

=Research & Impact

## Ulster University PURE Guide Series

## Research Data Management (RDM) Using PURE for Datasets



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### What is Research Data Management?

Research data management (or RDM) is a term that describes the organisation, storage, preservation, and sharing of data collected and used in a research project. It involves the everyday management of research data during the lifetime of a research project (eg: using consistent file naming conventions). It also involves decisions about how data will be preserved and shared after the project is completed (eg: depositing the data in a repository for longterm archiving and access).

Managing research data well means that researchers can take full advantage of the data they hold, and ensures that data can be preserved and shared, so that results can be verified, and data can be reused in the future. Research data management saves time and resources in the long run.

As an institution, Ulster University supports the principle of open access to publicly funded research outputs and research data. Research data generated at Ulster University is recognised as an institutional asset that, when shared openly, not only increases the visibility of Ulster University's research but also facilitates public engagement and creates new opportunities for knowledge exchange and collaboration.

It is recommended all researchers should be familiar with <u>Ulster's RDM Policy</u>, <u>GDPR</u> and the <u>Data Protection Act</u> <u>2018</u>.

Further information can be found at the Research Data Management website at the link below:

#### What is a dataset?

A dataset refers to the data itself (data files) and can be in many different formats eg: paper questionnaires, word files, excel spreadsheets, etc.

#### What is a dataset record?

A dataset record is the metadata describing the details of the research project e.g. title, description, date of publication, contact details, etc. and can have many datasets associated with it. All datasets associated with a research project should be uploaded to the dataset record.

# What must Ulster University researchers do?

Ulster University researchers are required, as a minimum, to:

 archive, where possible, research data in line with funders' guidelines and <u>Ulster University's RDMPolicy</u> by creating, in PURE, a dataset record (metadata) describing your research and either upload the dataset or point to where it is located, if it is stored elsewhere.

For example:

a. if you have already stored/published your data in an external data repository e.g. Funder's or Departmental server:

Create a dataset record in PURE and add a persistent identifier (e.g. a URL or DOI) which points to the external dataset;

- b. if you wish to publish your dataset in PURE (with access restrictions/embargo if necessary):
  - Create a dataset record in PURE and upload your datasets (files), setting the appropriate restriction/embargo.
  - Once the dataset record is complete and ready to be published on the PURE portal contact the PURE Support Team (puresupport@ulster.ac.uk) and inform the team that a dataset record has been created and is awaiting validation.
  - A member of the PURE Support team will review the dataset record and contact the Data Manager (i.e. the first listed contact in the dataset record) to obtain confirmation that the Data Manager approves the record.

- Once confirmation from the Data Manager is received a DOI will be minted and the dataset record validated.
- Finally, a message will then be sent to all contributors as a notification that a DOI has been minted for the dataset record.

**Please note**: that each funding body will have different rules on when metadata and datasets should be made available. Further information on funders' requirements can be found at:

http://www.dcc.ac.uk/resources/policy-andlegal/overview-funders-data-policies

### Licensing your data

The University promotes and supports open research to increase transparency in our research processes, reproducibility of our research results and to maximise access to our research outputs. Licensing is an important aspect of practising open research. In accordance with this position, we recommend that you consider applying an open licence to your research data.

By applying licences to your data, you remove any ambiguity over what others can - and cannot - do with your work. Licences allow your outputs to be shared and re-used under flexibly, legally sound terms.

For guidance on open licences read '<u>Help with choosing an</u> <u>Open Data Licence for your research data</u>'.

Once you have decided on an open licence, you can use the following step-by-step guide to apply the licence to your dataset in PURE.

# Introduction to Datasets in **PURE**

This guide has been developed by the Research Performance team, to assist researchers when using PURE for the creation and publication of datasets, along with other support materials, and can be found on the <u>RDM</u> webpage.

You can contact a member of the Research Performance team at <u>pure-support@ulster.ac.uk</u> if you require further assistance.

#### Helptext



Alongside this guide, use the Helptext function in the dataset record template to assist with the completion of the dataset record. You can also download this guide and get access to the RDM webpage from the Helptext.

Click on the Helptext at the top right-hand corner to display the Helptext for all sections or click on the Helptext for individual sections, when required.

# Adding a dataset record in PURE

Login to PURE at: https://pure.ulster.ac.uk/admin with your UU email and Network password

Click on Datasets

42

Click on

and a dataset record template appears



### Completing a dataset record

Complete as much detail as you can in the dataset record template. PURE will not allow you to save without completing all the mandatory fields. These are denoted by a red asterisk\*.

#### **Dataset Record Template**

A dataset record template in PURE contains the following sections:

- 1. Identification
- 2. People
- 3. Dataset managed by
- 4. Data availability
- **5.** Access to the dataset
- 6. Access contact details
- 7. Temporal coverage
- 8. Geo location
- 9. Legal/ethical
- 10. Relations to other content
- **11.** Visibility

The sections in bold contain at least one mandatory field. Before creating a dataset record it is recommended you have all relevant information to hand, e.g. the metadata of the research project and the datasets themselves.

#### 1. Identification

#### Title\* and Description:

The information in the title and description fields should enable other researchers to understand the dataset record. The description field can take at least 1,000 words (6.5k characters).

#### Date of data production:

This is not a mandatory field, however, it is useful to complete this field so that other researchers can see if the time period of data production is relevant to their research.

#### 2. People\*

People 🗿			
People <b>*</b> Marie Mallon, Creator Person  Research & Impact Organisational unit: Department  Add person	nit)	Edit -	
	20	Edit person	-
Rol Cr Ov Ca Da Da Da Da Da Da Da Da Da	Marie Mallon Internal person	taset t (1/08/17 → present)	Cancel Create

PURE will add your name automatically and the default role displayed is 'creator'. You can change this by clicking on 'Edit' and choosing a different option from the drop-down menu.



#### Adding an internal Person:

Add the Principal Investigator, Co-Investigators and other colleagues who contributed to the project by clicking on 'Add person' – start typing their name and PURE will display them in the drop-down menu.

People #	(+1)
A Marie Mallon, Creator	Edit —
Research & Impact Organisational unit:	a – Department
(Add person) (Add or	rganisational unit
	Search and add Person - or create External Person
	Search Create external person
	Q wendy aiken
	Wendy Aiken Research Performance Administrative (Statt)
Edit person	
Wendy Aiken Internal person	
e *	
eator 🐨	
iliation on the dataset	
Perserrh Performance (1000017	
Kesearch Performance (1/00/17 - present)	
dd organisation	
dd organisation	

Once you have located the person:

- Click on their name
- Choose their role
- Their affiliation should already be set
- Click Create

If you have already added them and want to edit their role, click on the 'Edit' button next to their name.

#### **Adding an External Person:**

External contributors can also be added using the 'Create external person' function.

- Click 'Add person'
- Click 'Create external person'
- Add their 'First name' and Last name'
- Choose their role
- Add organisational unit
- Click Create

Swarr	h Cre	eate external person
Jeare		cate external person
Search and	i add Perso	on - or create External Person
Se	earch Ci	reate external person
First name		Last name #
AN POINT AND		
		1.16
Role *		Туре
Creator 💌		External person 🐨
Country		
-		
Affiliation on the	dataset	
Ornanisational unit	1	
organisational ultim		
Add organisation	al unit	

#### 3. Dataset managed by

#### Managing organisational unit\*:

This will be prepopulated with the organisational unit affiliated to the person that is creating the dataset record. This can be amended, however, by clicking on 'Change organisation'.



#### 4. Data availability

#### Publisher\*:

If you have archived or published your data already in an external data repository, the publisher will be the external repository owner, e.g. UK Data Archive.

If the datasets are held at Ulster University and you want to publish your dataset in PURE, then the publisher will be Ulster University.

Data availability 👔
Publisher 🗚
Add publisher

#### Adding a publisher:

- Click on 'Add Publisher'
- Start typing the Publisher's name in the search box

	Add publisher	
	Search Create new	
🔍 ulster		C
1 - 10 / 211		
<mark>Ulster</mark> Publisher		
CHEP, <mark>Ulster</mark> Publisher		
Ulster Univeristy Publisher		

- PURE will display the Publisher in the drop-down menu, if they are already in the system
- If the name does not appear click 'Create new'
- Type the Publisher's name
- Click
   Create
- If you need to change the publisher, you can do so using the 'Change publisher...' function.

Add publisher Search Create new
Type of publisher Publisher
Name
Cancel Create
Data availability 👔
Publisher 🗚
Ulster Univeristy
Change publisher

#### DOI:

A Digital Object Identifier (DOI) is a unique character string which identifies the location of a digital object e.g. dataset or journal article and can be used as a persistent hyperlink to the digital object.

#### Adding an existing DOI:

• Click 'Add existing DOI'

Data availability 👩		
Publisher <b>*</b> Add publisher DOI		
Add existing DOI -or-	If you do not have a DOI already one can be minted from the Dataset Record after your have saved it. Refer to the guide 'Using PURE for Datasets'.	

• Place the DOI in the 'Insert DOI' box

Create DOI	
Insert DOI (Digital Object Identifier)	
Example: 10.1000/182	
	Cancel Save



#### **Creating a DOI:**

**Please note**: A DOI will be minted by a member of the PURE Support Team during the validation process.

It is important to note that once a DOI is minted the editing rights to the dataset record is limited for staff members, particularly around uploading or amending documents.

While you are working on your dataset record in PURE you should save your record as 'Entry in Progress'. Once your dataset record is ready to be published, change the status of your record to 'For Validation'.

#### **Electronic data:**

This relates to the datasets (files) themselves.

Multiple datasets (files) can be uploaded to a dataset record but in the case of datasets which contain personal identifying information relating to research participants, or other individuals, these should only be uploaded or linked if they are fully anonymised. Further information on handling sensitive and/or personal data is available at the <u>Research Data Management</u> <u>website</u>.

**Please note:** Care should be taken to ensure that where multiple datasets are being made available, they do not, in combination, increase the risk of identification.

If you are unsure, please contact the Data Protection Officer in the <u>Office of University Secretary</u> for guidance.

- You can add the dataset itself if you want to publish using PURE.
- If the dataset is published externally, there is no need to add it in PURE, but you are required to add a link eg DOI pointing to the external repository.

Pure accepts a wide variety of file formats. If your file size is exceptionally large or you encounter problems uploading your data then please email the PURE Support Team on <u>pure-support@ulster.ac.uk</u> for assistance.

#### Adding a dataset (file):

- Drag the file into the 'Electronic data' box or
- Click 'browse' and select the file to be uploaded

Publisher <b>*</b> Add publisher		
Add existing DOI -or-	If you do not have a DOI already one can be minted from the Dataset Record after your have saved it. Refer to the guide 'Using PURE for Datasets'.	
Electronic data Drag files o Max filesize:	r <b>browse</b> your computer. 5120 MB.	

• Click 'Open'.

Once the file has been uploaded you will be prompted to select the *Visibility, Licence, Type* and *Embargo end date*.

File name	File size	Visibility		License	Type	Embargo end date
36852_Douglasdoc	416 KB	Public - No restriction	Apply to all	No value 📼	Audiovisual 👻	(III)
		Public - No restriction				
		Campus - Restricted to spe Backend - Restricted to Pu	ecific IP rang re users	e		

It is possible to set the visibility, licence, type and embargo to be different for each file but if you wish to apply the same setting to all files select the 'Apply to all' feature that appears next to the boxes.

The licence will default to 'no value' unless changed. To apply an open licence, simply select the desired licence from the drop –down menu.

			Multiple file upload		
File name	File size	Visibility	Licence	Туре	Embargo end date
1_2_2_1pdf	758 KB	Public – No restriction 🛛 🖝	No value 🤝	Audiovisual 👻	
			No value 🔶		
			CC BY		
			CC BY-SA		
			CC BY-ND		Cancel OK
			CC BY-NC		
			CC BY-NC-SA		
			CC BY-NC-ND		
ntact details 🕧			PDDL		
arron			ODC-By		

As part of the validation process, a member of the PURE support team will create a licence information sheet to accompany your dataset. The licence information sheet will provide a full citation for your dataset.

**Please note**: Once granted, an open licence cannot be withdrawn from someone who is already reusing your work. It is therefore important that you carefully consider open licences before you apply one to your dataset. See <u>Help with choosing an Open Data</u> <u>Licence for your research data</u>.



**Please note:** The embargo affects the file itself, and not the dataset record, so if you set an embargo for six months, for example, the dataset record will be visible on the PURE Portal immediately after being 'Saved', but the dataset (file) will only become visible once the embargo has lifted, in six months time.

#### To view a dataset (file) that has been uploaded

Click Show

To make a change to the options previously chosen

Click Edit

#### To delete a dataset (file)

Click on the remove button



#### **Physical data:**

**Please note:** This is not a mandatory field in PURE but if you have physical data Ulster's RDM Policy require the completion of this field.

Most funder's policies apply to physical data as well as electronic data. You are required to complete the metadata for all datasets and provide reasonable access to the physical data. You should describe the data (e.g. paper records of questionnaires) and describe the arrangements that are in place to access the records (e.g. by contacting the person named in Access contact details).

#### Adding the details of Physical data:

• Click on 'Add details of Physical data' and complete the details before clicking 'Create'.

#### Links:

If your dataset is stored in an external repository and has a URL that points to the dataset, add the URL by clicking 'Add link' and entering the URL. You can also use this field to add URLs for websites of other Organisations or Institutions that contributed to the research.

#### Date made available\*:

This is essentially the publication date of the datasets (files). Only the year of publication is mandatory but it is helpful to be more specific if you can. You could use the date of the creation of the dataset record if an embargo has not been set on the datasets. If an embargo period has been used on the datasets, then the date made available should be the day after the embargo period ends (so the day your datasets become visible).

#### 5. Access to the dataset

This can be ignored if the visibility and embargo is set on individual datasets.

#### 6. Access contact details

**Contact Information:** The person added here must be someone that was added in the people section.

#### 7. Temporal coverage

Temporal coverage refers to the period of time the dataset covers, for example, the data covers animal records from 1850-1905.

#### 8. Geo location

**Geographical coverage:** this is not mandatory field but it can be helpful to indicate the regional, national or international coverage of the data.

#### 9. Legal/ethical

**Please note:** It is assumed that your dataset is not subject to GDPR as your data should not contain any personal identifying information for any of your research participants.

If there are issues of this nature, please carefully consider the access conditions you apply to your dataset(s) and the visibility of the dataset record itself.

The information in this section will not be available on the public portal

Add the details of any constraints by ticking the relevant box and typing the information into the details box.

ls	the data subject to any of the following constraints?
~	Data protection
Ple	ease give details
_	
	Ethical approval
	Commercial constraints

#### **Data protection:**

 Documents/datasets should only be uploaded or linked if they are fully anonymised and do not contain personal identifying information relating to research participants or other individuals. Care should be taken to ensure that where multiple datasets are being made available, they do not, in combination, increase the risk of identification. Please ensure that you are aware of the requirements of the <u>Data Protection Act 2018</u> and <u>GDPR</u>. If you are unsure, please contact the University's Data Protection Officer in the <u>Office of University</u> <u>Secretary</u> for guidance.

#### **Ethical Approval:**

 All research studies involving human participants are subject to ethical approval, which must be in place before data collection commences. While ethical constraints will not apply to anonymised or coded datasets in most circumstances, if you are concerned that making your dataset visible will breach your ethical approval or the Data Protection Act 2018 please DO NOT upload or link it without seeking further advice from <u>Research Governance</u> or the University's Data Protection Officer. • If your research has ethics approval, please include the ethical or filter committee reference number and date of approval. Tick the 'Ethical Approval' box and provide the information in the text box.

#### **Commercial constraints:**

 If your data is of commercial value and/or is subject to contractual restrictions you should ensure that it is fully protected and that you are not at risk of breaching contractual obligations before you disclose, upload or link any documentation. If you are unsure please seek further advice from the <u>University Intellectual Property</u> <u>Manager</u> or <u>Research Development.</u>

#### • Patents

If you have obtained a patent, please add the Patent Number by ticking the 'Commercial constraints' box and add the details in the text box.

#### Sensitive:

Ulster University conducts research in disciplines which might be regarded as sensitive including, for example, political activism, work with animals and in the area of genetically modified organisms. If you believe that your research is in a sensitive subject area, please ensure that appropriate policies have been followed throughout and that adequate protection for individuals is in place. If you are concerned that making your data visible will put individuals or the institution at risk in any way please contact <u>Research Governance</u> prior to taking any further action.

#### 10. Relations to other content

You can link your dataset record to other content in PURE (e.g. projects, publications, activities) thereby building a dynamic and interconnected picture of your research. You should link your dataset record to all associated content where appropriate.

**Please note:** To meet many funder requirements, you should also link your dataset record to all associated publication records.

#### Adding other content in PURE to a dataset record:

Click

+1

- for one of the areas listed eg Projects.
- Once you begin to type PURE will list items, already in the system, in a drop-down menu. Click on the item to be added and keep repeating the process until all items have been added.

Projects		
+0		
	Start typing to begin the search.	
2	Search results will be updated while you type.	
1.2		
<b>T T</b>		
Research out	puts	
+0		
Activities		
, tectivite o		

Removing an item from a dataset record:

• Click the remove button on the right-hand side of the listed relation



Projects	
+0	
Equipment	
+0	
Student thesis	
+ 81	
Research outputs	
Ussolving Boundaries in North-South Education	
Research output: Research – peer-review > Article	-
US Assessing Impact of ICT Intercultural Work	
Research output: Research – peer-review > Article	
W Supporting community cohesion through ICT: The epartners programme in	
Northern Ireland	
Research output: Research - peer-review > Article	
I Online Learning and Community Cohesion. Linking Schools	2
Research output: Research - peer-review > Book	
+10	
Activities	
12	

#### 11. Visibility

PURE has dual controls on the access to datasets and their visibility, ensuring dataset owner(s) using PURE have complete control over who sees their data and has access to it.

If your dataset is not openly available, the RDM Policy requires that a dataset record is visible to show that a dataset exists. If you have any queries on this point, please contact <u>pure-support@ulster.ac.uk</u>.

Use this field to set the visibility of your dataset record (as distinct from the dataset itself).

You have a few options:

- **Public:** your dataset record will be openly available through the PURE portal
- **Campus**: your dataset record will be available from allowed (campus-based) IP-addresses
- **Backend**: your dataset record will be visible to Ulster University research and academic staff and administrators
- Confidential: your dataset record will be visible for contributors and users with editorial rights to the content

If you make the dataset record visible but restrict the visibility of the dataset itself, only the metadata will appear on the public portal.

The default visibility of a dataset record in PURE is '*Public*-*No restriction'*. This means the dataset record (the metadata) is visible in the PURE Portal immediately on being 'Saved'. If the metadata should be restricted, set the restriction accordingly in the 'Visibility' box. This can be changed, as many times as is necessary, at any time during the life of the project.

#### Changing the visibility of a dataset record:



#### 12. Saving a dataset record

While you are working on your dataset record in PURE you should save your record as 'Entry in Progress'. Once your dataset record is ready to be published, change the status of your record to 'For Validation' before clicking 'Save'. Once you have saved your record 'For Validation' contact the PURE Support Team (pure-support@ulster.ac.uk) and inform the team that a dataset record has been created and is awaiting validation.



#### Identifying the visibility of a dataset record:

The visibility and level of restriction of a dataset record can be identified by the colour of the dot displayed on the righthand side of the screen, whilst in the list view.



If the dot is white then no restriction has been set and the dataset record is visible in the PURE Portal. If the dot is coloured grey, black or red then a restriction has been set.

This guide has been produced by the Research Performance team (Research & Impact).

If you have any comments please contact pure support@ulster.ac.uk