# **Engineering and Physical Sciences Research Council** (EPSRC): EPSRC Data Management Plan

## **Data Collection**

What data will you collect or create?

#### Guidance:

Research data is defined by EPSRC as recorded factual material commonly retained by and accepted in the scientific community as necessary to validate research findings.

Although the majority of such data is created in digital format, all research data is included irrespective of the format in which it is created.

How will the data be collected or created?

#### Guidance:

Plans should be in accordance with relevant standards and community best practice.

## **Documentation and Metadata**

What documentation and metadata will accompany the data?

#### Guidance:

Sufficient metadata should be recorded and made openly available to enable other researchers to understand the potential for further research and re-use of the data.

EPSRC recommends that appropriately structured metadata is published (normally within 12 months of the data being generated) and made freely accessible on the internet. In each case the metadata must be sufficient to allow others to understand what research data exists, why, when and how it was generated, and how to access it.

Where the research data referred to in the metadata is a digital object, it is expected that the metadata will include use of a robust digital object identifier (For example as available through the <a href="DataCite organisation">DataCite organisation</a>).

Published research papers should include a short statement describing how and on what terms any supporting research data may be accessed.

Think about how much time/effort will be needed to create appropriate supporting documentation/metadata prior to depositing retained data, and ensure you have the resources to cover this aspect.

# **Ethics and Legal Compliance**

How will you manage any ethical issues?

#### Guidance:

EPSRC recognises that there are legal, ethical and commercial constraints

on release of research data. To ensure that the research process (including the collaborative research process) is not damaged by inappropriate release of data, research organisation policies and practices should ensure that these constraints are considered at all stages in the research process.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

## Guidance:

EPSRC expects those it funds to maximise the impact of their research for the benefit of the UK, including (but not limited to) the efficient recognition, protection and exploitation of intellectual property. Collaboration in EPSRCfunded research by private sector organisations is particularly important in this regard.

EPSRC expects that research organisations will make appropriate use of the provisions available in the legislation to guard against inappropriate release of research data which might damage the collaborative research process, and work against the national interests of the UK, In this regard, EPSRC views the use of appropriate confidentiality agreements and publication plans as essential elements of research management strategy.

# Storage and Backup

How will the data be stored and backed up during the research?

## Guidance:

When considering where to store your data, please bear in mind that all reasonable steps should be taken to ensure that publicly-funded data is not held in any jurisdiction where the available legal safeguards provide lower levels of protection than are available in the UK.

How will you manage access and security?

#### Guidance:

Where research data is subject to restricted access, research organisations should implement and manage appropriate security controls.

## **Selection and Preservation**

Which data are of long-term value and should be retained, shared, and/or preserved?

#### Guidance:

Data with acknowledged long term value should be preserved and remain accessible and useable for future research.

Such research data should be securely preserved for a minimum of 10 years from the date that any researcher 'privileged access' period expires or, if others have accessed the data, from last date on which access to the data was requested by a third party.

What is the long-term preservation plan for the dataset?

#### Guidance:

EPSRC expects Research Organisations to ensure that researchers have access to and use appropriate research data storage facilities, which may be directly owned and managed by the research organisation, or by a third party, or by a combination of the two, and may be generally known as either an institutional or a subject-based data repository.

# **Data Sharing**

How will you share the data?

#### Guidance:

Researchers are expected to facilitate data preservation and sharing. Publicly-funded research data that is not generated in digital format should be stored in a manner to facilitate it being shared in the event of a valid request for access to the data being received.

Are any restrictions on data sharing required?

#### Guidance:

EPSRC-funded researchers are entitled to a limited period of privileged access to the data they collect to allow them to work on and publish their results. The length of this period will depend on the scientific discipline and the nature of the research.

Where access to the data is restricted, the published metadata should give the reason and summarise the conditions which must be satisfied for access to be granted. For example 'commercially confidential' data, in which a business organisation has a legitimate interest, might be made available to others subject to a suitable legally enforceable non-disclosure agreement.

# **Responsibilities and Resources**

Who will be responsible for data management?

#### Guidance:

Research organisations should ensure that effective data curation is provided throughout the full data lifecycle, with 'data curation' and 'data lifecycle' being <u>as defined by the Digital Curation Centre</u>.

The full range of responsibilities associated with data curation over the data lifecycle should be clearly allocated within the research organisation.

What resources will you require to deliver your plan?

#### Guidance:

It is appropriate to use public funds to support the preservation and management of publicly-funded research data. To maximise the scientific benefit which can be gained from limited budgets, the mechanisms for managing and providing access to research data should be both efficient and cost-effective in the use of such funds.

Research organisations could allocate resources from within their existing public funding streams, whether received from Research Councils as direct or indirect support for specific projects or from higher education funding councils as block grants.

Researchers may need to discuss with their research/finance office about how best to ensure the anticipated costs of RDM for their project are met. The EPSRC, together with other UK research funders, provided clarifications on <u>including RDM-related costs in grant proposals</u>.