PRIFYSGOL ABERYSTWYTH UNIVERSITY

## Aberystwyth University

# *Digital Curation: New Medium, Old Methods*

Higgins, Sarah

*Publication date:*
2011

*Citation for published version (APA):*
Higgins, S. (2011). *Digital Curation: New Medium, Old Methods*. Advocating for Archives and Records: The Impact of the Profession in the 21st Century, Edinburgh, United Kingdom of Great Britain and Northern Ireland. http://www.archives.org.uk/images/documents/Publications/Manuscripts_to_Metadata_the_Relevance_of_Core_Skills_in_the_Digital_Age.pdf

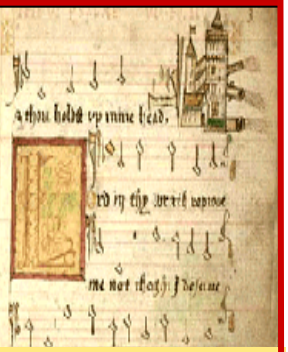
**General rights**
Copyright and moral rights for the publications made accessible in the Aberystwyth Research Portal (the Institutional Repository) are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the Aberystwyth Research Portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the Aberystwyth Research Portal

**Take down policy**
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

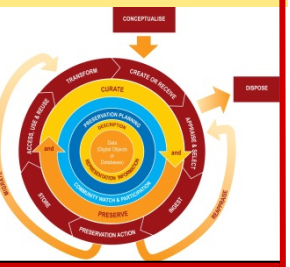
tel: +44 1970 62 2400
email: is@aber.ac.uk

Download date: 09. Jul. 2020



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

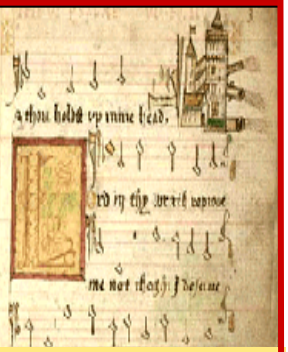



# Manuscripts to Metadata: the Relevance of Core Skills in the Digital Age


Sarah Higgins — Lecturer, Aberystwyth University

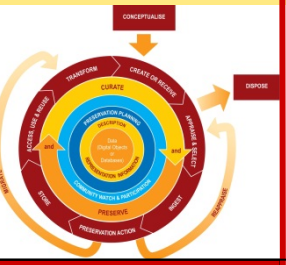
Simon Wilson — Digital Archivist, University of Hull

Lisa Jeskins — Archives Hub, Mimas, University of Manchester



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0



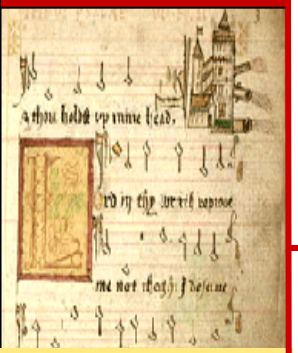

PRIFYSGOL ABERYSTWYTH UNIVERSITY

# Digital Curation: New Medium, Old Methods

Sarah Higgins

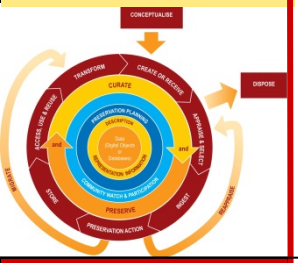
Lecturer in Archive Administration and Records Management

Aberystwyth University



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

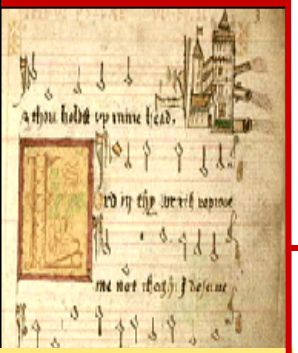



# Archives and access

The imperative of an archives repository is to manage the materials in their care so that they can be:

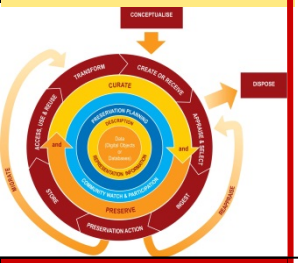
- Identified
- Located
- Used
- Preserved

If material is not accessible then an archive is failing to fulfil a key objective.



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0



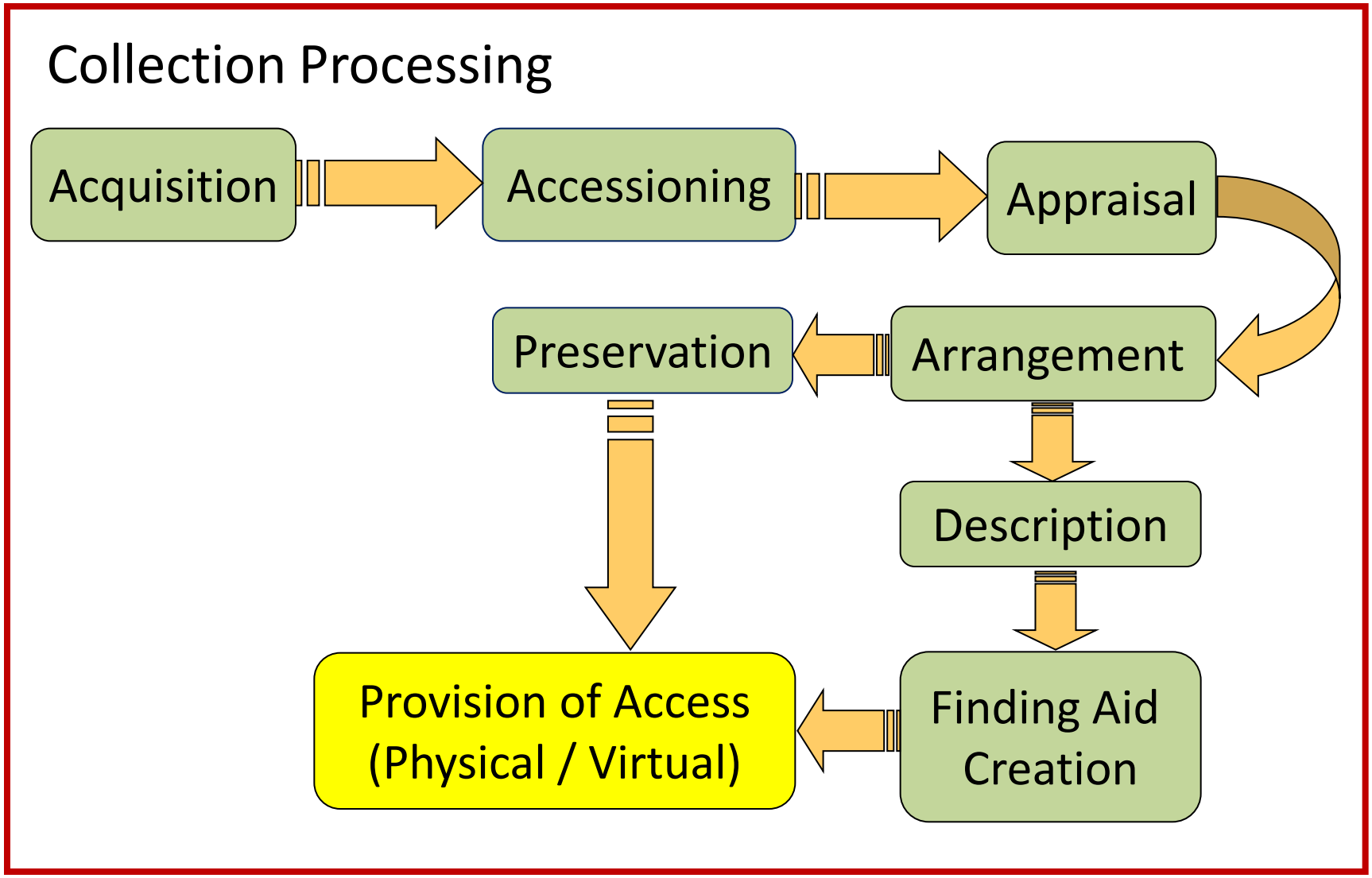

# Archives and access

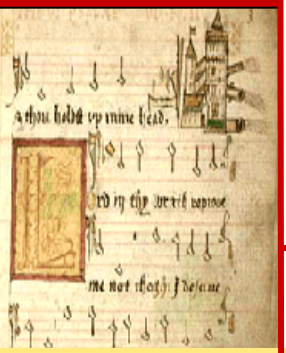
Retaining accessibility to information is a key objective whatever the medium:

- Stone and clay
- Paper
- Vellum
- Microfilm
- Photographic media
- Audio media
- **Digital media**

PRIFYSGOL ABERYSTWYTH UNIVERSITY

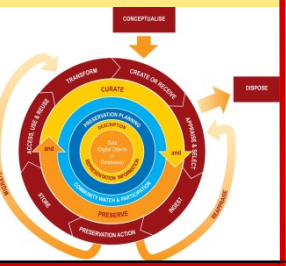
# *"Moral and physical defence of archives"* Jenkinson





0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0




# Moral and Physical Defence: Process Supported by Policy

PRIFYSGOL ABERYSTWYTH UNIVERSITY

**Organisational Policy**
Remit to maintain an archive

**Collection Policy**
Defines what to collect

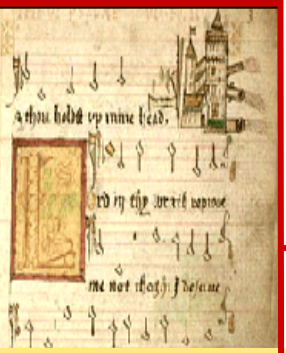
**Re / Appraisal Policy**
What to keep , for how long

**Acquisition Policy**
Formal transfer process

**Preservation Policy**
Storage, handling etc.

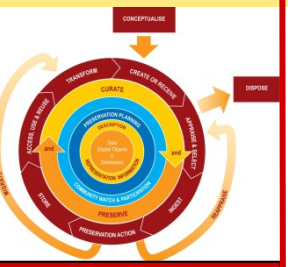
**Accessions Policy**
What to document / assess

**Access Policy**
Defines archive's users



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0




# Moral Defence: Archival Principles Support Process

PRIFYSGOL ABERYSTWYTH UNIVERSITY

**Arrangement**

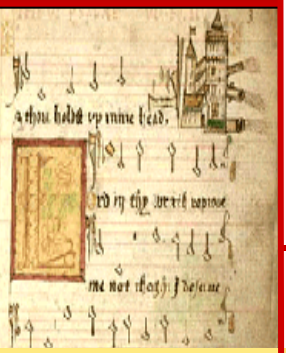
Hierarchical
-respect des fonds
-original order
-provenance
-function

**Description**

Cataloguing rules
- context
- standards
- interoperability
- indexing
- reference numbers

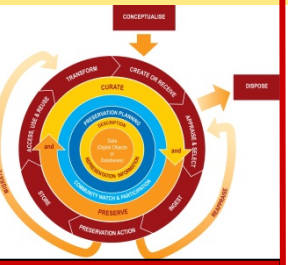
**Finding-aid Creation**

- hard copy or online?
- digital images?
- Standalone / networks?
- digital repositories?



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

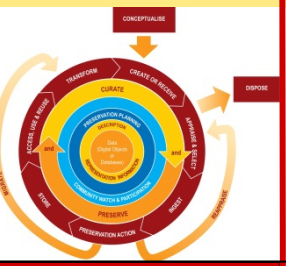



# Digital Preservation

Tag cloud of: http://www.digitalpreservation.gov/

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0




# Digital Preservation Models

- DCC Curation Lifecycle Model:

  *high-level overview of activities*

  "… provides a graphical, high-level overview of the stages required for successful curation and preservation of data from initial conceptualisation or receipt".

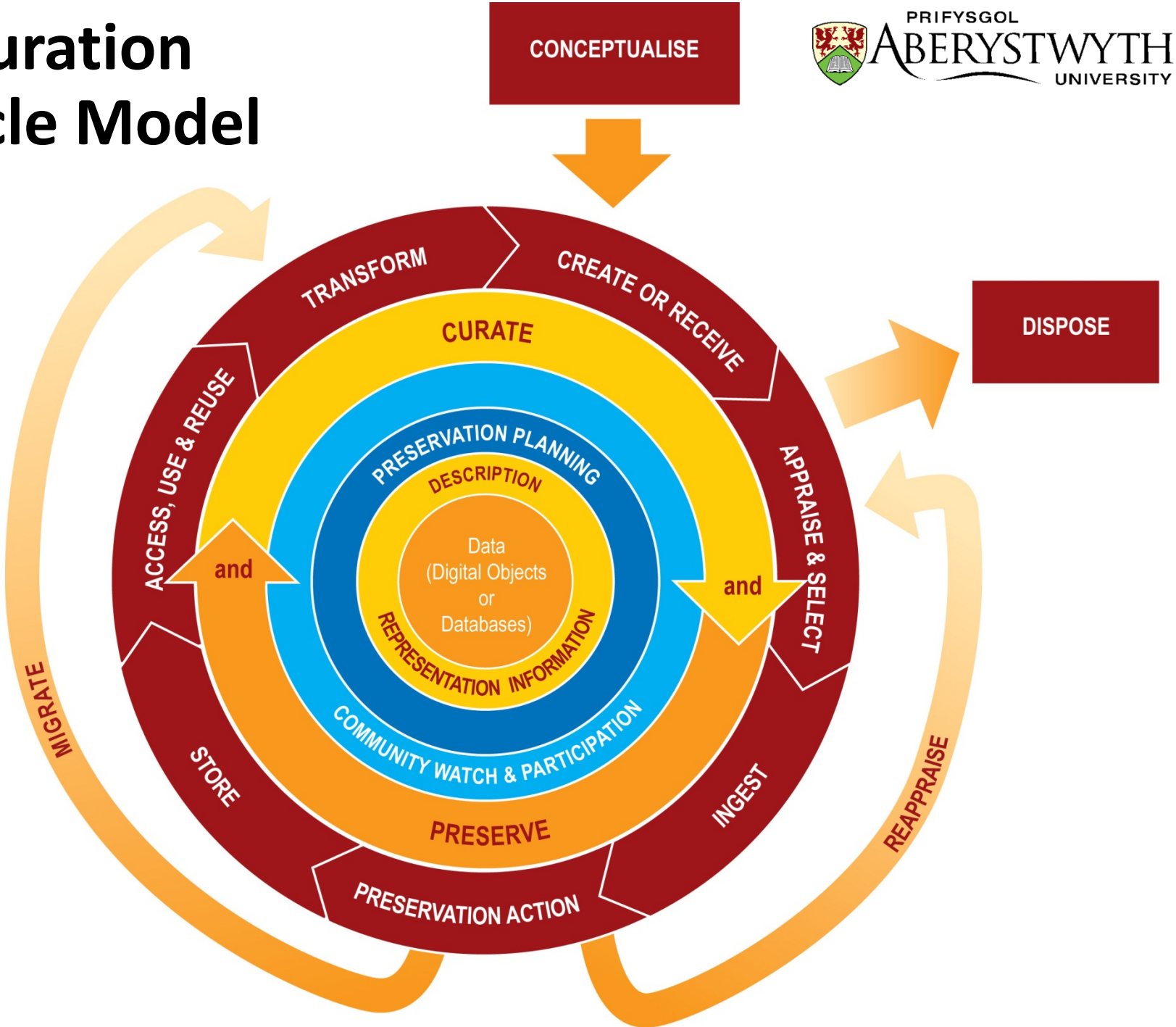
- OAIS (Open Archival Information System Reference Model – ISO 14721:2003)

  *nuts and bolts of activities*

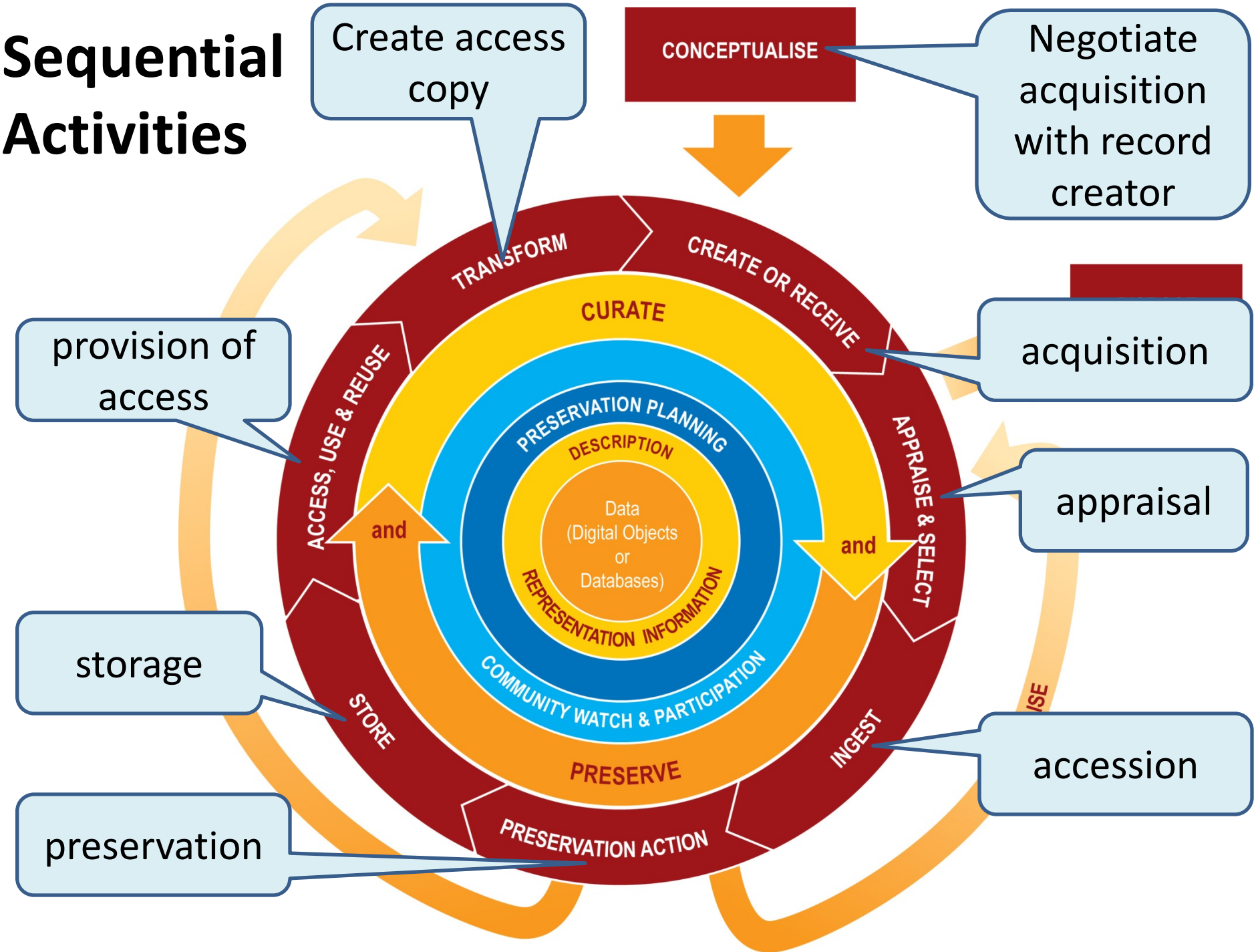
  "The purpose of this International Standard is to establish a system for archiving information, both digitalized and physical, with an organizational scheme composed of people who accept the responsibility to preserve information and make it available to a designated community".

# DCC Curation Lifecycle Model

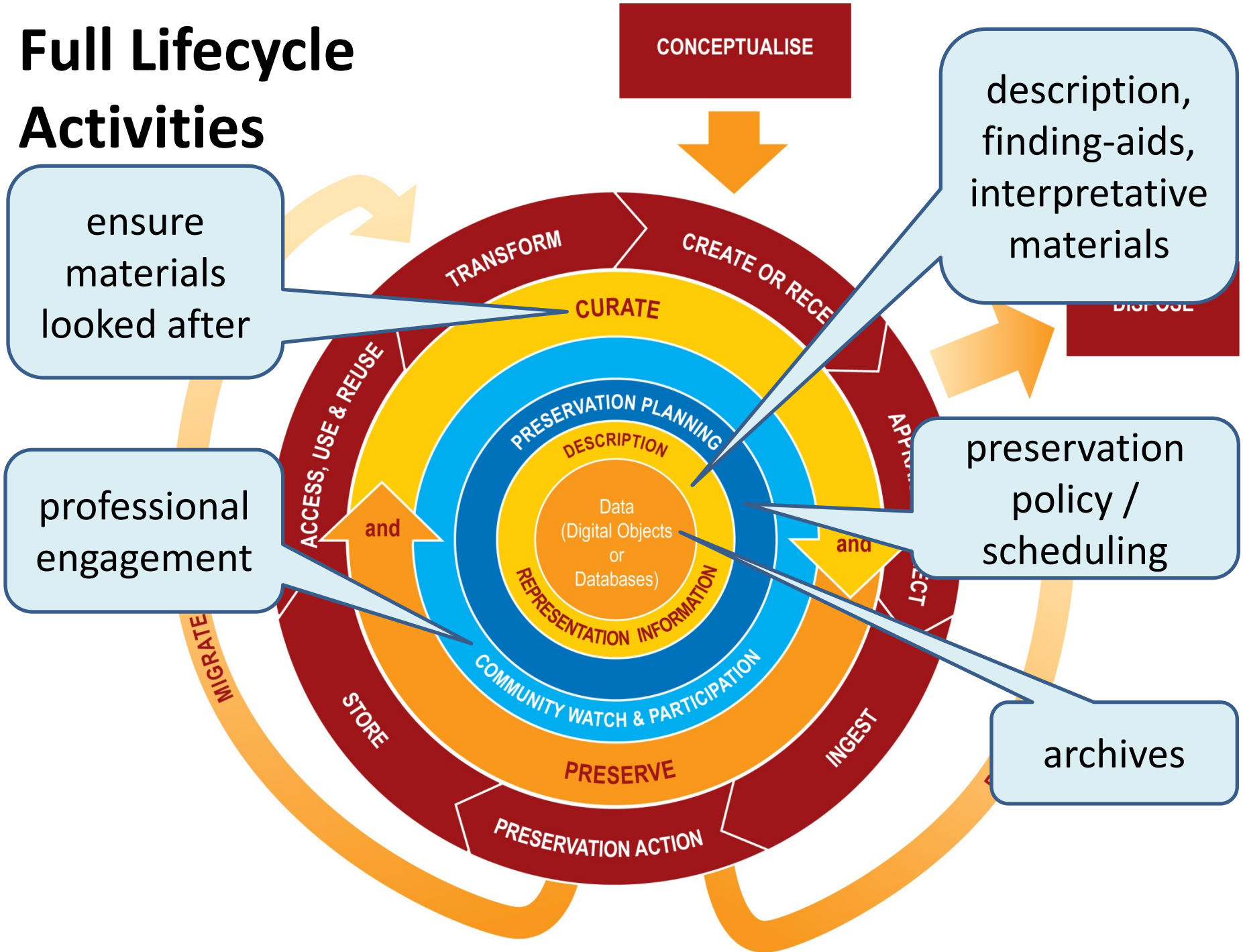
PRIFYSGOL ABERYSTWYTH UNIVERSITY



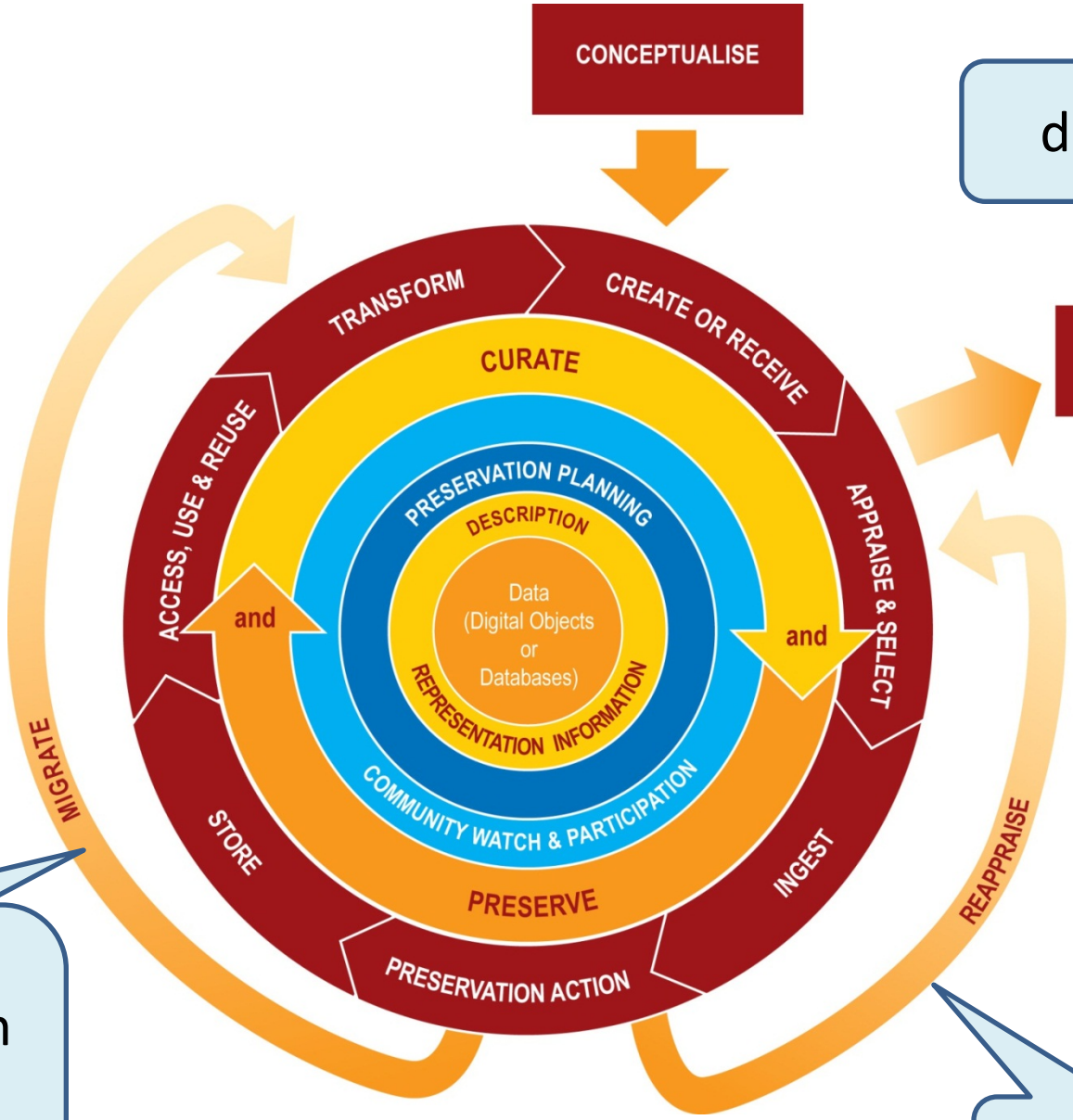
# Sequential Activities



# Full Lifecycle Activities



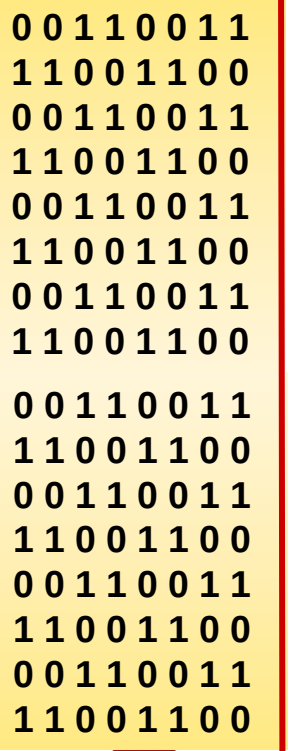
# Occasional Activities

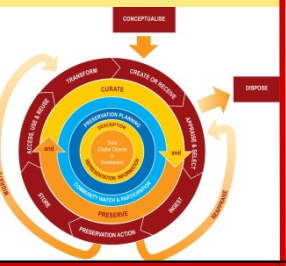



dispose

Convert to another medium e.g. photocopy, microfilm, digitise!

reappraise




# OAIS

3 main tenets

- Mandatory responsibilities
  - "Moral and physical defence"
- Functional model
  - actors and processes
- Information model
  - the specifics of description and interpretive materials needed to contextualise archival material – "moral defence".

Specific technical methodologies

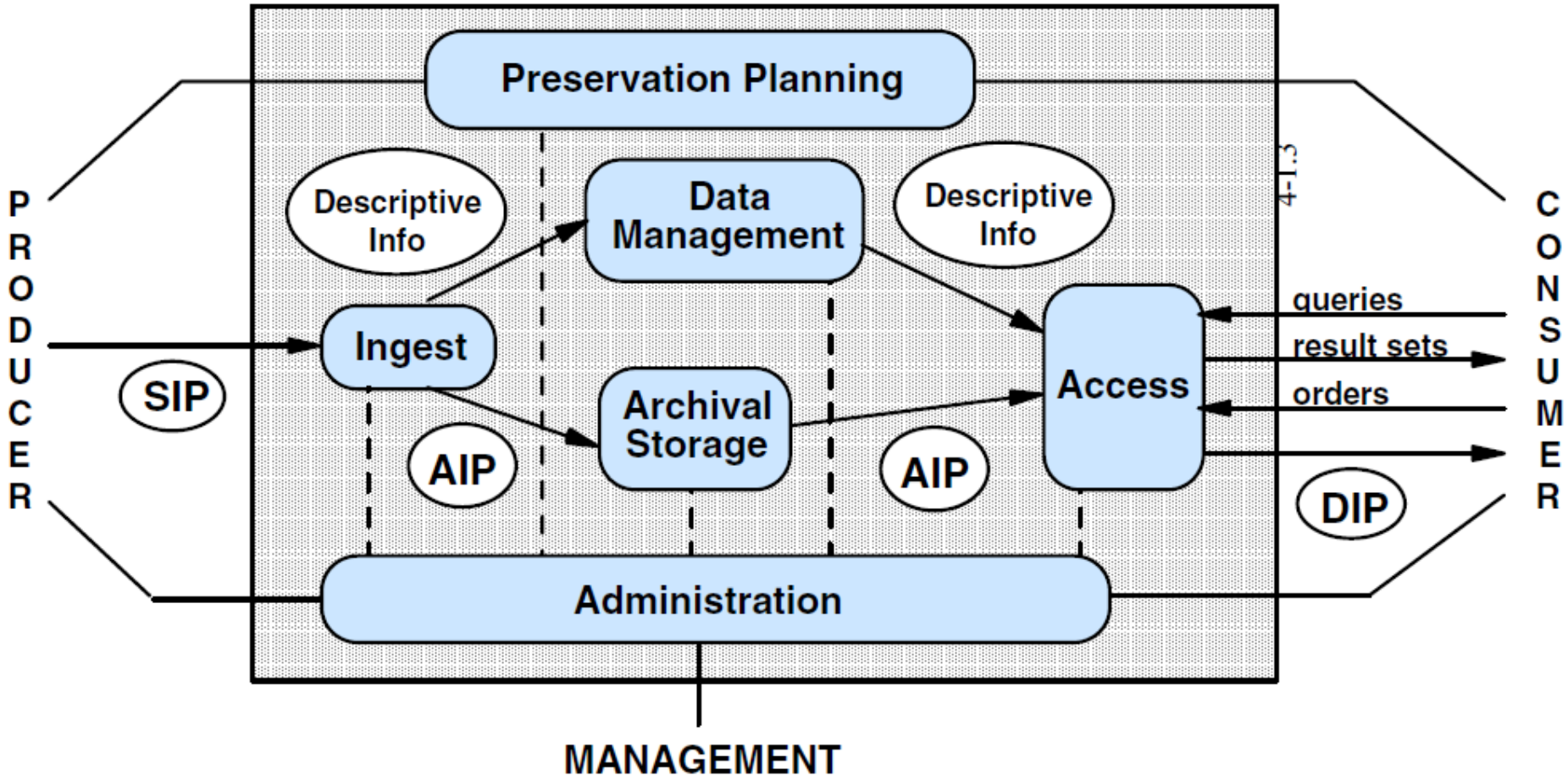
- Preservation
- Interoperability

# OAIS – 6 mandatory responsibilities

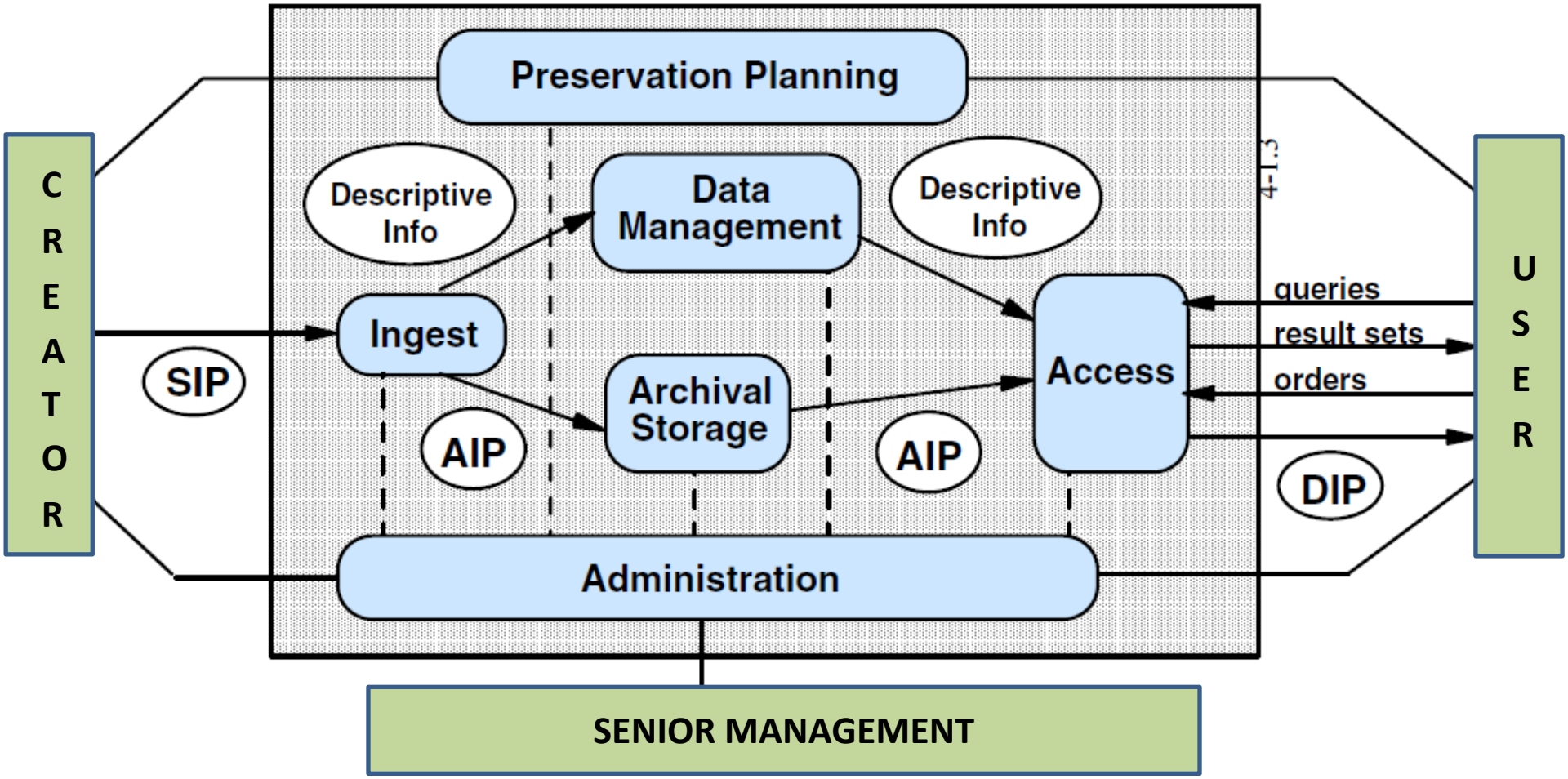
| | |
|---|---|
| 1 | *Collect archival materials from the creator and accession into the repository supported by Collections Policy, Acquisition Policy and Accessions Policy.* |
| 2 | *Arrange, describe and ensure finding-aids are available for the material. Prepare the material for storage by removing anything harmful to long-term preservation, packaging appropriately and store in a suitable environment.* |
| 3 | *Develop an Access Policy and access methodology to ensure the material can be made available to the identified users.* |
| 4 | *Provide contextual information through arrangement and description - catalogues, finding-aids and interpretive materials.* |
| 5 | *Implement a Preservation Policy which ensures the materials do not deteriorate and are handled appropriately. Ensure secure storage so that records are not tampered with or inappropriately copied.* |
| 6 | *Ensure provision and procedures for access are in place for the identified users.* |

# OAIS – Functional model

## Actors, Archives, Processes

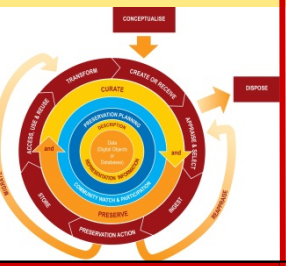


# Actors - OAIS – Functional Model



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0



PRIFYSGOL ABERYSTWYTH UNIVERSITY

# Archives - OAIS – Functional Model

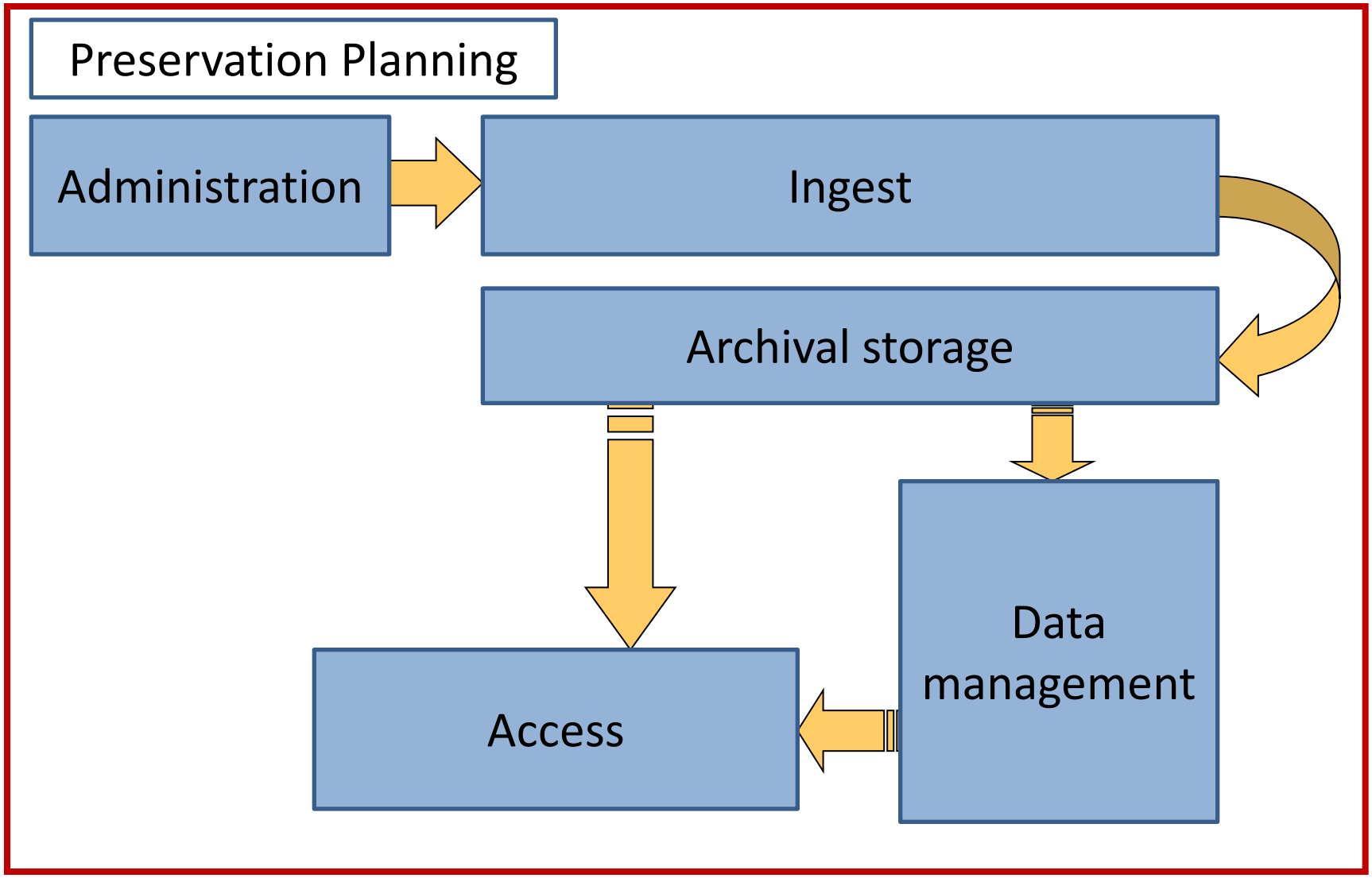
| OAIS packages | Archival processing - stages |
|---|---|
| Submission Information Package (SIP) | Material in the state it is in when deposited with the archive – before arrangement, description and conservation activities. |
| Archival Information Package (AIP) | Material arranged, described, conserved and packaged. |
| Dissemination Information Package (DIP) | Material as it is presented to the user, including preservation surrogates. |

# Processes- OAIS – Functional Model

| OAIS Functional Entities | Archival processes |
|---|---|
| Ingest | Accession and appraisal |
| Archival storage | Storage, arrangement, preservation and retrieval of archival material |
| Data management | Description and archive management |
| Administration | Acquisition, access control and IT management |
| Preservation planning | Preservation policy development and implementation |
| Access | Access policy and implementation |
| Common services | Support services external to the archive e.g. IT department, legal department |

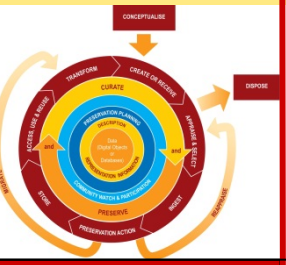
PRIFYSGOL ABERYSTWYTH UNIVERSITY

# *"Moral and physical defence of archives"* Jenkinson



0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0



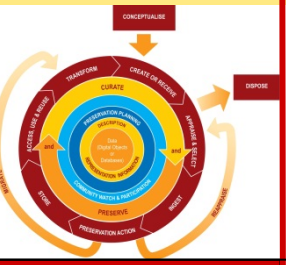

# Digital Curation: New Medium, Old Methods

PRIFYSGOL ABERYSTWYTH UNIVERSITY

- Curation of digital media has developed its own vocabulary and an accompanying mystique
- The archival processes are the same, just labelled differently

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0

0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0
0 0 1 1 0 0 1 1
1 1 0 0 1 1 0 0




Sarah Higgins

Lecturer in Archive Administration and Records Management

Aberystwyth University

sjh@aber.ac.uk