



# Data Management Plans and DMPonline

EUDAT conference, 29<sup>th</sup> October 2013, Rome

Sarah Jones  
Digital Curation Centre  
[sarah.jones@glasgow.ac.uk](mailto:sarah.jones@glasgow.ac.uk)  
Twitter: sjDCC



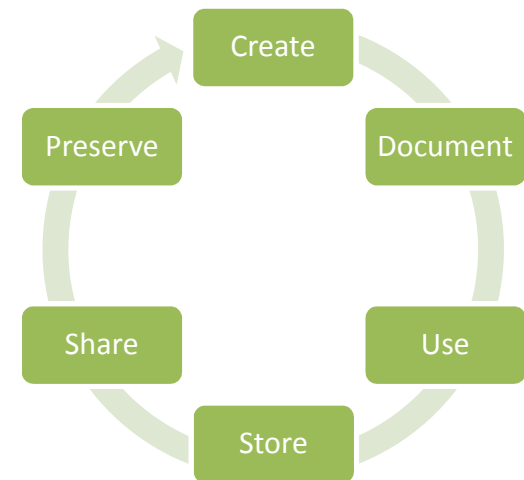
Funded by:



# What is a DMP?

A short plan that outlines:

- what data will be created and how
- how it will be managed (storage, back-up, access...)
- plans for data sharing and preservation



# Drivers for DMPs



“Each funded research project, should submit a structured Data Management Plan for peer-review as an integral part of the application for funding.”

Liz Lyon, Dealing with Data



Asks for “institutional and project specific data management policies and plans”

RCUK Common Principles



University policy...

# Which UK funders require a DMP?

● Full Coverage
 ◐ Partial Coverage
 ○ No Coverage

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
AHRC	●	●	●	●	●	◐	○	●	○	◐	◐
BBSRC	●	●	●	●	●	●	●	●	●	◐	●
CRUK	●	●	●	●	●	●	●	◐	●	○	○
EPSRC	●	●	●	◐	●	●	●	◐	○	○	●
ESRC	●	●	●	●	●	●	●	●	●	●	◐
MRC	●	●	●	●	●	●	○	◐	●	○	◐
NERC	●	●	●	●	●	●	●	●	●	●	◐
STFC	●	●	●	●	●	●	●	◐	●	◐	◐
Wellcome Trust	●	●	●	●	●	●	●	●	●	◐	●

[www.dcc.ac.uk/resources/policy-and-legal/overview-funders-data-policies](http://www.dcc.ac.uk/resources/policy-and-legal/overview-funders-data-policies)

# Some other funders that require DMPs or equivalent



Department  
for International  
Development

BILL & MELINDA  
GATES *foundation*



GenomeCanada



National Science Foundation  
WHERE DISCOVERIES BEGIN



National Institutes of Health  
*Turning Discovery Into Health*

DFG Deutsche  
Forschungsgemeinschaft

NHS  
National Institute for  
Health Research

TDR  For research on  
diseases of poverty  
UNICEF • UNDP • World Bank • WHO

# Five common themes

1. Description of data to be collected / created  
(i.e. content, type, format, volume...)
2. Standards / methodologies for data collection & management
3. Ethics and Intellectual Property  
(highlight any restrictions on data sharing e.g. embargoes, confidentiality)
4. Plans for data sharing and access  
(i.e. how, when, to whom)
5. Strategy for long-term preservation

# DCC Checklist for a DMP

- 13 questions on what's asked across the board
- Prompts / pointers to help researchers get started
- Guidance on how to answer

[www.dcc.ac.uk/sites/default/files/documents/resource/DMP Checklist 2013.pdf](http://www.dcc.ac.uk/sites/default/files/documents/resource/DMP%20Checklist%202013.pdf)



# Potential areas for collaboration

- Ensuring compatibility and coherence in requirements
- Collaborating on tools and sharing of good practice
- Sharing ideas on reviewing and monitoring plans
- Moving from compliance to benefits for researchers



# Different stages of a DMP

## Outline DMP

- Basic, short plan
- Answer 3 questions
- Written at grant application stage

## Full DMP

- Detailed plan
- Define procedures
- Written in conjunction with data centres

[www.nerc.ac.uk/research/sites/data/dmp.asp](http://www.nerc.ac.uk/research/sites/data/dmp.asp)

# A useful framework to get started

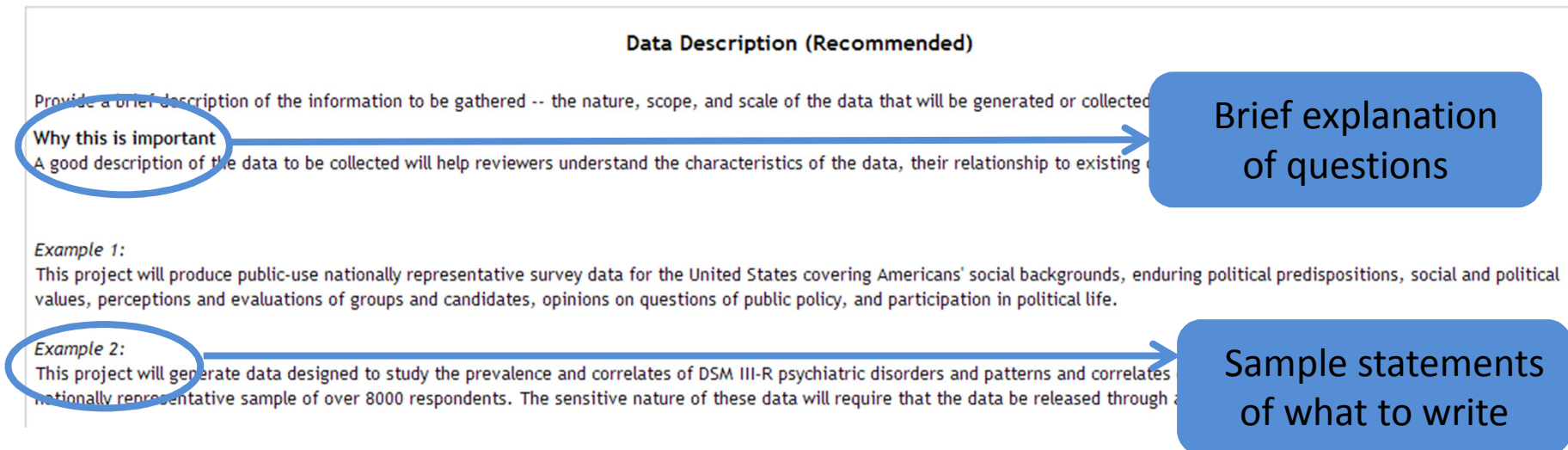
## Framework for Creating a Data Management Plan

This framework can be used as an outline in assembling data management plans to accompany grant applications. Note that some funders have page limits for data management plans—NSF limits plans to two pages.

### Elements of a Data Management Plan

This [list of elements](#) is informed by a gap analysis that ICPSR conducted of existing recommendations for data management plans and other forms of guidance made available for researchers generating data. The result of the gap analysis was a [comparison of existing forms of guidance](#). Elements that are highly recommended for inclusion in effective data management plans are noted.

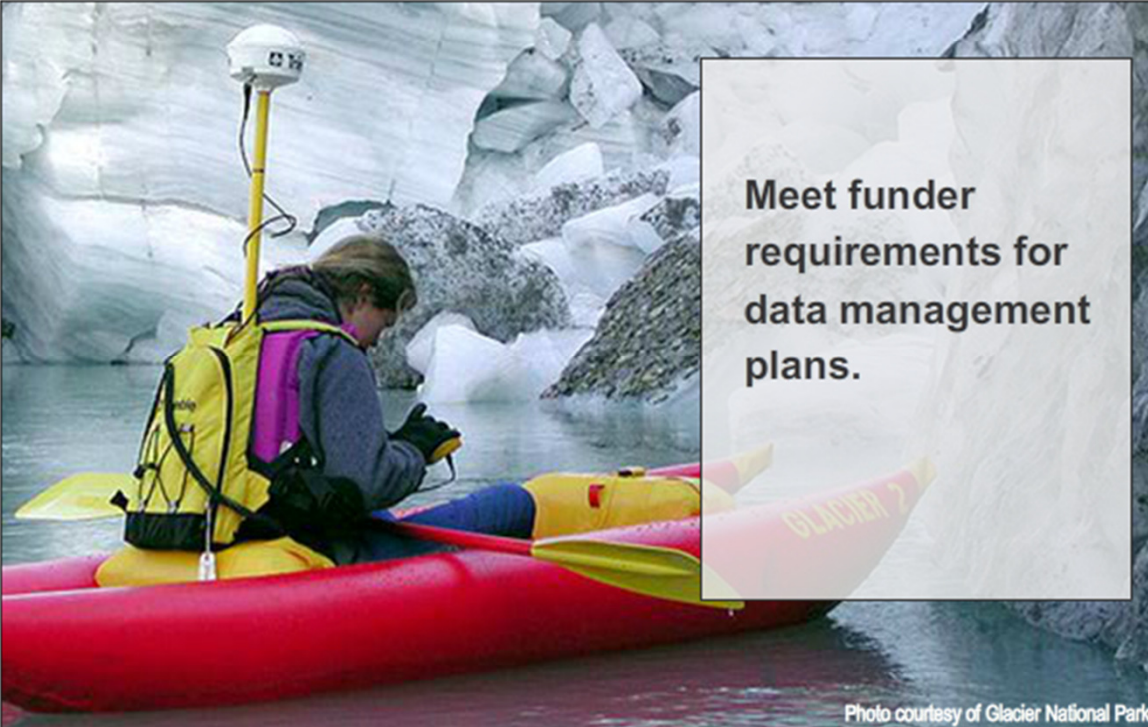
See our [bibliography](#) for additional readings germane to the elements of a data management plan.



[www.icpsr.umich.edu/icpsrweb/content/datamanagement/dmp/framework.html](http://www.icpsr.umich.edu/icpsrweb/content/datamanagement/dmp/framework.html)

# DMPTool

Guidance and Resources for your Data Management Plan



**Meet funder requirements for data management plans.**

Photo courtesy of Glacier National Park

The DMP Tool allows you to: **1** **2** **3** **4**

[Get Started!](#)

**Data Management Plan: Sample Plan Created at the DataONE Best Practices Workshop - Santa Fe NM 7/2011 Atmospheric CO2 Concentrations, Mauna Loa Observatory, Hawaii, 2011-2013**

**1. Types of data produced**

All samples at Mauna Loa Observatory will be collected continuously from an inlet located at the tower, a central tower and four towers located at compass quadrants. Raw data files will contain continuously measured CO2 concentrations, calibration standards, reference standards, daily check standards, and blanks. The sample lines located at compass quadrants were used to examine the influence of source effects associated with wind directions. In addition to the CO2 data, we will record weather data (wind speed and direction, temperature, humidity, precipitation, and cloud cover). Site conditions at Mauna Loa Observatory will also be noted and recorded. The final data product will consist of 5-minute, 15-minute, hourly, daily, and monthly average atmospheric concentration of ...

[See a plan created with the DMP Tool](#)

## Recent DMP News

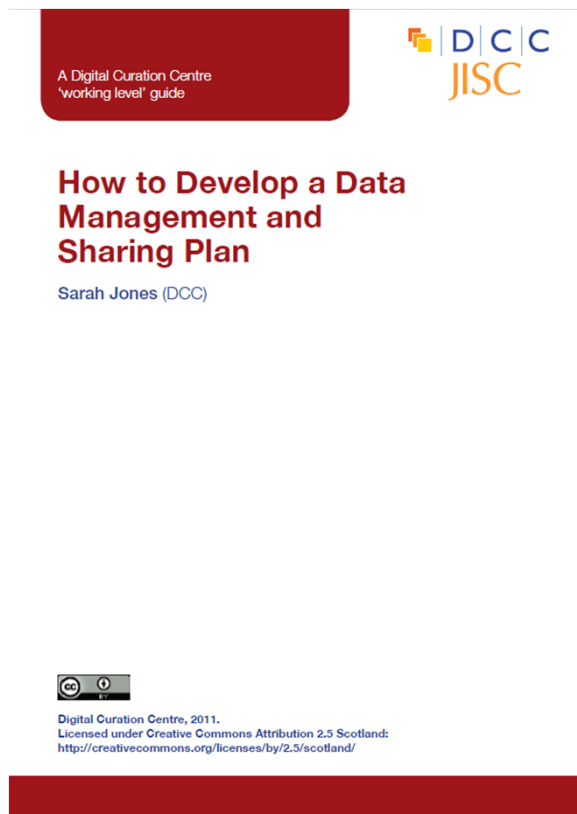
[DMPTool2 Project – October 2013 Report](#)

[DMPTool at the Data Information Literacy Symposium](#)

[DMPTool adds 100th institution!](#)

[More news >](#)

# Help from the DCC



[www.dcc.ac.uk/resources/  
how-guides/develop-data-plan](http://www.dcc.ac.uk/resources/how-guides/develop-data-plan)



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



[www.dcc.ac.uk/resources/data-  
management-plans/checklist](http://www.dcc.ac.uk/resources/data-management-plans/checklist)

# What is DMPonline?

A web-based tool to help researchers write data management plans

## **A short history**

- Launched in April 2010 at the Jisc conference
- Released v.2 in March 2011 with extra functionality
- Released v.3 in April 2012 with revisions in light of the DMPTool and work from the Jisc MRD programme
- v.4 beta just out, incorporating major changes from evaluation

# Main features in DMPonline

- Templates for different requirements (funder or institution)
- Tailored guidance (funder, institutional, discipline-specific etc)
- Ability to provide examples and boilerplate text
- Supports multiple phases (e.g. pre- / during / post-project)
- Granular read / write / share permissions
- Customised exports to a variety of formats
- API for systems interoperability
- Shibboleth authentication

# Collaboration on DMPonline

- Developed funder-specific guidance in collaboration with funders
- Developed institutional templates (questions and locally-specific guidance) with key contacts in universities
- Developed and deployed discipline-specific guidance with Jisc MRD projects (e.g. DMTPsych at York)
- Provide ongoing advice to the DMPTool consortium
- The use of DMPonline has been mooted for Horizon 2020

# DMPonline v.4 beta

This site is still in development. We hope you will try it out and appreciate your feedback via [DMPonline@dcc.ac.uk](mailto:DMPonline@dcc.ac.uk). However, you may encounter errors and we cannot guarantee that your data will not be lost. Please note you will need to sign up, existing DMPonline tool logins will not work.



<http://dmponline-beta.dcc.ac.uk>

Home

About

News

Help

Welcome.

DMPonline has been developed by the [Digital Curation Centre](#) to help you write data management plans.

Create an account to start your first plan.

## Sign in

[Forgot your password?](#)

Remember me

Sign in

## Sign up

New to DMPonline? Sign up today.

[Contact Us](#) | [Accessibility](#) | [Terms of Use](#) | [Privacy Policy](#)

© 2004 - 2013 DCC

The DCC is funded by

Jisc



# Creating an account

Welcome.

DMPonline has been developed by the [Digital Curation Centre](#) to help you write data management plans.

Create an account to start your first plan.

Sign in 

Sign up 

New to DMPonline? Sign up today.

sarah.jones@glasgow.ac.uk

Organisation

glas

[Glasgow Caledonian University](#)

[Glasgow School Of Art](#)

[University Of Glasgow](#)

Asks for email,  
organisation and  
password

Auto-fills uni  
options as you  
type

[Contact Us](#) | [Accessibility](#) | [Terms of Use](#) | [Privacy Policy](#)

© 2004 - 2013 DCC

The DCC is funded by

**Jisc**

# Creating a plan

## Create a new plan

Please select from the following drop-downs so we can determine what questions and guidance should be displayed in your plan.

**If applying for funding, select your research funder.**

Otherwise leave blank.

Medical Research Council

**To see institutional questions and/or guidance, select your university?**

You may leave blank or select a different institution to your own.

Institution

Institution

University Of Glasgow

Anglia Ruskin University

Aston University

Bangor University

Bath Spa University

Birkbeck College

Birmingham City University

**Tick to select any other sources of guidance you wish to see.**

Digital Curation Centre

Create plan

Select your funder  
(if any)

Select relevant uni  
for DMP questions  
and guidance

Select other  
sources of  
guidance

# Tailoring at multiple levels

## Create a new plan

Please select from the following drop-downs so we can determine what questions and guidance should be displayed in your plan.

**If applying for funding, select your research funder.**  
Otherwise leave blank.

Medical Research Council

**To see institutional questions and/or guidance, select your university?**  
You may leave blank or select a different institution to your own.

University Of Glasgow

Unit

Humanities Advanced Technology and Information Institute

**Tick to select any other sources of guidance you wish to see.**

Digital Curation Centre

Create plan

Options to have questions and guidance at institutional and 'unit' level

# Summary of what's in a plan

This plan is based on:

Funder | Economic and Social Research Council

[Answer questions](#)

[Export](#)

The ESRC requires that all applicants seeking ESRC funding include a statement on data sharing in the relevant section of the Je-S application form. If data sharing is not possible, the applicant must present a strong argument to justify their case.

Sections	Questions
Existing data	<ul style="list-style-type: none"><li>- An explanation of the existing data sources that will be used by the research project (with references)</li><li>- An analysis of the gaps identified between the currently available and required data for the research</li></ul>
Information on the data that will be produced	<ul style="list-style-type: none"><li>- Methodologies for data collection</li><li>- Data volume and data type, e.g. qualitative or quantitative data</li><li>- Data quality, formats, standards documentation and metadata</li></ul>
Planned quality assurance and back-up procedures (security/storage)	<ul style="list-style-type: none"><li>- Quality Assurance</li><li>- Back-Up</li></ul>
Management and archiving of collected data	<ul style="list-style-type: none"><li>- Plans for management and archiving of collected data</li></ul>
Overcoming data sharing difficulties	<ul style="list-style-type: none"><li>- Expected difficulties in data sharing, along with causes and possible measures to overcome these difficulties.</li></ul>
Consent, confidentiality, anonymisation and other ethical considerations	<ul style="list-style-type: none"><li>- Explicit mention of consent, confidentiality, anonymisation and other ethical considerations</li></ul>
Copyright and intellectual property ownership of the data	<ul style="list-style-type: none"><li>- Copyright and intellectual property ownership of the data</li></ul>
Responsibilities for data management and curation	<ul style="list-style-type: none"><li>- Responsibilities for data management and curation within research teams at all participating institutions</li></ul>

# Overview of sections in a plan

The screenshot displays the DMP ONLINE interface for a project titled "My project (NERC Template)". The user is signed in as s.jones@arts.gla.ac.uk. The interface includes a navigation menu with buttons for "View plans", "Create plan", "About", "News", and "Help". A status bar indicates "No questions have been answered". The main content area shows a list of sections, each with a dropdown arrow to expand it. A blue callout box highlights the "Outline DMP" and "Full DMP" tabs under "Plan details". Another blue callout box points to the "Allows multiple phases" text. A third blue callout box explains the "Summary page with dropdown buttons to expand and answer each section".

**DMP ONLINE**

Signed in as s.jones@arts.gla.ac.uk

View plans Create plan About News Help

My project (NERC Template)

No questions have been answered

Plan details Outline DMP Full DMP

- Organisation (3 questions, 0 answered)
- Roles and Responsibilities (1 question, 0 answered)
- Data Generation Activities (1 question, 0 answered)
- In-Project Data Management Approach (1 question, 0 answered)
- Metadata and Documentation (1 question, 0 answered)
- Data Quality (1 question, 0 answered)
- Exceptions or Additional Services (1 question, 0 answered)
- New Datasets (3 questions, 0 answered)
- Third Party/Existing Datasets (1 question, 0 answered)

Allows multiple phases

Summary page with dropdown buttons to expand and answer each section

# Questions and guidance

The screenshot shows a web interface for 'ESRC Data Management Questions'. At the top, there are tabs for 'Plan details', 'ESRC Data Management Questions', 'Share', and 'Export'. Below this, there are two main sections:

- Existing data (2 questions, 0 answered)**: This section is collapsed.
- Information on the data that will be produced (3 questions, 0 answered)**: This section is expanded. It contains a question titled 'Data volume and data type, e.g. qualitative or quantitative data'. The question is displayed in a rich text editor with a toolbar containing 'B', 'I', 'Paragraph', and icons for bulleted list, numbered list, and table. A blue callout box is overlaid on the text editor, containing the text: 'Easy-format text boxes to answer' and 'Can pre-populate boxes with examples / suggested answers'. Below the text editor is a 'Save' button and a status indicator 'Not answered yet'.

On the right side of the interface, there is a sidebar titled 'ESRC Guidance'. It contains two sections of guidance:

- ESRC Guidance** (collapsed):
  - Give a brief description of new data which you envisage creating. This information should include how the data will be collected (in line with the proposed research methods), their format (e.g. SPSS, Open Document Format, tab-delimited format, MS Excel), and how they will be documented.
  - Using standardised and interchangeable or open lossless data formats ensures the long-term usability of data. Clear and detailed data descriptions and annotation, together with user-friendly accompanying documentation on methods and contextual information, makes data easy to understand and interpret and therefore shareable and with long-lasting usability.
  - [Guidance on data formats](#)
  - [Guidance on documenting data](#)
- ESRC Guidance** (expanded): This section is currently empty.

# Answering questions

The screenshot shows a web interface for a project titled "My project (ESRC Template)". At the top right, a progress bar indicates "1/12" questions completed. Below the title, there are tabs for "Plan details", "ESRC Data Management Questions", "Share", and "Export". The main content area is divided into sections for different questions:

- Existing data** (2 questions, 0 answered) - expanded to show a text editor with the following content:

Data volume and data type, e.g. qualitative or quantitative data

The project shall generate new quantitative data (Bristol Online Survey outputs, SPSS data and outputs), qualitative data (digital audio files, audio transcripts, digital photographic and video data, workshop outputs, NVivo files), and mapping data (TIFF files). Metadata, in the form of pdfs and Excel spreadsheets, shall be used to facilitate the management and archiving of these data. Data shall be stored in password-protected folders on the host institution's secure servers. Data transfer between the PI and Co-I shall take place via face-to-face meetings.
- Information on the data that will be produced** (3 questions, 1 answered) - collapsed.
- ESRC Guidance** - collapsed.
- ESRC Guidance** - collapsed.

A blue callout box is overlaid on the text editor, containing the text: "Notes who has answered the question" and "Progress bar updates how much is left".

At the bottom left, there is a "Save" button and a notification: "Answered less than a minute ago by Sarah Jones". Below this, another question section is visible, titled "Data quality, formats, standards documentation and metadata", with a text editor and "ESRC Guidance" link.

# Sharing plan with collaborators

## Withdrawal of services for young people

Plan details | ESRC Data Management Questions | **Share** | Export

You can share your plan to allow others to read or edit it. Please insert the email address of the person you wish to share it with. You can leave a note to explain why you are sharing the plan, or what you wish them to look at.

### Collaborators

User name	Permissions	
Sarah Jones	Owner	
Laura Molloy	<input type="text" value="Read only"/>	<a href="#">Remove user access</a>

### Add collaborator

Email

Permissions:

Allow colleagues to read-only, edit your plan or become co-owners



# Exporting plans

## Withdrawal of services for young people

### ESRC Data Management Questions

#### Existing data

Questions	Answers
- An explanation of the existing data sources that will be used by the research project (with references)	The ESDS archive has been systematically searched using a series of search terms related to and derivative of 'public service withdrawal', 'impacts', and/or 'children' and 'young people'. Our overall assessment is that there are no datasets that will adequately address the aims of this project. The following datasets are tangentially related to this project.
- An analysis of the gaps identified between the currently available and required data for the research	Given the contemporary nature of the proposed project, we know of no datasets that cover users' (especially young people's) views and experiences of austerity measures and service withdrawal. The proposed project will therefore capture new and unprecedented data, for which there is an evident demand among national and regional stakeholders, decisionmakers and service-providers (see 'Pathways to Impact' attachment). Moreover, whilst several datasets incorporate longitudinal data, none includes data gleaned from oral history and multigenerational family interview methods central to the proposed project. The proposed project therefore represents an extension to the methods and data quality of the tangentially-related projects listed in section 1. Finally, the novel use of 'impact' activities to generate data (e.g. workshops, mapping software) exceeds the scope of all extant and even tangentially-related datasets.

#### Information on the data that will be produced

Questions	Answers
- Data volume and data type, e.g. qualitative or quantitative data	The project shall generate new quantitative data (Bristol Online Survey outputs, SPSS data and outputs), qualitative data (digital audio files, audio transcripts, digital photographic and video data, workshop outputs, NVivo files), and mapping data (TIFF files). Metadata, in the form of pdfs and Excel spreadsheets, shall be used to facilitate the management and archiving of these data. Data shall be stored in password-protected folders on the host institution's secure servers. Data transfer between the PI and Co-I shall take place via face-to-face meetings.
	Quantitative data shall be generated from an anonymous online survey (target 10,000 responses). The survey will be administered via Bristol Online Surveys (BOS) software: a secure, quality-assured, widely-used online survey tool. Data will be exported to SPSS for analysis.

# Institutions can customise DMPonline

Profile local support via custom guidance and boilerplate text



Select / write  
desired questions



Add your logo,  
URL etc



[www.dcc.ac.uk/news/customising-dmponline](http://www.dcc.ac.uk/news/customising-dmponline)

# Want to use DMPonline?

- Try out the beta at: <http://dmponline-beta.dcc.ac.uk>
- Request new features on GitHub:  
<https://github.com/DigitalCurationCentre/DMPOnline>
- Contact us about collaboration on:  
[dmponline@dcc.ac.uk](mailto:dmponline@dcc.ac.uk)

# Thanks – any questions?

DCC guidance, tools and case studies:

[www.dcc.ac.uk/resources](http://www.dcc.ac.uk/resources)

Follow us on twitter:

@digitalcuration and #ukdcc



D|C|C

because good research needs good data