



Digital Repository of Ireland
Taisclann Dhigiteach na hÉireann

DRI:

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Ireland's EU Structural Funds
Programmes 2007 - 2013
Co-funded by the Irish Government
and the European Union

HEA

Higher Education Authority
An tÚdarás um Ard-Oideachas



EUROPEAN REGIONAL
DEVELOPMENT FUND

Development of a Preservation Plan

1. Policy Frameworks

1. Requirements engineering

1. Strategy Development and Testing

What is DRI

Preservation

Access (use)

Sharing, linking, user tools (reuse)

→ *Cultural & Social heritage*

1. Digital Preservation –Robust Policy Framework



Policy Framework

<http://www.dri.ie/publications>

Policy Framework

Data Seal of Approval
(DSA)

<http://datasealofapproval.org/en/>

ISO 16363
(TRAC checklist)

Policy Tracker

		0= Finalised 1= Current 2=Future	Policy Steps										
REQUIRED POLICIES and Procedures FOR DRI	Number		Reviewed by sub-committee	External Review (if required); EOD for legal	Reviewed by CIT	External Review (if required) Partners' Tech Transfer Offices/Re: Offices for Legal	Stage (in the policy lifecycle)	Next Task	Date for review	Policy Manger	Sponsor	CIT Approve	
Acquisitions and Pre-Ingest													
Collections Policy	PP1	0	yes	n/a	1	n/a	publication	review	2019	Aileen O'Carroll	Dolores Grant/Strand Two meetings	April 2015	
Guide to Data Preparation and Archiving	PP2	0	yes	n/a	n/a	n/a	publication	review	2019	Aileen O'Carroll	Sharon Webb, Aileen O'Carroll, Charlene McGoogan	n/a	

4. Requirements Engineering

RE specifies what the system or product should do. It ensures that the system is built upon authentic user requirements.

Defines a project's objectives and helps to produce resources/projects/software that considers both the context (the user, the environment of use, the problem domain) and the software development effort.

Concerned with real-world goals, functions and constraints.

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

- 6.1 Are risk management techniques used to inform the strategy?
- 6.2 Does the repository have a preservation policy?
- 6.3 Are data recovery provisions in place? What are they?
- 6.4 What checks are in place to ensure consistency across archival copies?
- 6.5 What levels of security are required and how are these supported?
- 6.6 How is deterioration of storage media handled and monitored?
- 6.7 Does the repository have a strategy for backup / multiple copies? If so, please describe.

REQ- 34 Data Preservation

The system must "identify and manage the risks to its preservation operations and goals associated with the system infrastructure".

1.1 It must "employ technology watches or other technology monitoring notification systems"

1.2 It must "have procedure in place to monitor and receive notifications when hardware changes are needed"

1.3 It must "have procedures in place to monitor and receive notifications when software changes are needed"

1.4 It must allow a user, in accordance with their access rights, migrate from one format to another in response to changes or obsolescence in software or media (see REQ-21).

<http://www.dri.ie/publications>

DRI Requirements Specifications (September 2015)

REQ-60 Data Integrity

The system must check the integrity of all communications and data held in the repository

- 1.1 It must check the integrity of digital objects at delivery and access point
 - 1.1.1 It must calculate a checksum and compare with checksum created at point of ingestion.
- 1.2 It must check the integrity of all data held in the repository periodically.
- 1.3 It must prevent unauthorized corruption of all data held in the repository.

4. REQ-62 Audit Trail

REQ-62 Audit trail

The system must manage and save all information related to internal user and external user and system interaction with the repository in accordance with current legislation.

- 1.1 It must track all changes made to a digital object.
- 1.2 It must track all changes made to a collection.
- 1.3 It must track all changes made to user access permissions.
- 1.4 It may track all user log in and log outs.
- 1.5 It must track all virus scans and integrity checks that are carried out by the system, including intermittent system checks as well as at point of ingestion.

Related REQ-17.4 Checksum

The system must create and record a checksum for all digital objects at point of ingestion.

Strategy Development and Testing

1. Identifying Issues and documentation required
2. Identifying what is currently in place
3. Identifying gaps
4. Developing policies, procedures, systems and software
5. Testing with demonstration projects

Responsibilities / Actors

DSA 1 - 3 cover responsibilities of the data producers

DSA 4 - 13 cover responsibilities of the data repository

DSA 14 - 16 cover responsibilities of the data consumers

Responsibilities / Actors

E.g DSA 1 “The Data producer deposits the data in a data repository with sufficient information for others to assess the quality of the data, and compliance with disciplinary and ethical norms.”

Responsibilities / Actors

Must involve the entire organisation

Organisational sustainability can be as (more?)
difficult as technical sustainability

Interpreting DSA

Some questions are open to interpretation

“Does the repository maintain links to metadata and to other datasets, and if so, how?”

Interpreting DSA

“Linking between the metadata and data are maintained in the operational database, and FSD metadata includes links to other datasets. In addition, the metadata includes links to publications based on the data.”

- Finnish Social Science Data Archive

Interpreting DSA

“Links to metadata are provided through the Digital Library web interface and are expressed as menu links when descriptive records are displayed.”

- UCD Digital Library

Interpreting DSA

“The Data Model incorporates a set of Fedora datastreams so as to handle the different types of metadata required by the system. Examples of metadata types required include descriptive Metadata, technical metadata and DRI administrative metadata, which incorporates preservation metadata (stored as PREMIS xml)”

- DRI

Audit Process

- Understand and Document your existing Policies and Procedures
- Read the DSA self-assessment questions and the responses of previously certified organisations
- Identify gaps in your existing organisation and develop your responses with input from the entire organisation

Audit Process

- Submit self-assessment and supporting documentation
- Application is peer-reviewed and can be sent back to the applicant for modification
- DSA is awarded if requirements are met
- DSA self-assessment document and review are published

Contact us!

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