

### Implementation of the Data Seal of Approval

The Data Seal of Approval board hereby confirms that the Trusted Digital repository UK Data Archive complies with the guidelines version 1 of 2010 set by the Data Seal of Approval Board.

The afore-mentioned repository has therefore acquired the Data Seal of Approval of 2010 on March 8, 2011.

The Trusted Digital repository is allowed to place an image of the Data Seal of Approval logo corresponding to the guidelines version date on their website. This image must link to this file which is hosted on the Data Seal of Approval website.

Yours sincerely,

The Data Seal of Approval Board

#### **Assessment Information**

Guidelines Version: 1 | June 1, 2010

Guidelines Information Booklet: <u>DSA-booklet\_1\_June2010.pdf</u>

All Guidelines Documentation: <u>Documentation</u>

Repository: UK Data Archive Seal Acquiry Date: Mar. 08, 2011

For the latest version of the awarded DSA http://assessment.datasealofapproval.org/seals/for this repository please visit our website:

Previously Acquired Seals: None

This repository is owned by:

UK Data Archive

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#### **Assessment**

1. The data producer deposits the research data in a data repository with sufficient information for others to assess the scientific and scholarly quality of the research data and compliance with disciplinary and ethical norms.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The UK Data Archive gives comprehensive advice on all aspects of the data-lifecycle for social science researchers.

This ranges from the Creating and Managing pages:

http://www.data-archive.ac.uk/create-manage [accessed 2011-02-15]

to specific advice on how to deposit data within the repository:

http://www.data-archive.ac.uk/deposit [accessed 2011-02-15]

#### **Reviewer Entry**

Accept or Reject:

Accept

## 2. The data producer provides the research data in formats recommended by the data repository.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The UK Data Archive publishes currently recommended data formats:

http://www.data-archive.ac.uk/create-manage/format/formats [accessed 2011-02-15]

The UK Data Archive is willing to accept research data in other formats which will be dependant on the ability of staff to transform them into open and available file formats.

Internal procedures including Quality Control, during the ingest process check these formats, but this is not done automatically.

#### **Reviewer Entry**

Accept or Reject:

Accept

Comments:

You may want to consider implementing an automated file format check.

### 3. The data producer provides the research data together with the metadata requested by the data repository.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

Data producers/depositors are expected to provide adequate metadata through the 'Data collection deposit forms'.

These forms collect the relevant information for successful reuse.

These deposit forms are available at:

http://www.esds.ac.uk/aandp/create/depform.asp [accessed 2011-02-15]

Some users continue to use handwritten deposit forms. At the time of writing these "deposit forms" are under redevelopment.

There are no tools to "create" additional metadata at the time of ingest. The UK Data Archive uses different versions of the DDI (Data Documentation Initiative) as a metadata standard.

There is an implicit relationship between the perceived value of the research data and the level of metadata which must be provided by the data producer.

A lower level of metadata is acceptable for the UK Data Archive's self-archiving repository. See the online help messages on the UKDA-store pages: http://store.data-archive.ac.uk/store/

#### **Reviewer Entry**

Accept or Reject:

Accept

## 4. The data repository has an explicit mission in the area of digital archiving and promulgates it.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline can be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The UK Data Archive Mission Statement is contained within our Strategic Plan: http://www.data-archive.ac.uk/media/113180/ukdastrategicplan1015.pdf [Accessed 2011-02-15]

Our Preservation Policy is published at:

http://www.data-archive.ac.uk/curate/preservation-policy [Accessed 2011-02-15]

#### **Reviewer Entry**

Accept or Reject:

Accept

## 5. The data repository uses due diligence to ensure compliance with legal regulations and contracts including, when applicable, regulations governing the protection of human subjects.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

#### Evidence:

The UK Data Archive UK Data Archive is not a legal entity. The host institution is the University of Essex (a limited company) and the Archive is a department within the University. Contracts are made between depositors or users and the University of Essex.

The relevant contractual infrastructure is discussed in section three of the UK Data Archive Preservation Policy. This states:

"The relationship between the depositor of a data collection and the Archive is based on:

\*a legally-binding deposit agreement and licence (known as the Licence Agreement) which confirms the rights and obligations of both parties and offers an opportunity for depositors to specify the conditions under which access may be given to third parties;

\*an assertion of copyright and intellectual property rights to ensure that the data creator/depositor has cleared all necessary permissions;

\*where necessary, negotiations for licence agreements with third parties to enable the Archive explicitly to distribute the material to particular user communities.

The Archive will not ingest materials which have unclear ownership or unresolved rights issues."

http://www.data-archive.ac.uk/curate/preservation-policy [Accessed 2011-02-15]

All contracts are available through the Archive Website

Data Producer: http://www.esds.ac.uk/aandp/create/licenceForm.pdf [Accessed 2011-02-15]

Data User: http://www.data-archive.ac.uk/conditions/data-access [Accessed 2011-02-15]

Procedures for breaches of contract exist, but are not published.

Specialist procedures are used to deal with data with a disclosure risk. These are outlined in the draft security plan which is not published, but can be made available on request. All Archive staff are required to sign a non-disclosure.

The Archive follows its own advice relating to regulations dealing with the protection of human subjects. See http://www.data-archive.ac.uk/create-manage/consent-ethics

#### **Reviewer Entry**

Accept or Reject:

Accept

## 6. The data repository applies documented processes and procedures for managing data storage.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline can be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The Archive has a Preservation Policy

http://www.data-archive.ac.uk/curate/preservation-policy [Accessed 2011-02-15] The strategy for multiple copies/backups is outlined in the Preservation Policy.

The Archive applies processes and procedures for guaranteeing the storage of data. It does not apply formal Quality Management (QM) procedures as specified within the ISO 9000 series. However, Quality Control and Quality Assurance procedures are used generically within the different functional entities of the Archive especially in the pre-ingest, ingest, archival storage and access functions.

The UK Data Archive has been successfully independently audited for conformity with ISO 27001/2 Information Security.

#### **Reviewer Entry**

Accept or Reject:

Accept

#### 7. The data repository has a plan for long-term preservation of its digital assets.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline can be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The UK Data Archive publishes a Preservation Policy which outlines the main theoretical and practical steps for providing long-term preservation of digital research data. See, in particular section 5.3 (Archival Storage Function) of the Archive's Preservation Policy:

http://www.data-archive.ac.uk/curate/preservation-policy [Accessed 2011-02-15]

#### **Reviewer Entry**

Accept or Reject:

Accept

#### 8. Archiving takes place according to explicit work flows across the data life cycle.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline can be outsourced.

#### **Applicant Entry**

Statement of Compliance:

3. In progress: We are in the implementation phase.

Evidence:

The entire archival process from ingest through to access is predetermined. Some ad hoc procedures are needed to deal with specific special cases, including non-standard file formats.

The basic file structure of the UK Data Archive's preservation system can be seen in Figure 10 (p.58) of the following report.

http://www.data-archive.ac.uk/about/projects/past?id=1635 [Accessed 2011-02-15] The procedural documentation required under this guideline is currently in production.

#### **Reviewer Entry**

Accept or Reject:

Accept

## 9. The data repository assumes responsibility from the data producers for access and availability of the digital objects.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

All data collections ingested into the Archive are controlled by a Licence Agreement: http://www.esds.ac.uk/aandp/create/licenceForm.pdf [Accessed 2011-02-15]

In this agreement the Archive is granted permission to distribute, catalogue, store, copy, reformat, preserve and disseminate data collections. The Archive never assumes sole responsibility for access to and availability of any data. Contractually, data producers are allowed to make their own data available in any means that they wish.

So, while the Archive assumes responsibility for access to research data, that responsibility may be shared with the producer.

#### **Reviewer Entry**

Accept or Reject:

Accept

#### 10. The data repository enables the users to utilize the research data and refer to them.

Minimum Required Statement of Compliance:

2. Theoretical: We have a theoretical concept.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

#### Evidence:

Registered users of the UK Data Archive or any of its constituent services e.g., ESDS (Economic and Social Data Service), HDS (History Data Service), Census.ac.uk and SDS (Secure Data Service), may use any of the data collections which have been archived for dissemination purposes. Some data collections have different levels of access condition which prevent data consumers (users) who do not meet the relevant criteria from accessing them. Furthermore some data collections are held at the Archive for preservation purposes only, and are not accessible to end-users.

The Data Catalogue (http://www.esds.ac.uk/Lucene/Search.aspx [Accessed 2011-02-15]) allows access to all data collections available, and some "virtual" data collections which are held outside of the Archive.

Research data is currently available in formats which the data consumers request or use frequently. For statistical data, files are currently provided in SPSS, Stata and text formats.

All digital objects ('studies') maintained by the Archive are assigned a locally unique identifier and investigation into implementing study-level DOI's is under way. Documentation provided with each study includes a standard format study-level citation.

When a new or amended deposit moves from the ingest to the preservation team a checksum is generated for each file within the AIP. Dissemination Information Packages delivered as zips have a checksum generated against all of the files in the 'download bundle', this checksum is appended to the zip file name.

An OAI-PMH feed of all study-level metadata is made available at http://oai.esds.ac.uk/ [Accessed 2011-02-15]

#### **Reviewer Entry**

Accept or Reject:

Accept

#### 11. The data repository ensures the integrity of the digital objects and the metadata.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

3. In progress: We are in the implementation phase.

#### Evidence:

The Archive's activities are based on a pragmatic interpretation of integrity. As defined by ISO 15489, integrity relates to the completeness of a record and to its continued state of unalteration. The data collections which are accessed by users are complete, but they are not unaltered from the originally deposited data collection. Changes are made to allow for digital preservation, but the changes which have been made to any given downloadable data collection are documented by Archive staff and "published" with the data collection.

For details of data processing the following documents are currently available on the Archive's Website [All files accessed 2011-02-15]:

Data Processing Standards: (http://www.data-archive.ac.uk/media/54782/ukda079-ds-dataprocessingstandards.pdf )

Data Processing Quick Reference Guide:

(http://www.data-archive.ac.uk/media/54764/ukda080-ds-processingquickreference.pdf)

Quantitative Data Processing Procedures:

(http://www.data-archive.ac.uk/media/54770/ukda081-ds-quantitative data processing procedures.pdf)

**Documentation Processing Procedures:** 

(http://www.data-archive.ac.uk/media/54785/ukda078-ds-documentationprocessingprocedures.pdf)

Catalogue Quality Control Procedures:

(http://www.data-archive.ac.uk/media/54779/ukda084-ds-cataloguequalitycontrolprocedures.pdf)

When a new or amended deposit moves from the ingest to the preservation team a checksum is generated for each file within the Archival Information Package (AIP). Dissemination Information Packages (DIP) delivered as zips have a checksum generated against all of the files in the 'download bundle', this checksum is appended to the zip file name.

#### **Reviewer Entry**

Accept or Reject:

Accept

#### 12. The data repository ensures the authenticity of the digital objects and the metadata.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The Archive ensures a relevant level of authenticity of both digital objects and depositor supplied documentation. An audit trail during the ingest process ensures authenticity during this activity. Stringent back-up routines ensure authenticity in the archival storage function activities.

Data changes are managed on an ad hoc basis.

See Sections 5.3 (Archival Storage Function) and 5.4.2(Version Control/Change Procedures) of the Archive's Digital Preservation Policy.

http://www.data-archive.ac.uk/curate/preservation-policy [Accessed 2011-02-15]

#### **Reviewer Entry**

Accept or Reject:

Accept

## 13. The technical infrastructure explicitly supports the tasks and functions described in internationally accepted archival standards like OAIS.

Minimum Required Statement of Compliance:

3. In progress: We are in the implementation phase.

This guideline can be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

The Archive explicitly follows the broad guidance given in the OAIS reference model across the whole of the archival process. There are areas where we are not fully compliant to the standard, and there are areas where we have felt it necessary to extend or diverge from the standard. In particular, we use the concept of a pre-ingest function to achieve resource savings, and we construct DIPs during the ingest process rather than automatically from an AIP on demand. See the http://www.data-archive.ac.uk/curate/preservation-policy [Accessed 2011-02-15] for more details.

#### **Reviewer Entry**

Accept or Reject:

Accept

#### 14. The data consumer complies with access regulations set by the data repository.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

#### Evidence:

All data consumers are bound by a licence with the Archive which is based on the (contract) laws of England and Wales and national (United Kingdom) legislation where appropriate.

The main contractual agreement between the data consumer and the University of Essex (as the legal entity which represents the Archive) is the End User Licence. This can be viewed at:

http://www.esds.ac.uk/aandp/access/licence.asp. [Accessed 2011-02-15]

A short (plain English) summary is also available at: http://www.esds.ac.uk/aandp/access/summary.asp [Accessed 2011-02-15]

Other licences/agreements are in place for disclosive data to meet the requirements of the Statistics and Registration Service Act (2008) and further agreements are currently be drafted for the Secure Data Service.

It is important to note that some access conditions are specified by the data provider, and some through statutory legislation, but the majority are based on UK contract law.

#### **Reviewer Entry**

Accept or Reject:

Accept

# 15. The data consumer conforms to and agrees with any codes of conduct that are generally accepted in higher education and scientific research for the exchange and proper use of knowledge and information.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

All data consumers must agree to the End User Licence before being granted access to any data collection. This can be viewed at:

http://www.esds.ac.uk/aandp/access/licence.asp [Accessed 2011-02-15]

A short (plain English) summary is also available at:

http://www.esds.ac.uk/aandp/access/summary.asp [Accessed 2011-02-15]

Some of the data collections of the UK Data Archive are available for commercial and non-educational research. Users must conform to the relevant conditions specified by the data provider or the Archive.

#### **Reviewer Entry**

Accept or Reject:

Accept

### 16. The data consumer respects the applicable licenses of the data repository regarding the use of the research data.

Minimum Required Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

This guideline cannot be outsourced.

#### **Applicant Entry**

Statement of Compliance:

4. Implemented: This guideline has been fully implemented for the needs of our repository.

Evidence:

All data consumers must agree to the End User Licence before being granted access to any data collection. This can be viewed at:

http://www.esds.ac.uk/aandp/access/licence.asp [Accessed 2011-02-15]

A short (plain English) summary is also available at:

http://www.esds.ac.uk/aandp/access/summary.asp [Accessed 2011-02-15]

It is not completely possible to ensure that all data consumers respect the applicable licences; however, the Archive has procedures in place in the event of a breach of the End User Licence. A more stringent breaches policy has been drafted for a new Secure Data Service.

#### **Reviewer Entry**

Accept or Reject:

Accept