Working with OAIS

Digital preservation in theory and practice: the experience of Archaeology Data Service / AHDS Archaeology

Jen Mitcham:
jlm10@york.ac.uk

Working with OAIS: Overview

- What is the ADS?
- Functions of an OAIS?
- The Digital Pipeline

- Submission (SIP)
- Archive (AIP)
- Dissemination (DIP)

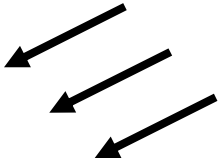
What is the ADS?

'… to support research learning and teaching with high quality and dependable digital resources'

Archaeology wing of AHDS (AHDS Archaeology)

Funded by AHRC, JISC and others

The 4 things we do all day

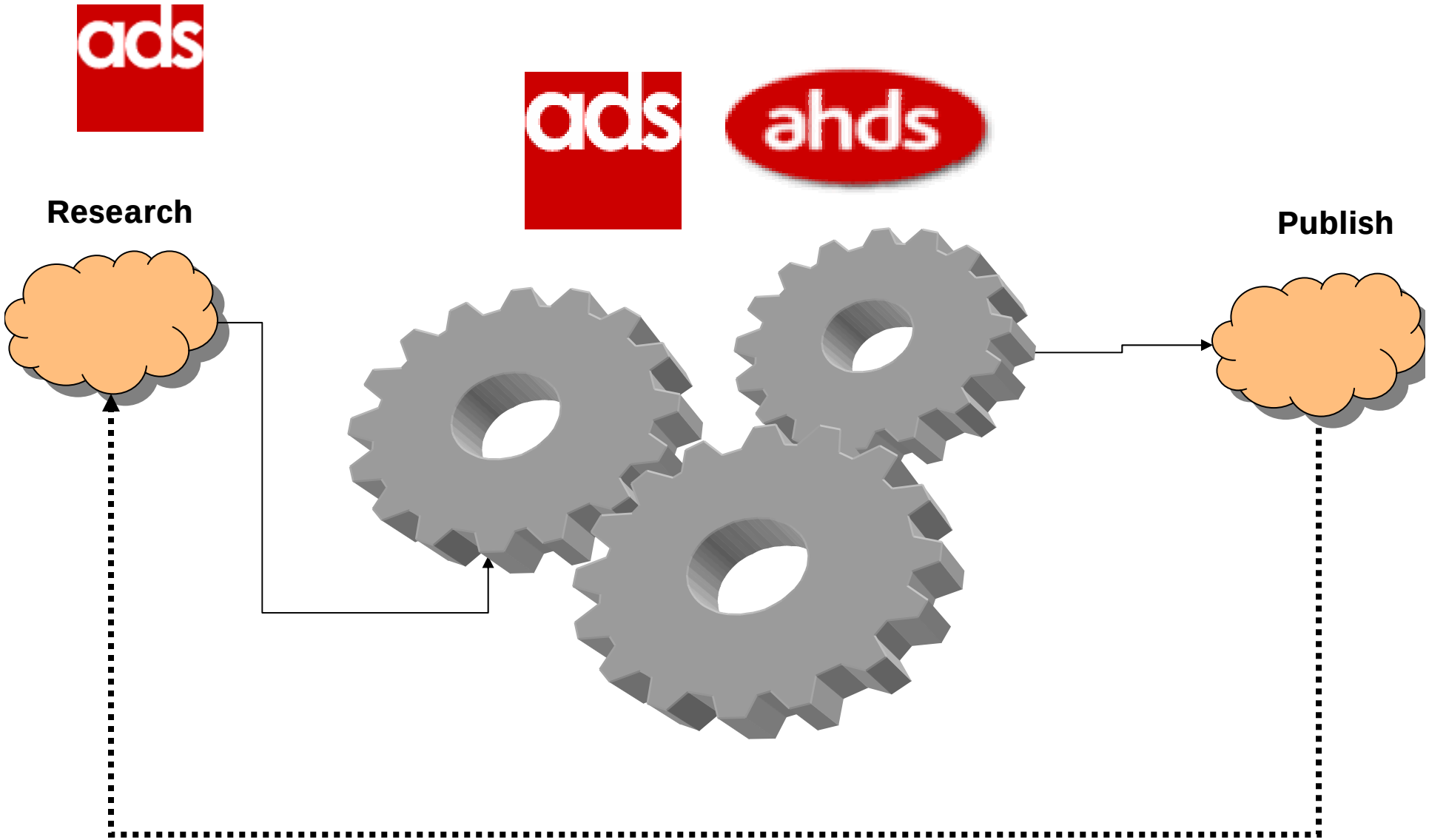


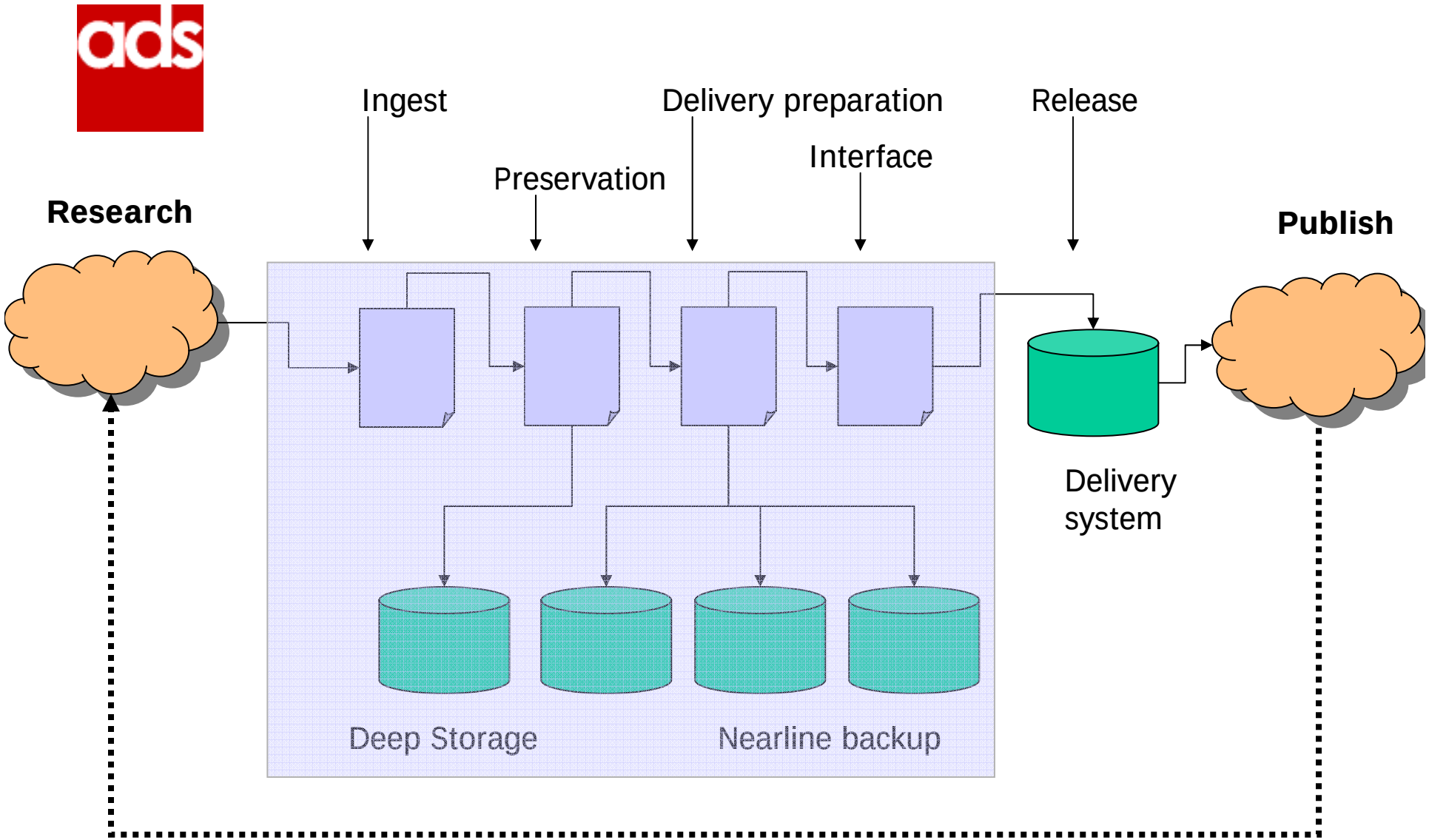
OAIS!!!!

- Digital preservation
- Guidance for data creators
- Access to data
- Guidance for funders

Core Functions in OAIS

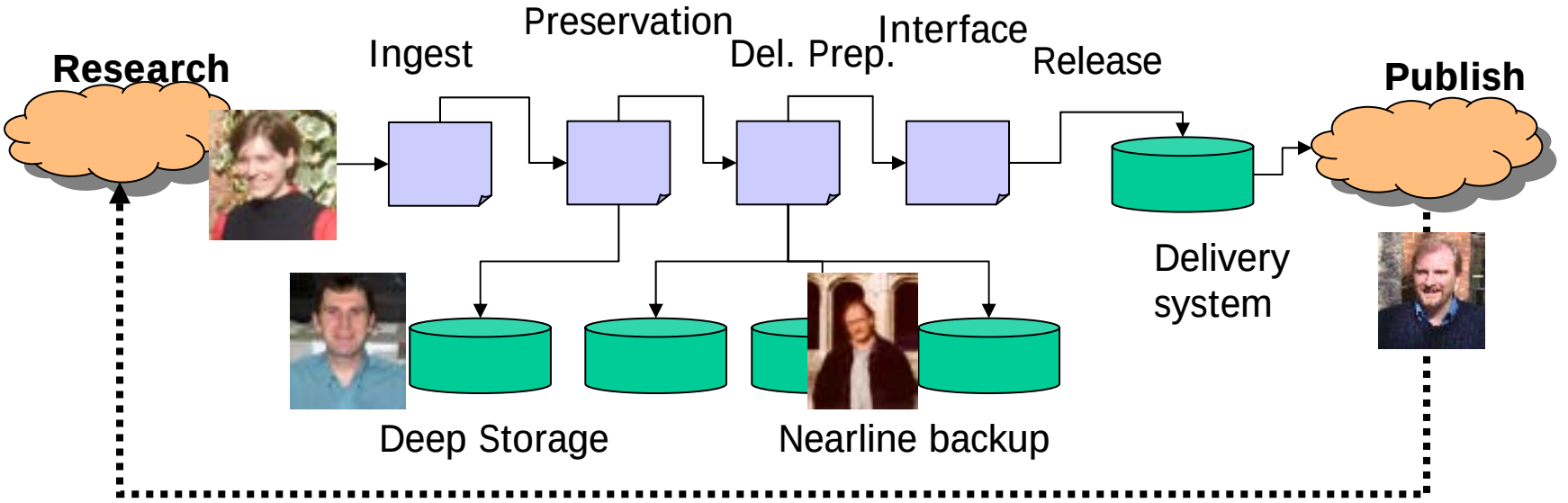
- Negotiate for appropriate deposits
- Obtain sufficient control of resources
- Determine scope of community
- Ensure independent utility of data
- Follow procedures for preservation
- Disseminate


ads
ads
ahds
Research
Publish

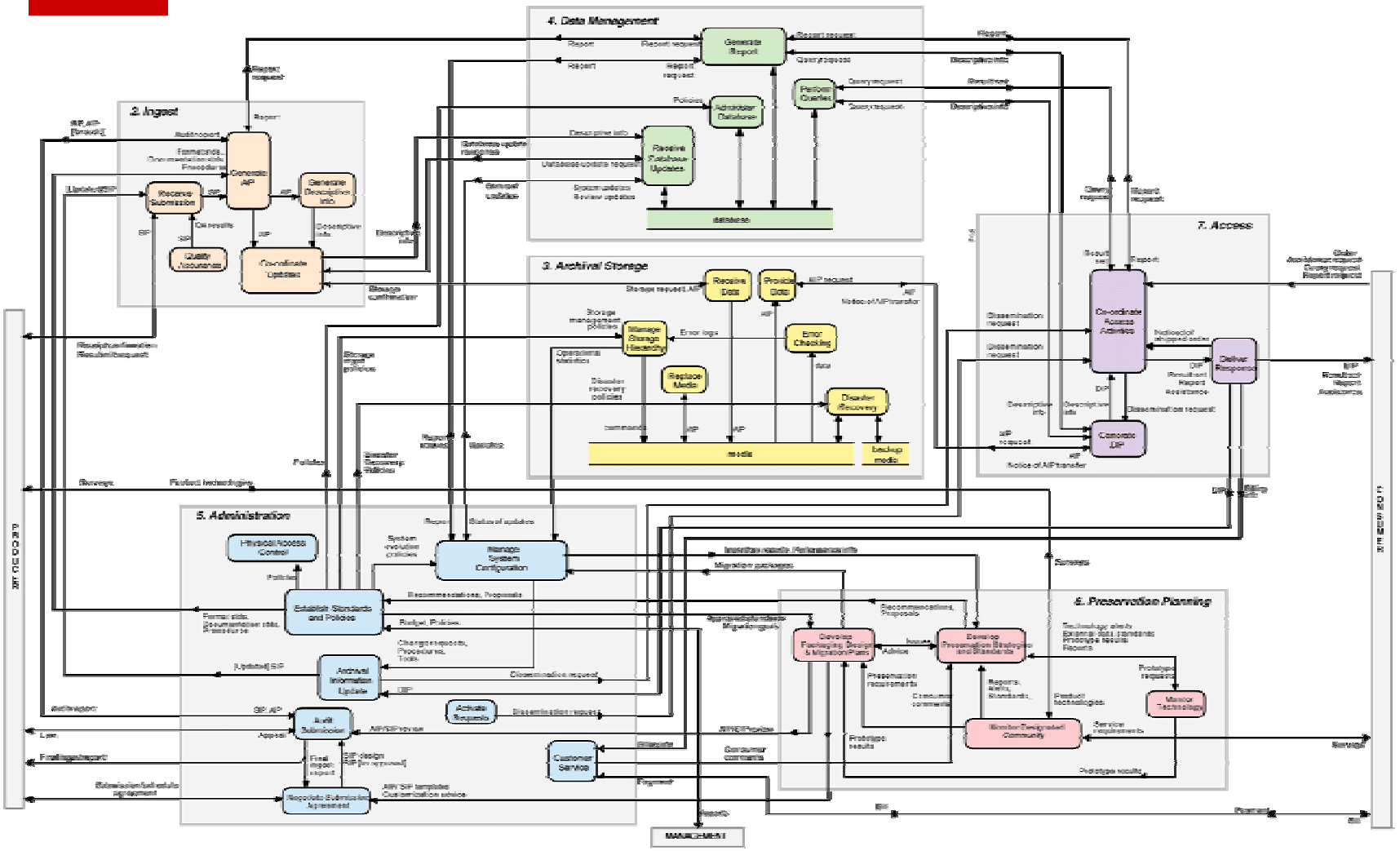

ads
Ingest
Preservation
Delivery preparation
Interface
Release
Research
Publish
Delivery
system
Deep Storage
Nearline backup

Administrative and managerial functions

Curatorial Functions



Open Archival Information System



A simple OAIS diagram

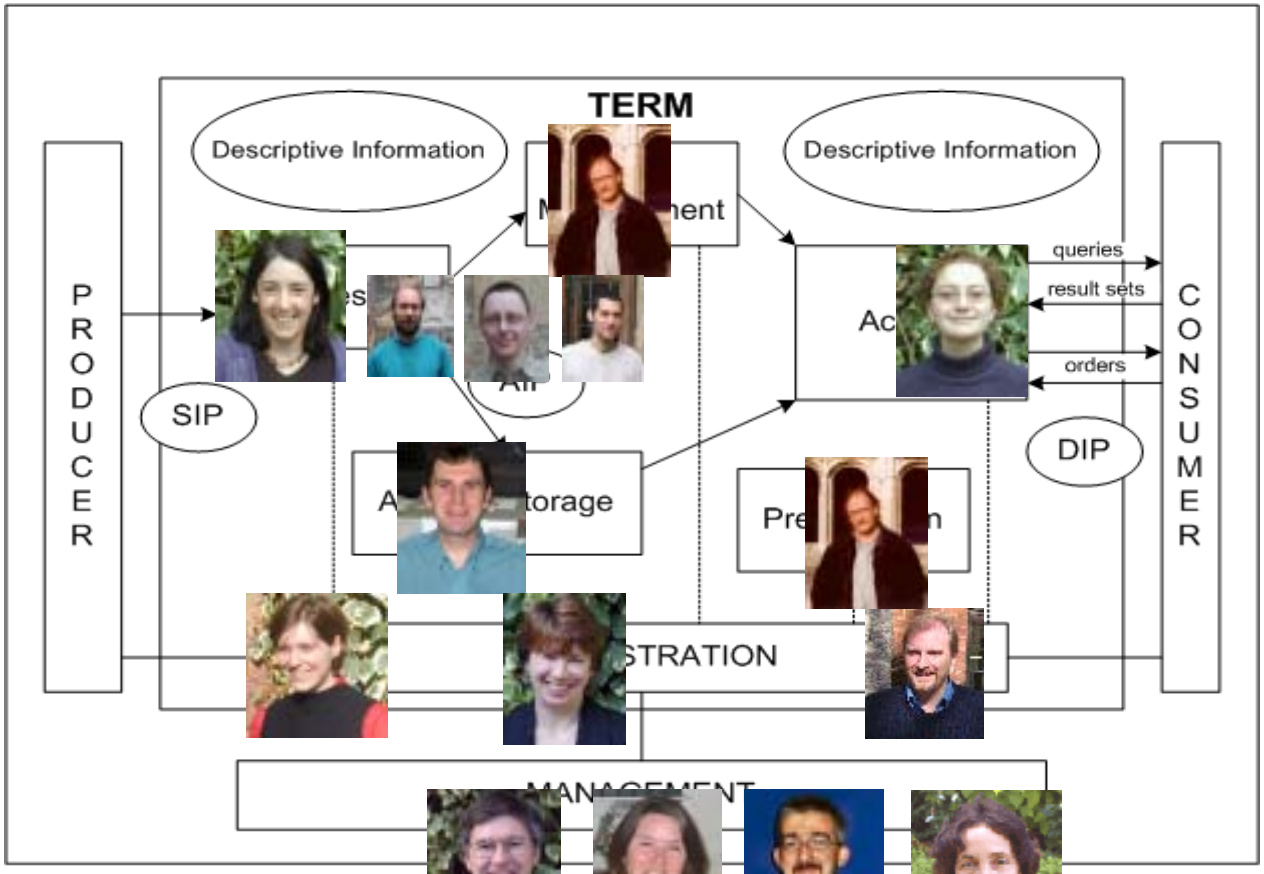


Fig. 1. Major functions of the O… Space Data Systems (CCSDS), CCSDS 650… tract Standard. (OAIS). White Book. Issue 1. Draft Recommendation for Space Data System Standards.

Picture from DLib

SIP: Submitting Information

Community interaction

Agreeing File Formats and Metadata

Negotiation on interface and constituents

Deposit licence

Delivery and receipt processes

Accession and Management

SIP to AIP – Ingest checklist

1. Check data for viruses
2. Can we read the CD/can we open the files?
3. Check file counts against documentation provided
4. Is documentation adequate for data provided?
5. Run checksum on CD
6. Copy data to server
7. Run another checksum and compare
8. Replace spaces in filenames with underscores
9. Scan licence agreement and store with SIP
10. Record receipt of data in management database
11. Create receipt to send to depositor

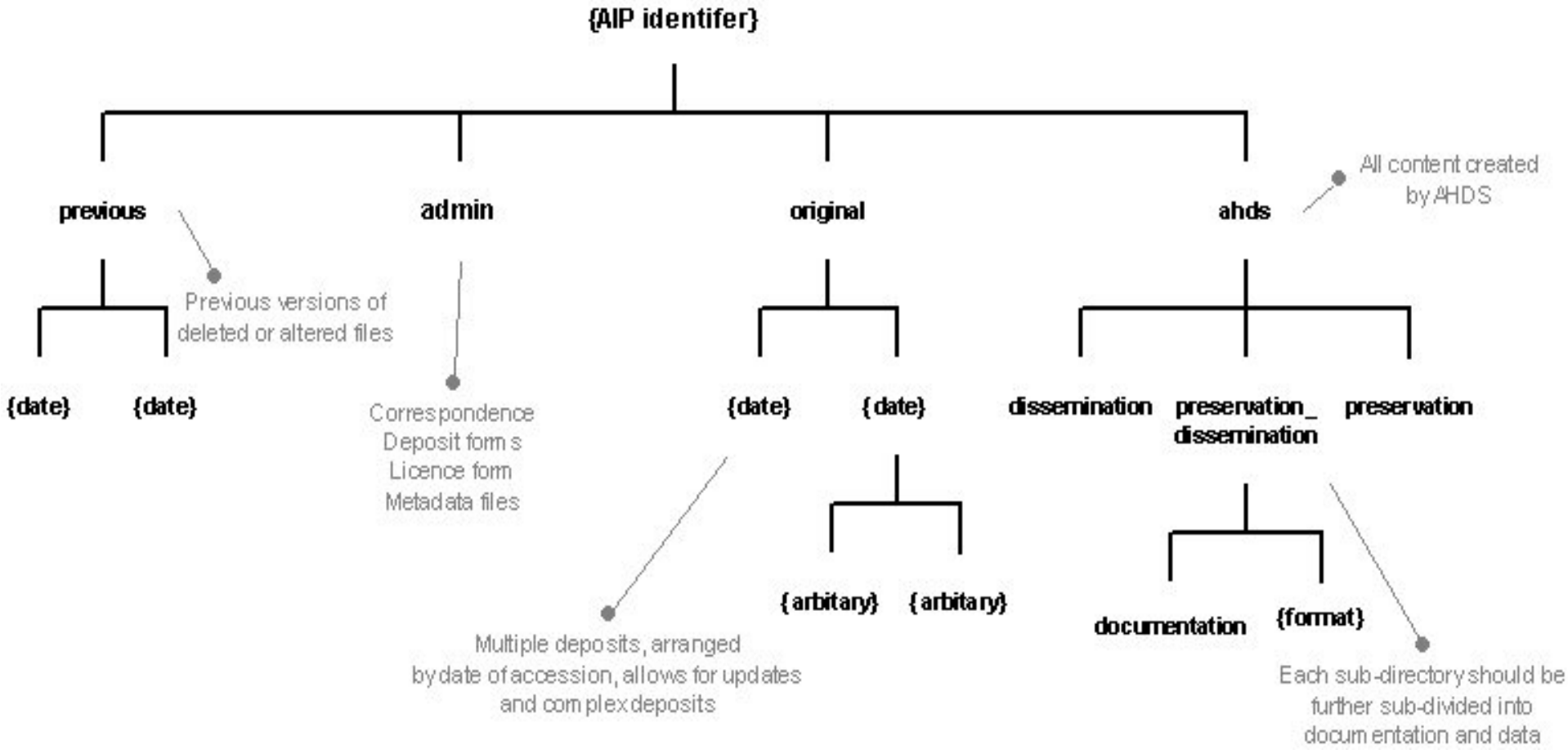
Assembly review + Management function

AIP: assembly

Assemble parts of AIP:

- Original submission
- Admin documents and metadata
- Preservation copies of data
- Dissemination copies of files
- Transformation metadata

AIP directory structure



Procedural review +
Management function

AIP: Procedures

What goes where

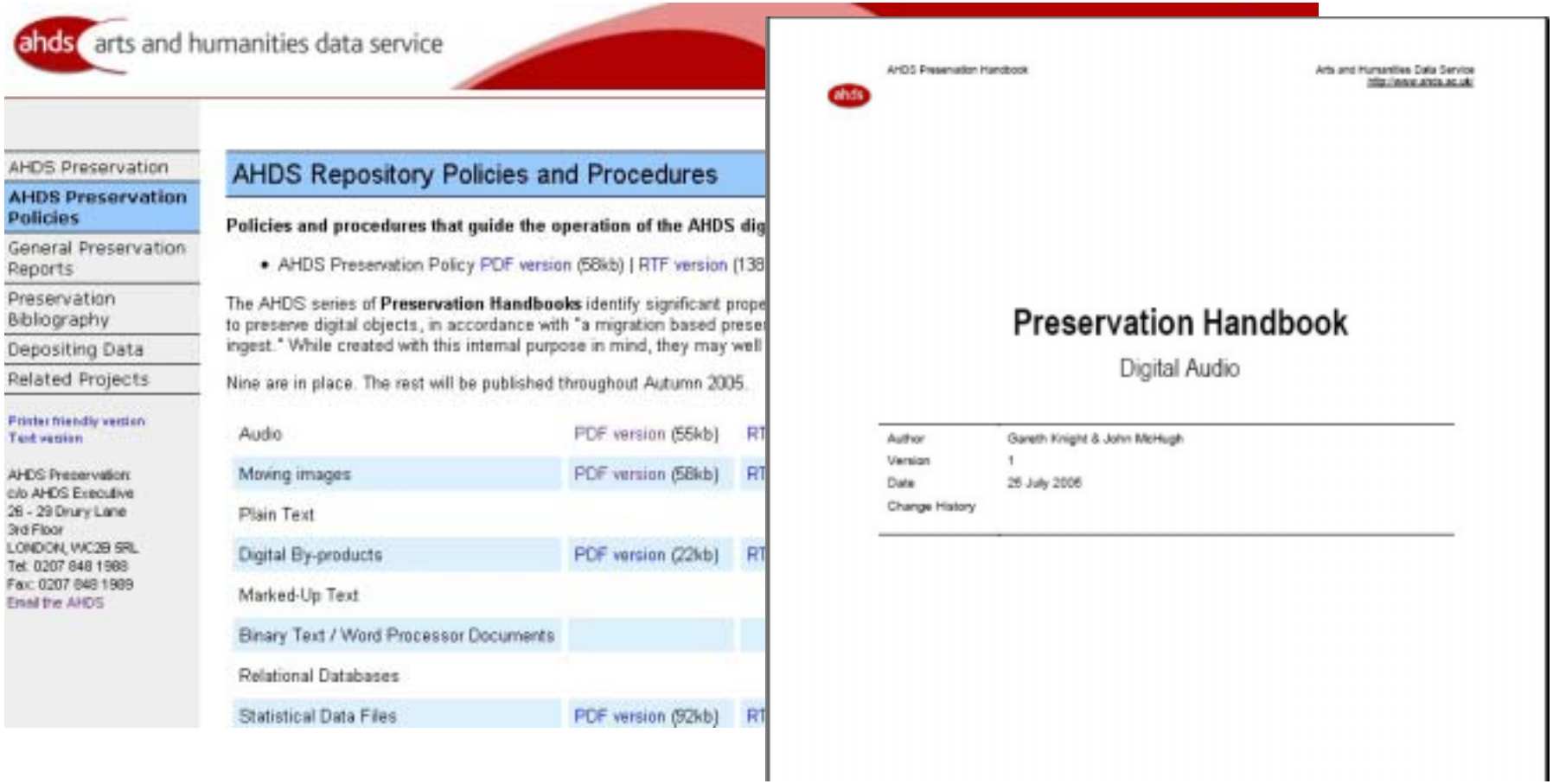
Format and transformation manuals

Documenting transformations

Administrative information

AHDS Preservation Manuals

http://ahds.ac.uk/preservation/ahds-preservation-documents.htm



DIP: Preparing for Dissemination / Access

Service review + helpdesk + Management function

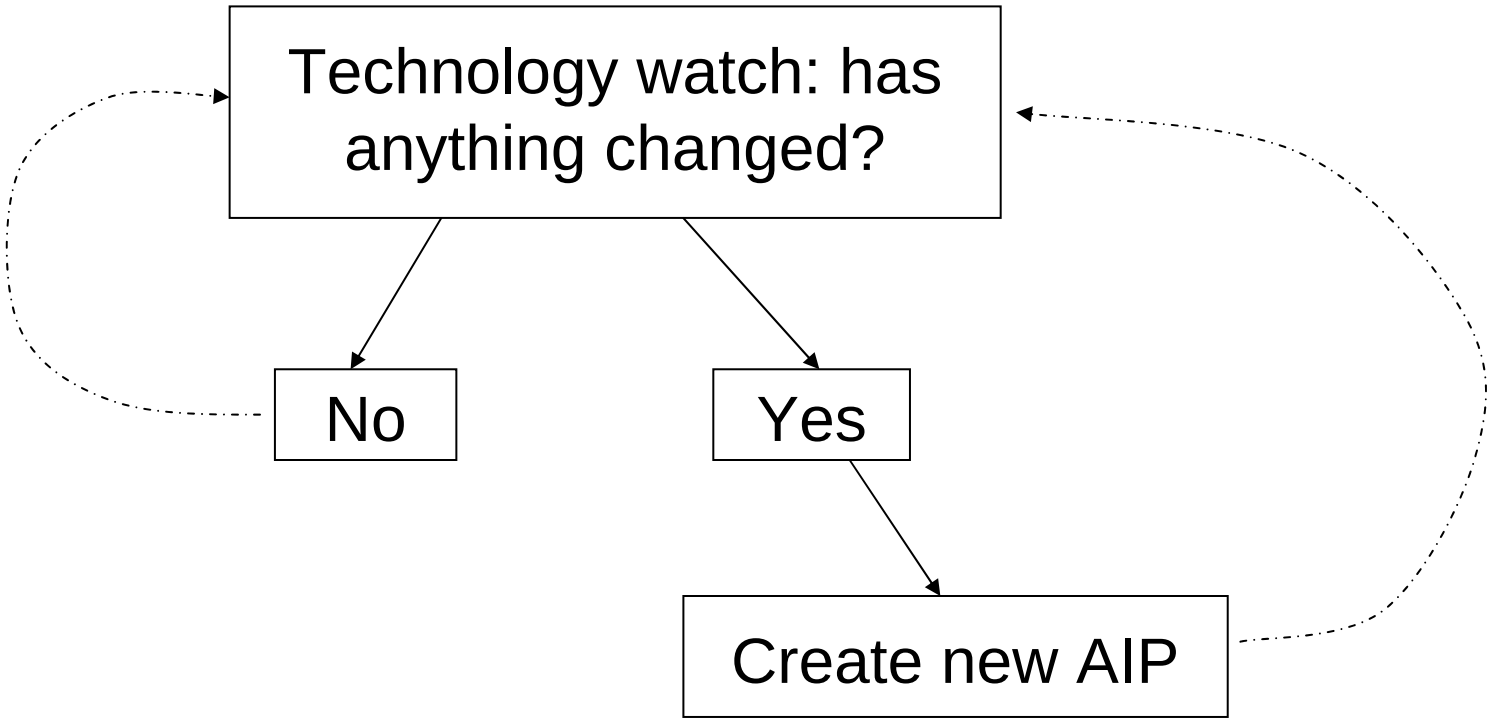
- Community interaction
- Design and implementation
- Internal procedures and checklists
- Quality Checks
- Depositor review / peer review
- Release

DIP: Access

http://ads.ahds.ac.uk/catalogue/

http://ads.ahds.ac.uk/catalogue/resources.html?spitalfields_var_2001

...then continuous active management



Compliance and the ADS?

- ☺ •Negotiate for appropriate deposits?
- ☺ •Obtain sufficient control of resources?
- ☺ •Determine scope of community?
- ☺ •Ensure independent utility of data?
- ☺ •Follow procedures for preservation?
- ☺ •Disseminate?