

# Data Preservation and Open Research Data Policy

July 2023

# **Aston University Data Preservation and Open Research Data Policy**

### 1. INTRODUCTION AND PURPOSE

In alignment with Aston University's commitment to open research, this policy specifically focusses on the preservation of research data and its use and dissemination by Aston University researchers.

Aston University supports an open research culture among its researchers. Open research is the establishing and enacting of good practice across disciplines that allows knowledge to be accessible throughout the research lifecycle. Adopting open research practices can increase the visibility of a research profile through increasing citation and collaboration opportunities. By supporting the availability of research data, processes and outputs, open research fosters collaboration, transparency, and reproducibility so that the benefits of scholarly research can be shared. This is in line with Aston's values and commitment to deliver research that changes lives for the better through collaborations between students, academic staff and industry leaders. To facilitate that mission, Aston University is committed to making research "as open as possible, as soon as possible" to best serve public society, industry and our beneficiaries.

# 1.1 Purpose of the policy

While the University respects the right of its researchers to retain research data privately in preparation for a publication, patent or grant submission, in all other possible situations, when suitable, we encourage data to be made available for all. Through following the FAIR (Findable, Accessible, Interoperable, Reproducible) principles<sup>1</sup>, research data made 'Open' can be effectively shared with others who may find new value in it. Potential research outputs then forthcoming through use of this data can attribute the original creator and potentially instigate future collaboration.

### 2. SCOPE OF POLICY

This policy covers Aston's expectations in relation to open research data and outlines what is expected of researchers when making research data open to others, including preservation via the use of the Aston University institutional data repository, Aston Data Explorer. The policy also outlines the responsibilities of Aston's professional services, who support our researchers with open research data.

This policy should be read alongside the 'Research Data Management Policy' which prescribes the expectations and outlines the responsibilities relating to managing research data during the active stages of the research lifecycle.

# 2.1 Who is covered by the policy

This policy applies to all researchers (defined as any staff members conducting research and doctoral research students) at Aston University with contractual responsibility for research data generation, collection, and/or analysis, or who produce or use research data.

<sup>&</sup>lt;sup>1</sup> FAIR Principles: https://www.go-fair.org/fair-principles/

### 2.2 Research Data

Research data are defined by the UKRI Concordat on Open Research Data<sup>2</sup> as 'the evidence that underpins the answer to a research question'. The data can be quantitative or qualitative and may either be primary (generated first hand) or processed secondary data (building upon primary data) where the rights for the original data may be held elsewhere. Contemporary research data tends to exist digitally and takes many different forms including documents, spreadsheets, code, models, transcripts, images etc. However, historic and visual data can still exist in physical records including books, sketches, photographs, audiotapes and specimens.

For a more comprehensive table of research data examples please see Appendix 1.

If you are engaged in a Knowledge Exchange activity whereby you are generating research data, you are expected to abide by the standards set out within this policy.

# 2.3 Policy Ownership

Research Committee owns this policy and oversees its implementation via College Research Committees.

The chair of the research committee is responsible for ensuring that this policy is reviewed every two years (unless there is a substantive change to regulations relating to open research data).

### 3. POLICY IN PRACTICE

# 3.1 Which Research Data can be made Open?

- 3.1.1 Research data that is not constrained by legal, commercial (Intellectual Property), ethical, privacy or sensitivity parameters. This includes personal and sensitive data where consent has been explicitly given to the researcher for research purposes, which is then suitably anonymised, providing the data remains useful.
- 3.1.2 Research data subject to specific funder mandates relating to preservation, sharing and re-use.
- 3.1.3 The Principal Investigator (PI) or research lead has responsibility over what data they choose to make available to others, including the data format. The PI should consult any third parties (academic and non-academic partners) when making these decisions.

# 3.2 Which Research Data must be made Open?

- 3.2.1 Research data generated from a funded project where a stipulation of the funding requires that data are made openly available.
- 3.2.2 Research data which underpins results (figures, tables, schematics etc.) published in a journal article must be made available in a suitable data repository (see 3.3.6). The location of the data and any necessary access restrictions will be outlined in a 'Data Access Statement' of the affiliated article.
- 3.2.3 Data Access Statements are mandatory even when no new data has been generated or analysed. Please see the open research <u>webpages</u> for further guidance.

<sup>&</sup>lt;sup>2</sup> https://www.ukri.org/wp-content/uploads/2020/10/UKRI-020920-ConcordatonOpenResearchData.pdf

# 3.3 How, When and Where can Research Data be made Open

- 3.3.1 Research data to be made available for others must be carefully screened to check that no personal information is included, which could identify individual research participants. To be fully anonymised/pseudonymised, the data must not have any means of linking it back to the individual, at this stage the data are no longer classed as 'personal data' under UK GDPR.
- 3.3.2 All research data must be easily identifiable and retrievable when needed. Persistent Identifiers (PID) such as a Digital Object Identifier (DOI) should be used to identify unique individual datasets.
- 3.3.3 Data made open should be in a non-proprietary and/or commonly used software format whenever possible.
- 3.3.4 In accordance with FAIR research data principles Aston researchers who make data open must clearly describe the data and explain how it has been used to date. This can be achieved through providing metadata<sup>3</sup> of sufficient detail and, when necessary, providing additional descriptive information in a README file.
- 3.3.5 The lead researcher/principal investigator is responsible for checking and adhering to funder or partner requirements in relation to the timing of release of research data.
- 3.3.6 Research data suitable for long term preservation should be deposited in a secure repository such as Aston University's institutional data repository <u>Aston Data Explorer</u> (see Section 3.4) or a suitable subject-specific repository which uses persistent identifiers such as a DOI (such can be found using <u>re3data.org</u>). Data which has been deposited in a suitable external subject-specific repository should be shared with the open research team (<u>researchdata@aston.ac.uk</u>) who will create a linked record on the Aston affiliated researcher's PURE profile.
- 3.3.7. Exclusive rights to re-use or publish research data should not be handed over to commercial publishers or agents unless this is a condition of funding or other agreed third-party rights.
- 3.3.8 Research data deposited on Aston Data Explorer will be reviewed by the open research team to check that fields have been entered correctly before a DOI is assigned. When published, the dataset will be linked to the data creator(s) PURE profile and be visible on <u>Aston Research Explorer</u>

# 3.4 Usage and Sharing of Open Research Data

- 3.4.1 Using open research data is encouraged at Aston. Similarly with any open-source data, it should be critically evaluated before use and any queries regarding the integrity/quality of the data should be directed to the data creator(s).
- 3.4.2 All usage and copyright licenses attributed to a dataset must be respected and adhered to when using or sharing open research data from Aston Data Explorer or any other source. This includes clear attribution of original data creator(s) if going on to generate any new research outputs.

<sup>&</sup>lt;sup>3</sup> Metadata: data which gives information about other data

# 3.5 Preservation of Research Data – Aston Data Explorer

- 3.5.1 Aston University provides an institutional data repository for its researchers to deposit and preserve their research data. <u>Aston Data Explorer</u> can be accessed through a web interface using your institutional login details.
- 3.5.2 Only researchers who have generated the research data whilst working at Aston can upload datasets to Aston Data Explorer. Staff who leave Aston University cannot deposit the same dataset at another institution. Datasets deposited by a staff member who subsequently leaves Aston University will remain on Aston Data Explorer.
- 3.5.3 Datasets which require restricted access on confidential, sensitivity, contractual or legal grounds can be deposited on Aston Data Explorer when the necessary permissions have been granted. This can be either under embargo to match the restrictions applied to an affiliated paper, or on an ad hoc request basis to the data creator/affiliated research group.
- 3.5.4 Datasets deposited online should be limited to a size of 10GB. Should you need to store a larger file contact researchdata@aston.ac.uk.
- 3.5.5 Preserved data will be visible for a minimum period of ten years from last access, after which the dataset will be retired from public view unless requested differently upon deposit. Datasets deposited in the Aston Data Explorer are backed-up to Arkivum a large-scale, long-term digital data archive with ISO 27001 data security certification.
- 3.5.6 In the event of Aston Data Explorer being discontinued, best efforts will be made to contact the data depositor well in advance of any discontinuation, allowing time to transfer the datasets to another suitable repository.

# 3.6 Copyright and Takedown Procedure

- 3.6.1 If no external contract exists, all primary research data generated by Aston University researchers falls under the responsibility of Aston University.
- 3.6.2 If you believe an item has been deposited in violation of copyright, please contact <a href="researchdata@aston.ac.uk">researchdata@aston.ac.uk</a> in the first instance and the matter will be dealt with in line with the Aston Data Takedown Policy<sup>4</sup>. While the matter is being investigated the University will restrict access to records as soon as possible.
- 3.6.3 Decisions on when and whether a dataset will become available again may take some time and if necessary, may be dependent on Aston seeking legal advice.

# 4. RESPONSIBILITIES

# 4.1 University

4.1.1 The Aston professional services who are involved with open research data processes include the Library, Digital Services, Research Knowledge Exchange (RKE) and Legal Services.

<sup>&</sup>lt;sup>4</sup> Aston Data Take Down Policy: https://researchdata.aston.ac.uk/take down policy.html

4.1.2 Aston professional services teams are responsible for developing sufficient training resources and offering support and guidance relating to open research data. They are also responsible for the functional provision of the research data repository (Aston Data Explorer) and the security and preservation of any data deposited.

# 4.2 Heads of School/Department or Associate Deans for Research

- 4.2.1 Ensuring that researchers in their area are aware of this policy and their responsibilities in relation to it.
- 4.2.2 Assist researchers in their area to meet the requirements of this policy.

### 4.3 Researchers

- 4.3.1 All researchers will need to familiarise themselves with the content of this policy, ultimately the lead researcher or PI of a research project will be expected to have oversight of final decisions regarding making data open. These decisions include:
  - Deciding what data are made open
  - Choosing what format the data are in
  - Ensuring the research data follows the FAIR principles
  - Deciding the most suitable repository for the dataset
  - Checking if there is any funder, publisher, ethical or legal restriction or requirement regarding making data open.

# 5. EXCEPTIONS TO THIS POLICY

Research data subject to contractual, regulatory and/or funder policies will need to be managed in line with the stipulated requirements. In this case these requirements supersede the details pertained inside this policy.

### 6. SOURCES OF GUIDANCE

Advice on how to implement the requirements set out in this policy are available via the <u>library</u> <u>webpages</u> or by emailing <u>researchdata@aston.ac.uk</u>

# 7. RELATED POLICIES

This policy should be read alongside the following:

Research Data Management Policy

Concordat on Open Research Data

**Intellectual Property (IP) Policy** 

Research Integrity Policy

**Research Ethical Principles and Procedures** 

**Research Misconduct Policy** 

**IT Security Framework** 

**Data Protection Policies and Procedures** 

**Records Management Policies and Procedures** 

General Regulations for Degrees by Research and Thesis

# Appendix

1 – Table of different types of research data

Data	Description & Example		
Observations*	Measuring and recording qualitative or quantitative data through experimentation, e.g., real-time measurements of Carbon Dioxide		
Questionnaires*	Participant responses to questions posed, e.g., participant responses to medical survey		
Audio*	Audible recording of sounds, e.g., recording bird call in the forest		
Photographs*	Image captured on light sensitive material or digitally, e.g., telescopic photograph of constellations		
Specimens/Samples*	A piece of material of research interest to be studied, e.g. a specimen of bauxite		
Films*	A recording of motion pictures, e.g., a film of a volcanic eruption		
Sketchbooks*	Drawing by hand, e.g., sketch of rock formations on a cliff face		
Transcripts*	A verbatim recording of words recorded, e.g., a transcript of a police interview		
Spreadsheets	An electronic document in which data are stored and can be manipulated in equations, e.g. a spreadsheet showing student attendance		
Code	A text and numerical computer language with instructions and rules which can allow software, calculations etc. to operate, e.g. an R script of wind velocity data which when run produces diurnal plots		
Models	A predictive computer simulation usually using known data and a host of mathematically applied possibilities/scenarios to try and better understand real world events (past or future), e.g. forecasted future weather events		
Algorithms	A sequence of mathematical/computational steps to perform a function, e.g. the operation of a search engine to deduce most relevant responses		

<sup>\*</sup> Data can exist within a physical object when not recorded in, or converted to, a digital form

Version	1	Author	Research Integrity Office and Library
			Services
Approved date	19/07/2023	Approved by	University Research Committee
Review date	19/07/2025		