

# DATACITE DOI POLICY

### Introduction

The University of Reading has a contract with the British Library by which it is authorised to allocate Digital Object Identifiers (DOIs) to enable persistent and unique identification of and linking to digital objects within the authority of the University.

The contract with the British Library was originally entered into for the purpose of allocating DOIs to Datasets held in the <u>University of Reading Research Data Archive</u>, but the DOI allocation service may be used by the University for any other DOI allocation purposes permitted within the terms of the contract.

This document outlines the University policy for DOI allocation and the terms of use which any person wishing to allocate DOIs must subscribe to.

Full details of the DataCite DOI allocation service are available from the British Library. 1

### **DOI** service owner

The University owner of the DOI service and designated registrant with the British Library is Robert Darby, Research Data Manager.

As the service owner Robert is responsible for:

- payment of the annual £1,500 subscription to the British Library;
- ensuring DOI allocation takes place in accordance with the terms of the contract between the University and the British Library and the requirements of the DOI Policy.

### **Authorisation to allocate DOIs**

DOI allocation may only be undertaken by University employees who are authorised service owners or individuals acting on their behalf, in accordance with the terms of the contract between the British Library and the University and the requirements of the DOI Policy.

Any service owner who wishes to allocate DOIs to digital objects under the authority of the University of Reading must apply to Robert Darby for authorisation to do so. Such an applicant will need to provide satisfactory evidence of the following:

- That they understand the purpose and use of DOIs and propose to allocate them appropriately and responsibly;
- That they have read this DOI Policy and the DOI Allocation Agreement between the British Library and the University of Reading (to be supplied to applicants on request), and are confident they can allocate DOIs in compliance with the terms of use there set out;

©University of Reading 2019

<sup>&</sup>lt;sup>1</sup> https://www.bl.uk/datacite.

#### DataCite DOI Policy - Robert Darby:

- That they own or manage a suitable automated service for the generation of DOIs and their registration with the DataCite Metadata Store in conformity with the University of Reading DOI syntax formula (see below);
- That they will only permit the allocation of DOIs through any service or services by individuals answerable to them, who will be suitably instructed and trained;
- That they will accept liability for any breaches of the DOI Allocation Agreement caused by their actions or by anyone allocating DOIs on their behalf.

## **Contractual obligations**

Under the DOI Allocation Agreement with the British Library, the University as the 'data client' and any persons allocating DOIs under its authority must meet the following criteria:

- Authority: The data client must hold the authority over the data objects, such that they can
  assign DOI names to objects and provide appropriate access to information about them and
  their metadata.
- Open resolution target: DataCite DOIs must resolve to a publicly accessible landing page. The data client must maintain an open landing page which describes the data object(s) and which includes at least the mandatory metadata<sup>2</sup> and the DOI. Data clients may also wish to include one or more of the following elements: statement on access to the data; associated metadata; information, software, or context required for unpacking, reading and interpreting the data.
- Data discovery: data clients must provide the mandatory metadata according to the DataCite metadata schema and agree to make it freely available for discovery purposes<sup>3</sup> and develop and implement suitable quality control measures to ensure compliance with the metadata schema.
- Data persistence: Data clients must have a clear and public indication to preserve the data against which they wish to register DOIs, or have responsibility for providing access to the data over the long-term. This requirement may be satisfied by having a formal data preservation plan, an operational SLA or a clear intention in their mission statement.

# **University requirements**

In addition to meeting the contractual obligations set out above, any service owner authorised to allocate DOIs must meet the following requirements:

#### Eligible data objects

The data objects, or the items to which the DOIs are to be allocated, must be eligible for such allocation. DOIs provide 'a system for persistent and actionable identification and interoperable exchange of managed information on digital networks. A DOI name can be assigned to any entity —

©University of Reading 2019

<sup>&</sup>lt;sup>2</sup> In the latest version of the DataCite Metadata Schema (4.3) the <u>mandatory metadata</u> for the digital object are: Identifier (i.e. the DOI); Title; Creator; Publisher; Publication Year; Resource Type. In earlier versions of the Schema, Resource Type is not mandatory.

<sup>&</sup>lt;sup>3</sup> The metadata deposited with DataCite are held under the terms of the <u>Creative Commons 0</u> (CC0) licence. This means that clients and DataCite waive any interests in the metadata and thereby place them as completely as possible in the public domain, so that others may freely build upon, enhance and reuse the metadata for any purposes without restriction under copyright or database law.

#### DataCite DOI Policy - Robert Darby:

physical, digital or abstract – primarily for sharing with an interested user community or managing as intellectual property'.<sup>4</sup>

In practice any material or output associated with research or study undertaken at the University may be eligible.

#### Authority and service policy

The service owner must be able to provide assurance that the University has authority over the data objects managed by the service to which DOIs will be allocated and that it is able to provide access to the objects on request.

The service must have a clearly-defined purpose to hold for the long term, publish information about and provide access to the objects under its management and to which DOIs will be allocated. This purpose should be expressed in terms of a policy or policies addressing the how objects within its scope will be managed in accordance with the requirements of the DOI Allocation Agreement.

If the service at any point transfers objects to which DOIs have been assigned to another organisation, the service owner should notify Robert Darby at the earliest possible opportunity. It will be necessary to notify the British Library in order that DataCite can grant the new organisation the ability to update specified DataCite DOI names.

#### **System**

The service must comprise a suitable automated system for the generation of DOIs and their registration with the DataCite Metadata Store in conformity with the University DOI syntax formula. By suitable automated system is meant a system that is able to:

- Record the mandatory minimum metadata for the data object;
- Allow quality assurance and approval by authorised administrators of a metadata record for an object before the record is published and a DOI is allocated;
- Allocate a DOI using the required syntax by automated means and register it with the DataCite Metadata Store;
- Publish the mandatory minimum metadata online by means of a publicly accessible landing page;
- Prevent the modification of mandatory minimum metadata once they have been registered with the DataCite Metadata Store.

A repository service is a typical example of a system that would meet these criteria. Both the University Research Data Archive and CentAUR, the publications repository, are based on the EPrints repository software, which has a standard submit-review-approve-publish workflow, and can deploy standard plugins for the generation and registration and DOIs.

#### **Syntax**

Any system designed to automate the generation of DOIs must be configurable to do this in accordance with the University DOI syntax formula, which is:

[BL prefix]/[system identifier - 4 digit].[object identifier - unique object ID]

• **BL prefix**: this is the unique organisational identifier allocated to the University by the British Library and must be used. For the University this identifier is 10.17864;

©University of Reading 2019

<sup>&</sup>lt;sup>4</sup> https://support.datacite.org/docs/doi-basics.

#### DataCite DOI Policy - Robert Darby:

- System identifier: this is an identifier associated with the system that automates allocation of the DOI, and may be arbitrarily chosen. The system identifier for the Research Data Archive is 1947; 1926 has been reserved as the identifier for CentAUR (these are both significant years in University history). It is recommended that all system identifiers should be four-digit numbers;
- **Object identifier**: this is a unique identifier associated with the metadata record for the data object in the given system, i.e. the unique key for a database record, such as the eprint ID in an EPrints repository.

Note that the punctuation cannot be varied: a / must separate the BL prefix and the System identifier, and a single point must separate the System identifier and the Object identifier.

Here is an example of a DOI conforming to the syntax using the system identifier for the Research Data Archive:

10.17864/1947.40170

#### Charges

Any service owner wishing to use the DOI allocation service may be required by the Research Data Manager to make a contribution the annual subscription cost, which is £1,500 exclusive of VAT.

# Authorisation, management and review

Authorisation to allocate DOIs under the University's Agreement with the British Library will be granted to the service owner by Robert Darby. This authorisation is subject to the service owner's compliance with the terms of the Agreement and this Policy, and may be revoked at any time if the service owner fails to comply with the terms of use here set out.

Robert Darby will manage the University's DOI Allocation Agreement in the interests of all participating University services, and any enquiries or requests for support should be addressed to him. Any service owner making use of the Agreement may at Robert Darby's discretion attend DataCite client meetings at the British Library or submit any matters for consideration at these meetings, which will be put forward on their behalf.

The Allocation Agreement with the British Library is renewed annually on 1 September. All service owners making use of the Agreement will be contacted in July to review their continued participation in the Agreement.

### **Further information**

For general information about the how DOIs work, the DOI allocation service, and the purposes it can be used for, you can consult the British Library DataCite web pages.<sup>5</sup>

Any service owner who is interested in using the University's DOI allocation service should contact Robert Darby in the first instance. Robert can provide a copy of the DOI Allocation Agreement and discuss the requirements that must be fulfilled by an allocating service.

©University of Reading 2019

Page 4

<sup>&</sup>lt;sup>5</sup> https://www.bl.uk/datacite.