

University of Oxford policy for assigning DataCite DOIs

ORA (Oxford University Research Archive) is the institutional repository for the University of Oxford and is committed in providing an Open Access service that disseminates University of Oxford research as widely and accessibly as possible, whilst also providing members of the University of Oxford mechanisms for compliance with funder policy, and security in storage and preservation. This includes the ability to assign DOIs to the following research output types working papers, reports, datasets, designs, audio/visual media, figures, filesets, software/code, ephemera, records, patents, compositions, and posters.

Before pursuing the assignment of DOIs to research outputs produced and managed by an Oxford University department or group, it should be considered whether ORA fulfils this requirement. The DOI Service is available for consultation and guidance and can be contacted at doi-service@bodleian.ox.ac.uk.

0.1 This policy governs the criteria for assignment by the Bodleian Libraries of DataCite DOIs (Digital Object Identifier)¹ to research outputs produced by the University of Oxford via the University of Oxford DOI Service. This policy is in accordance with the terms accepted as part of the membership agreement between the British Library Board and University of Oxford for the registration of DataCite DOIs at Oxford, and as part of the British Library's DataCite consortium.

1. Introduction

1.1 A DOI is intended to be a persistent, unique identifier for digital objects². The DOI system is managed by the International DOI Foundation. Permission for an institution such as Oxford to 'mint' and assign DOIs must be approved by a DOI Registration Agency. For the University of Oxford, the agency is the British Library acting on behalf of the DataCite organisation³. The Bodleian Libraries administer the terms and relationship with the British Library for the assignment of DOIs on behalf of the University of Oxford. Users of the University of Oxford DOI Service take responsibility for ensuring compliance with the DataCite terms and conditions as specified in the 'DOI allocation agreement Between the British Library Board and the Chancellor, Masters and Scholars of the University of Oxford' - summarised within this policy and appendices.

1.2 Other DOI registration agencies are available for the management of DOIs, however, DataCite was considered the most appropriate in-line with the management of the institutional repository – ORA (Oxford University Research Archive).

2. Criteria

2.1 The Bodleian Libraries can assign DOIs to research outputs produced by members of the University of Oxford. This includes outputs such as research data, theses, reports, working papers, and similar items. The Bodleian Libraries can also assign DOIs to research outputs (or versions of research outputs) such as articles and conference papers that have not been published and assigned DOIs

¹ See <http://www.doi.org/>

² NOTE: DOIs are commonly used as identifiers for digital objects, however they are not the only type of identifier in use. The Bodleian Libraries automatically assign an internal unique identifier (UUID) for every digital object held in their digital systems, in addition to DOIs and other identifiers.

³ <http://datacite.org/>

elsewhere, e.g. preprints. Details of the coverage of the DOI agencies, including DataCite, can be found on the [DOI.org](https://www.doi.org) website.⁴

2.2 Assignment of a DOI is restricted to the terms of the DataCite DOI Registration Policy⁵. The policy details that:

- i.a DOI should not be applied to a version of the same content published elsewhere with a DOI⁶;
- ii. research content to which a DOI is to be applied is required to meet a specified level of metadata quality under DataCite policy⁷;
- iii. there must be an adequate level of digital preservation for content registered with a DOI, and longevity of the content landing page⁸;
- iv. the organisation (University of Oxford) must be responsible for the research content to which a DOI is being applied.

3. Location of research content

3.1 The University of Oxford DOI Service will only assign DOIs to research content held in a repository⁹ that is owned, managed, and maintained by a unit of the University (such as an academic department or similar).

3.2 The University of Oxford's institutional repository for research content is ORA (Oxford University Research Archive).

3.3 The University of Oxford DOI Service will evaluate the need of the querying department or group regarding DOI registration and whether existing services can fulfil these requirements.

3.4 ORA

3.4.1 ORA provides access to as much of Oxford's academic research as possible. This includes articles, conference papers, theses, research data, working papers, posters and more.

3.4.2 By making items freely available ORA can promote and encourage the sharing of scholarly outputs produced by members of the University that have been published open access, whilst additionally supporting University compliance with research funder open access policies.

3.4.3 Oxford depositors can request for a DOI to be assigned to an object in ORA. A DOI assigned by ORA will resolve to the ORA record for the object.

- a. To be able to apply a DOI to an object via ORA, the research content must be deposited¹⁰ and have a freely available item record page in ORA.
- b. Research content deposited in ORA can be assigned a DOI if requested by the depositor. This includes embargoed content that has a freely available record.
- c. ORA is managed and maintained by the Bodleian Libraries.
- d. Further information on ORA and DOIs can be found at:
https://libguides.bodleian.ox.ac.uk/ora/persistent_identifiers

⁴ <https://www.doi.org/the-community/existing-registration-agencies/>

⁵ <https://support.datacite.org/docs/doi-registration-policy>

⁶ such as a research article being published through a publisher who registers a DOI for that version of the work.

⁷ <https://support.datacite.org/docs/metadata-quality>

⁸ <https://support.datacite.org/docs/landing-pages>

⁹ A repository offers a service to record, store, access and share digital data in the long-term in a trustworthy environment.

¹⁰ deposit is made via Symplectic Elements

3.5 University DOI assignment outside ORA

3.5.1 For the University of Oxford DOI Service to assign a DOI to research content not held in ORA, assurance must be given that the repository and treatment of the content complies with the University's DataCite obligations (as described in section 2 above, and in Appendix 1).

3.5.2 If these obligations are met, the University of Oxford DOI Service can enable a unit of the University to register DOIs to research content that is owned, managed, and maintained by the unit, resolving directly to the department website or platform.

3.5.3 The University of Oxford DOI Service is responsible for the University of Oxford DataCite DOI Fabrica¹¹ account and setting up any new repositories under the membership agreement with the British Library.

3.6 Other internal Oxford repositories and research data

3.6.1 Other University of Oxford data stores are available for the storage of research data. However, a record of the research data should be created within ORA as part of the University Data Catalogue.

3.6.2 If you are unsure which data store is the most appropriate for your research data, please see <https://researchdata.ox.ac.uk/deposit-your-data> or contact [Research Data Oxford](#) to discuss options.

3.7 External data repositories

3.7.1 The Bodleian Libraries cannot assign DOIs to research content stored in repositories **not** controlled by the University of Oxford. A record providing details of the research content including its location and DOI assigned by another issuer should be entered and displayed in ORA.

4. Charges

4.1 A charge is incurred to the University of Oxford for DataCite membership and for minting DOIs.

4.2 There are currently no charges for University of Oxford members using the University of Oxford DOI Service.

5. Governance

5.1 Oversight of this policy lies with RIMSC (Research Information Management Sub Committee).

5.2 The Bodleian Libraries ORA Management Group is responsible for ensuring effective management and maintenance of ORA and compliance with the DataCite agreement and may delegate this responsibility to the appropriate groups or specialists.

5.3 Each request for use made to the University of Oxford DOI Service will be assessed by the service for eligibility of inclusion. The service reserves the right to make exceptions, provided that the material for inclusion has the approval of an appropriate person of responsibility within the Division, such as a Head of Department, and the other policy conditions are met.

5.4 An academic staff member is required to act as steward for the material and as the University of Oxford contact should any questions or queries arise of the content.

¹¹ <https://support.datacite.org/docs/doi-fabrica>

6. Relationship with existing policies

6.1 This policy will operate in conjunction with other University policies.

- Depositors must ensure the deposit of any research data in ORA is in compliance with their responsibilities under the University of Oxford Policy on the Management of Research Data and Records¹²
- ORA policies and terms¹³
- Bodleian Digital policies¹⁴

6.2 Information and guidance about research data management, can be found at the Research Data Oxford website¹⁵.

7. Contact

7.1 Email: doi-service@bodleian.ox.ac.uk

¹² <https://researchdata.ox.ac.uk/university-oxford-data-management-policy>

¹³ <https://ora.ox.ac.uk/policies>

¹⁴ <https://www.bodleian.ox.ac.uk/about/libraries/policies>

¹⁵ <https://researchdata.ox.ac.uk/>

APPENDIX 1

Criteria for assigning DOIs to research content not hosted by ORA

1. The University of Oxford DOI Service will only assign DOIs to research content held in a repository¹⁶ that is owned, managed, and maintained by a unit of the University (such as an academic department or similar). The affiliation to the University must be clear in the research content the DOI is being applied to and documented on the site hosting the content.

2. The University of Oxford's institutional repository for research content is ORA (Oxford University Research Archive)¹⁷. If there is a case for the assignment of DOIs to Oxford research content hosted outside of ORA, the Bodleian Libraries should be contacted to discuss individual arrangements¹⁸.

3. For the Bodleian Libraries to assign a DOI to research content not hosted in ORA, assurance must be given that the repository and treatment of the content complies with the University's DataCite obligations (as described in University of Oxford policy for assigning DOIs section and detailed in the sections 5, 6, and 7 below), and an agreement must be signed (Appendix 2).

4. A named individual (in this document called the 'Repository Manager') must be responsible for ensuring these obligations are met for the repository being used. The Repository Manager must be able to confirm that they hold the rights and authority to maintain and provide reasonable access to the research content and its metadata.

5. Digital preservation

5.1 The repository must have a clear and public indication of intention to preserve the research content or to provide access to it over the long-term. University of Oxford DOI Service must be provided with:

- i. evidence of intention of longevity and persistence of the repository;
- ii. assurance of the security of the content held in the repository (to ensure that research held in the repository are not tampered with);
- iii. evidence of a robust exit strategy for the repository;
- iv. assurance of the persistence of the URLs assigned to content in the repository, including procedures for if the local URL of the content changes;
- v. details of a Repository Manager who takes responsibility for queries about the research post-deposit;
- vi. and being informed if the Repository Manager or contact details for the repository change.

5.2 The repository may use ORA to assist with satisfying the points above. To do this the repository must additionally ensure the research content and a record page are available in ORA regardless of whether the DOI resolves to the ORA record or to another University location, such as department website.

6. Metadata

6.1 A metadata record for the research content must be created that complies with the DataCite mandatory metadata properties¹⁹.

- The DOI will be assigned to this record.

¹⁶ In this document a repository takes the role of offering a service to record, store, access and share digital research content in the long-term in a trustworthy environment. This could be in the form of a departmental website or digital archive.

¹⁷ <https://ora.ox.ac.uk/>

¹⁸ [doi@bodleian.ox.ac.uk?](mailto:doi@bodleian.ox.ac.uk)

¹⁹ <https://support.datacite.org/docs/metadata-quality>

- The record should provide a link for access to the research content; or details of its location; or who to contact to enquire about the content; or details of any embargo.
- The record for the research content must be fully open to anyone with Internet access.
- Metadata describing the research content will be created in DataCite DOI Fabrica.
- Metadata describing the research content will be made available under CC0 license in DataCite DOI Fabrica.
- DataCite mandatory metadata fields describing the dataset must not be modified. If changes need to be made, the University of Oxford DOI Service must be contacted.

6.2 The following types of work can be registered with a DOI through the University of Oxford DOI Service. The bracketed text provides an example.

- Audiovisual (films, videos, etc.)
- Book (text)
- Book Chapter (text)
- Collection (a collection of samples, or various files making up a report)
- Conference paper (text)
- Conference proceeding (text)
- Data paper (A data paper describes data provenance and methodologies used in the gathering, processing, organizing, and representing the data)
- Dataset (data file or files)
- Dissertation (theses)
- Event (Descriptive information and/or content that is the basis for discovery of the purpose, location, duration, and responsible agents associated with an event such as a webcast or convention)
- Image (drawing, photograph)
- Interactive resource (Training modules, files that require use of a viewer (e.g., Flash), or query/response portals)
- Journal (text)
- Journal article (text)
- Model (conceptual, graphical, mathematical or visualization model that represents empirical objects, phenomena, or physical processes)
- Output management plan (A formal document that outlines how research outputs are to be handled both during a research project and after the project is completed.)
- Peer review (Evaluation of scientific, academic, or professional work by others working in the same field. Text)
- Report (text)
- Software (Software supporting scholarly research)
- Sound (audio recording)
- Study registration (Clinical trials, registered reports)
- Working paper

7. Versions

7.1 Versions created of research content to which a DOI has been applied must follow the DataCite guidance at: <https://support.datacite.org/docs/versioning>. It is recommended that all new versions of research content in a repository where a DOI has been assigned, is assigned a new DOI.

8. Fabrica

8.1 In order for a repository to register DOIs for research content via the University of Oxford DOI Service, the repository must be added to the University of Oxford DataCite DOI Fabrica account.

8.2 The Repository Manager is responsible for providing the repository details and keeping these up to date. Each repository registered is then enabled with its own username, password, and DOI prefix.

8.3 Once a repository has been set-up the Repository Manager has three options available for the repository to assign DOIs to research content:

1. A form²⁰ via the Fabrica interface (this requires manually inputted data per object)
2. File upload²¹ via the Fabrica interface (this requires manually inputted data per object)
3. Via a REST API (Application Programming Interface)²² (requires technical support)

8.4 Repositories will need to consider how they would like to manage the registration of DOIs based on these three options, a combination of the options could be used.

9. Support

9.1 Bodleian Libraries Open Scholarship Support staff are available to discuss any queries regarding the service. More information on using the service can be found at: [LINK](#)

9.2 Email: doi-service@bodleian.ox.ac.uk

²⁰ <https://support.datacite.org/docs/create-a-doi-via-form>

²¹ <https://support.datacite.org/docs/fabrica-create-doi-file-upload>

²² <https://support.datacite.org/docs/api>

APPENDIX 2

Agreement for assigning DOIs to research content not hosted by ORA

To use the University of Oxford DOI Service for the assignment of DOIs to research content hosted outside of ORA the following terms must be agreed, and information supplied.

1a	I have read the 'University of Oxford policy for assigning DOIs' including the 'Criteria for assigning DOIs to research content not hosted by ORA.' The data repository and treatment of the dataset comply with the University's DataCite obligations described in that policy document.	
1b	I confirm that the research content is owned, managed, and maintained by a unit of the University (such as an academic department or similar).	
2	A named individual (the 'Repository Manager') has been assigned as responsible for ensuring these obligations are met for the repository being used, and these details have been provided to the University of Oxford DOI Service.	
3	The Repository Manager confirms that they hold the rights and authority to maintain and provide reasonable access to the research content and its metadata.	
4a	The repository has a clear and public indication of intention to preserve the content or to provide access to it over the long-term, which may be a full content management plan or a clear mission statement.	
4b	<p>I have supplied the University of Oxford DOI Service with:</p> <ul style="list-style-type: none"> i. evidence of intention of longevity and persistence of the repository; ii. assurance of the security of the content held in the repository (to ensure that research held in the repository are not tampered with); iii. evidence of a robust exit strategy for the repository; iv. assurance of the persistence of the URLs assigned to content in the repository, including procedures for if the local URL of the content changes; v. details of a Repository Manager who takes responsibility for queries about the research post-deposit; vi. and being informed if the Repository Manager or contact details for the repository change. <p>Or the repository is additionally depositing research content into ORA to assist with satisfying the criteria.</p>	
5	I confirm that the repository will ensure that a metadata record for the research content will be created that complies with the DataCite mandatory metadata properties ²³ and the criteria as set out in section 6.1 of the 'Criteria for assigning DOIs to research content not held in ORA' for each object being assigned a DOI through the University of Oxford DOI Service.	
6	The repository manager will keep the University of Oxford DOI Service up to date with regards to changes relating to the repository registration details within the University of Oxford DataCite DOI Fabrica account.	
	Signed:	Date:

²³ <https://support.datacite.org/docs/metadata-quality>