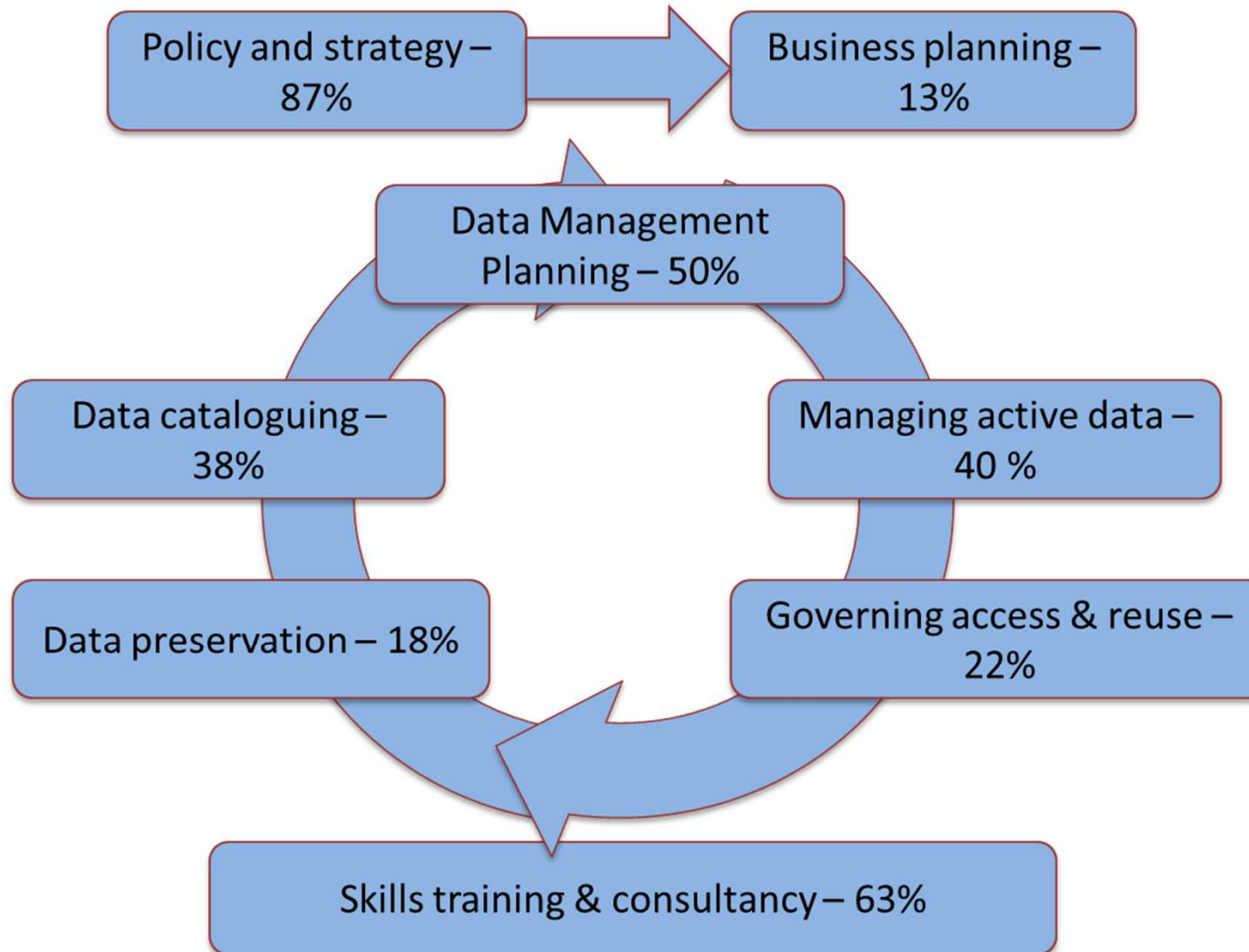
- Leadership – coordinate action
- Audit – who has what, where does it go?
- Advice on access – data, wherever it is
- Preservation – permanence
- Citability
- Data/publication linking
- Promoting data in teaching
- Selection
- Education – early career researchers

Annual RDM survey issued by DCC

- 60 UK Higher Education Institutions responded to DCC survey 2015, of 132 invited
- Research-active institutions well represented



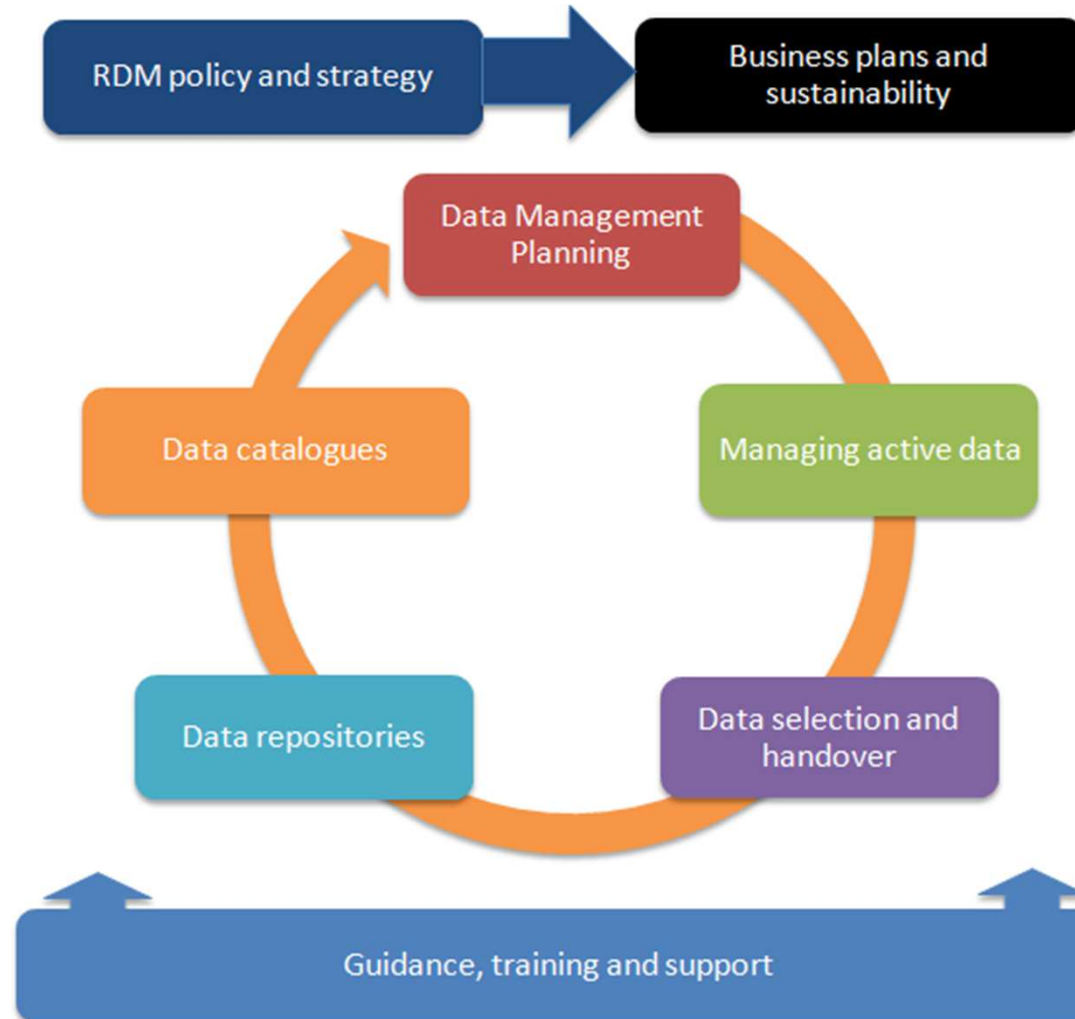
What is the national picture in the UK?



% indicating 'rolling out' or 'embedding'



Components of RDM services



These services can be...

- In-house, for one university
- Shared between a number of universities
- Shared across a country (in development)
- Purchased from a supplier – Figshare, Arkivum, etc.
- Scale is important
- Some things are hard to buy – storage is easy

What data to keep

Roles and Responsibilities

A Digital Curation Centre and Australian National Data Service 'working level' guide



How to Appraise & Select Research Data for Curation

Angus Whyte (DCC) and Andrew Wilson (ANDS)

Researcher ('data creator')

- Provide enough information for others to assess the research data's scientific and scholarly quality and compliance with disciplinary or ethical norms.
- Provide relevant information for the repository to identify who will use the data and how i.e. the 'designated community', and any specific access requirements or constraints.
- Provide the research data in formats recommended by the data repository.
- Provide the metadata requested by the repository.

Data centre or repository

- Make explicit its mission in the area of digital archiving, and its selection policy for digital objects.
- Ensure compliance with legal regulations and contracts.
- Ensure the authenticity and integrity of the digital objects and the metadata.
- Assume responsibility from the data producer for ensuring the digital objects are accessible and available to a defined 'designated community'.
- Plan for long-term preservation of the digital assets.

"I just back everything up onto data sticks. I didn't even know you could back-up to servers".

<http://www.flickr.com/photos/mattimattila/3003324844/>



"Departments don't have guidelines or norms for personal back-up and researcher procedure, knowledge and diligence varies tremendously. Many have experienced moderate to catastrophic data loss"

Incremental Project Report, June 2010

SOME OTHER NATIONAL PERSPECTIVES

2016-10-26

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Australia

- Significant long-term funding for national services & support
- ANDS – data discovery, software, skills, coordination, advice
- National storage & HPC infrastructure
- Financial incentives for universities to use common services in standard ways

Canada

- Like Australia, national research funding but province-level university funding
- Two initiatives – one from universities (PROTAGE), one from federal level (RDC)
- Data management planning, discovery, skills, repositories
- Common tools for local deployment

Netherlands

- Strong national data repository – DANS
- One cooperative service – 3TU (now 4TU)
- Combined to produce RDNL – back office tech services, front office liaison
- National Dataverse instance
- Some shared services now being proposed by SURF-SARA

Portugal

- Existing national publication repository
- Extending to cover research data
- One provider, university-branded front-ends
- Copying other aspects of UK model – e.g. regular meetings for professional staff, funders, other stakeholders

Denmark

- Multi-phase project supported by technical service providers & university libraries
- Governance by them & funders
- Training & shared services
- Still in development

USA

- Scale means many initiatives
- Much is NSF project-funded
- Some existing university collaborations
- Similar spread to UK – 3 or 4 tiers from Ivy League to small institutions
- Very complex funding model
- Technology is useful – models less so

Finland

- National initiative supports Data Management Planning service supplied by DCC
- Training also coordinated
- Central HPC & storage infrastructure for big science

EOSC


- EOSC brings together infrastructure at local, national, international, domain level
- Increasing need for standard service descriptions to enable guided choices, automation
- We all need to track this

Some questions

- What do you provide once?
- What do you develop once, deploy many times?
- What do you just provide guidance on once?
- What is compulsory, what is optional?

DCC guidance


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 Services - 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
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CASE STUDY

A Digital Curation Centre Case Study
March 2013



RDM Training for Librarians

Marieke Guy, Digital Curation Centre

Section of the How to guide that this supports
Guidance, training and support

Introduction

This case study looks at the approaches taken by three Jisc Managing Research Data Projects (2011 - 2013) and one institution to providing effective training for librarians and information services professionals in Research Data Management (RDM).

Background context

Through its institutional engagement programme the Digital Curation Centre (DCC) has seen many institutional (RDM) initiatives emanating from libraries. Librarians are carving out a new role for themselves in promoting and embedding good RDM practices. They are well placed for this role having information science skills in areas such as metadata, open access, institutional repository use - key constituents for RDM. Librarians also tend to have good working relationships with other service departments and researchers. This results in requirements for them to sit on institutional working parties and steering groups redesigning institutional strategies and infrastructure necessary to meet operational and regulatory requirements. Despite these factors various reports indicate that researchers do not immediately turn to the library, even when librarians could help a lot.

The 2012 RLUK report on *Re-skilling for Research* looked at the role and skills of liaison librarians required to effectively support the evolving information needs of researchers. It states that it "is clear that as the nature of research within our institutions changes, so must the role of the library in supporting research". More recently the Association of

published a paper: *Academic Libraries and Research Data Services: Current practices and plans for the future*. The paper found that Libraries tend to rely on external conferences or workshops to provide research data services training and that there is a lack of internal institutional support in this area. As the landscape changes in individual institutions will need to take measures to ensure that their library and information services staff are effectively trained in aspects of RDM. This case study looks at initiatives in this area.

Overview: RDMRose

RDMRose is a Jisc-funded project to produce taught and continuing professional development (CPD) learning materials in RDM tailored for information professionals. It is looking in particular at the specific needs of liaison librarians in university libraries, and deliverables include OER materials suitable for learning in multiple modes, including face-to-face and self-directed learning. All materials can be reused by other library and information service educators and a version for self-supported Continuing Professional Development is available.

The RDMRose project brings together the University of Sheffield (School) with a practitioner community based on the White Rose University Consortium's libraries at the Universities of Leeds, Sheffield and York. Development of content and teaching was iterative, based on a highly participative curriculum development process and with a strong strand of student evaluation of learning materials and activities. Version 1 of the training materials was released in January 2013 and the project team would