Organisational alignment

How the ADS responds to external change

Catherine Hardman
Archaeology Data Service

The ADS: Who we are and what we do

- Founded 1996
- Department of Archaeology, University of York
- Collections
  - 1,100,000 metadata records
  - 25,000+ unpublished fieldwork reports
  - 700+ rich archives
- Guides to Good Practice
- DPC Decennial Award 2012

Organisational alignment

Our ‘vision’ has remained pretty unchanged

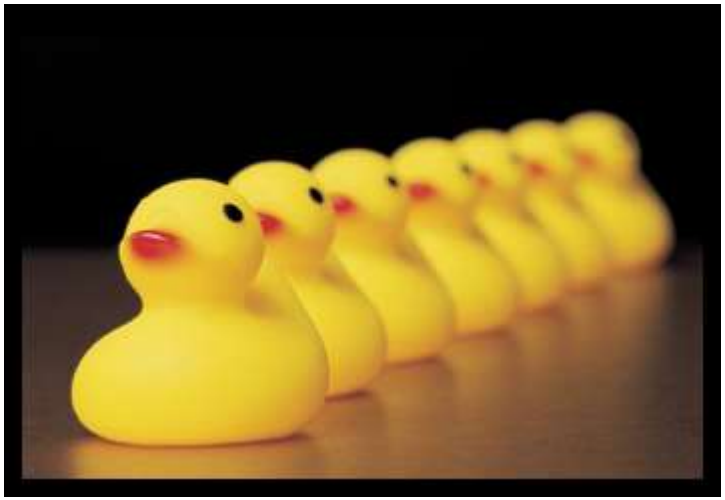
…supports research, learning and teaching with freely available, high quality and dependable digital resources...

….preserving digital data in the long term, and by promoting and disseminating a broad range of data in archaeology…

….promotes good practice in the use of digital data in archaeology...

But…

…there have been a large number of changes in the profession/sector that has meant we continue to ‘re-align’ over the years to keep our ducks in a row..



External challenges : 1996 (PPG16)?

Why is it so important to preserve archaeological data? (preservation by record)

- Archaeology is destructive!
- Archaeological resources are unique
- The documentation becomes the main resource for future interpretation
- Digital data is subject to rapid change to both software and hardware formats

External challenges : Preservation problems

IBM 3480

Click!

9-Track Reel

DVD-ROM

G2000 Tape

4mm Tape

QIC DC600

DC4_120

8" Floppy

Smart Media

3.5" Floppy

xD Picture Card

Punch Tape

CD-ROM

Rectangular Hole Punch Card

Floptical Disk

Travan

DG90M Tape

Memory Stick

5.25" Floppy

Sparq Disk Cartridge

5.25" Optical Disk

8mmD-eight

Cassette tape

12" Optical Disk

MultiMedia Card

Jaz Disk

SD Memory Card

Zip Disk

DLT Tape

CompactFlash

Ditto Max

External challenges : file formats

Images (8)
CAD Vector Graphics (4)
Database (4)
GIS (8)
Movies (3)
Spreadsheets (4)
Statistics (8)
Text (7)
Virtual Reality (4)
Geophysics (3)
Audio (4)

… always under review and growing…

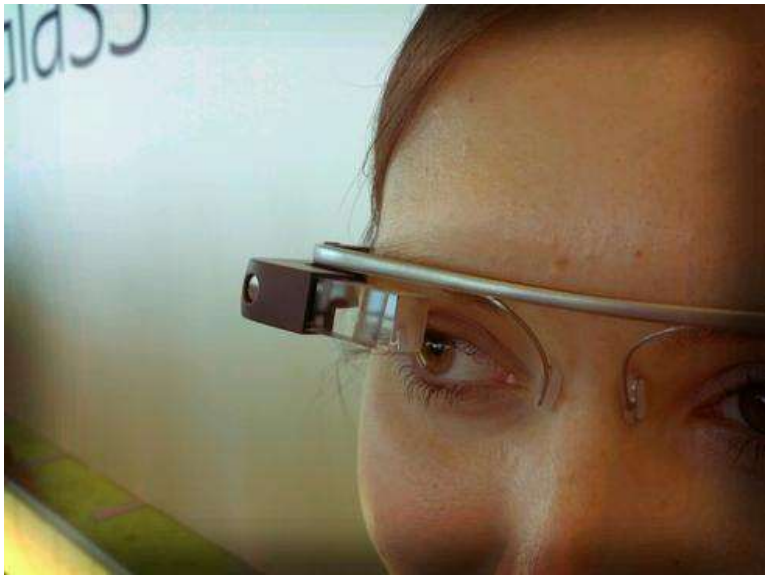
External challenges: changes in the sector

- Fluctuation in development levels
- Changes to RCUK rules re retention of research data
- Level of skills and infrastructure shortage in museums

External challenges: changes to users expectations

From the Tamagotchi…

..to Google-glasses

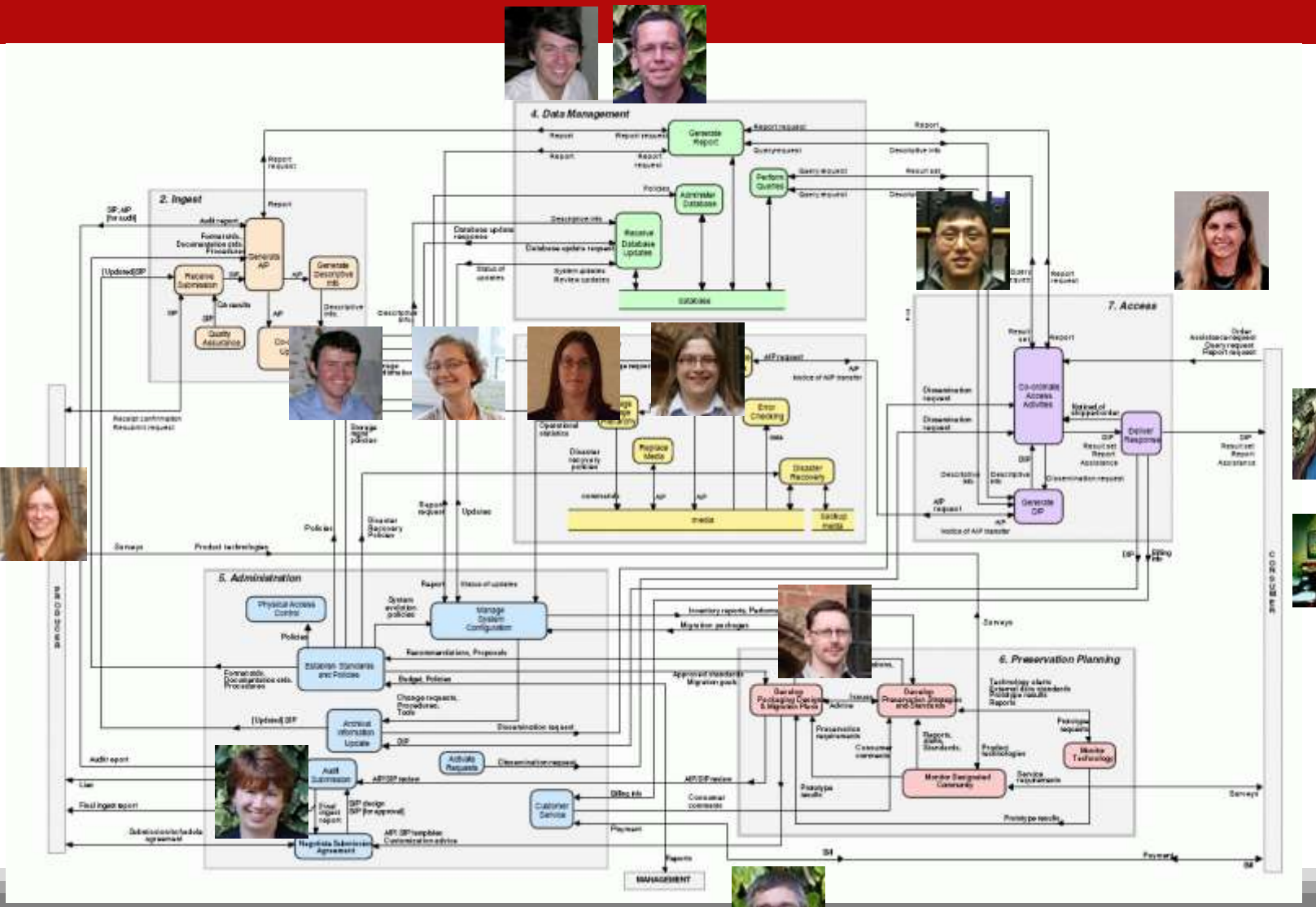


These challenges affect how we do things

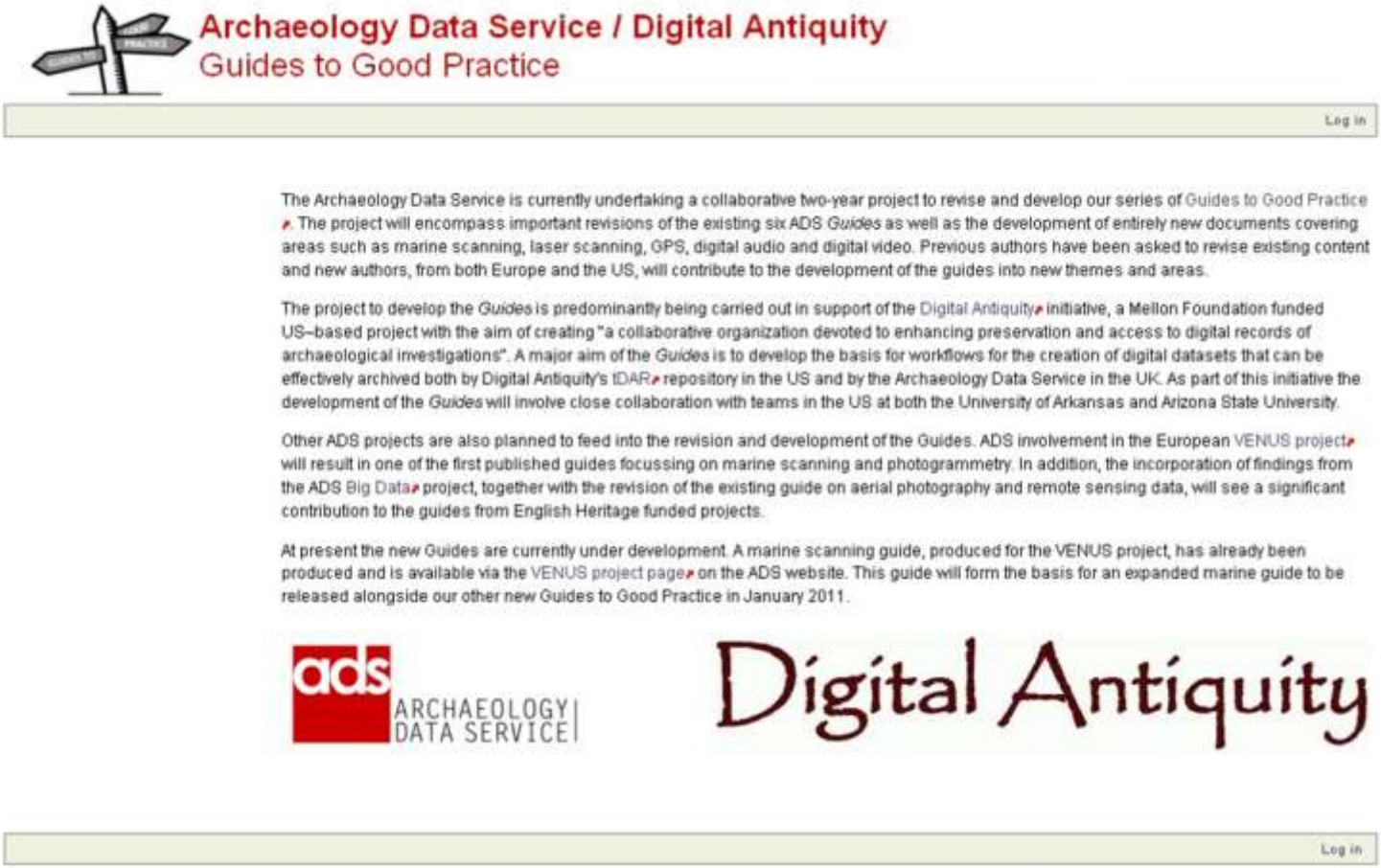
Common to traditional archives :

- A collections policy
- Selection and retention, review and disposal
- Sensitive data DPA/FoI requests
- Human Tissue Act 2004
- Licensing and copyright
- Terms and conditions of use
- Charging policy

Open Archival Information System (OAIS)



Always under review: Guides to Good practice



Archaeology Data Service / Digital Antiquity
Guides to Good Practice

Log in

The Archaeology Data Service is currently undertaking a collaborative two-year project to revise and develop our series of Guides to Good Practice. The project will encompass important revisions of the existing six ADS *Guides* as well as the development of entirely new documents covering areas such as marine scanning, laser scanning, GPS, digital audio and digital video. Previous authors have been asked to revise existing content and new authors, from both Europe and the US, will contribute to the development of the guides into new themes and areas.

The project to develop the *Guides* is predominantly being carried out in support of the Digital Antiquity initiative, a Mellon Foundation funded US–based project with the aim of creating "a collaborative organization devoted to enhancing preservation and access to digital records of archaeological investigations". A major aim of the *Guides* is to develop the basis for workflows for the creation of digital datasets that can be effectively archived both by Digital Antiquity's tDAR repository in the US and by the Archaeology Data Service in the UK. As part of this initiative the development of the *Guides* will involve close collaboration with teams in the US at both the University of Arkansas and Arizona State University.

Other ADS projects are also planned to feed into the revision and development of the Guides. ADS involvement in the European VENUS project will result in one of the first published guides focussing on marine scanning and photogrammetry. In addition, the incorporation of findings from the ADS Big Data project, together with the revision of the existing guide on aerial photography and remote sensing data, will see a significant contribution to the guides from English Heritage funded projects.

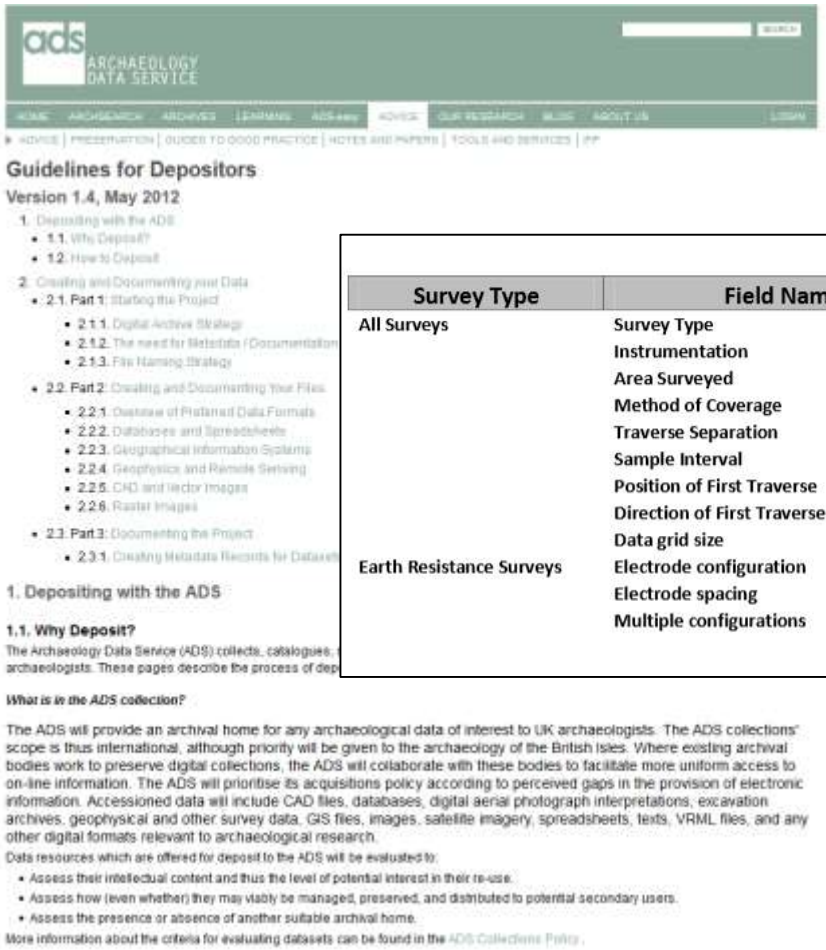
At present the new Guides are currently under development. A marine scanning guide, produced for the VENUS project, has already been produced and is available via the VENUS project page on the ADS website. This guide will form the basis for an expanded marine guide to be released alongside our other new Guides to Good Practice in January 2011.

ads ARCHAEOLOGY DATA SERVICE

Digital Antiquity

Log in

Always under review: Depositors Guidelines



ARCHAEOLOGY DATA SERVICE

Guidelines for Depositors

Version 1.4, May 2012

1. Depositing with the ADS
   - 1.1. Why Deposit?
   - 1.2. How to Deposit
2. Creating and Documenting your Data
   - 2.1. Part 1: Starting the Project
     - 2.1.1. Digital Archive Strategy
     - 2.1.2. The need for Metadata / Documentation
     - 2.1.3. File Naming Strategy
   - 2.2. Part 2: Creating and Documenting Your Files
     - 2.2.1. Overview of Preferred Data Formats
     - 2.2.2. Databases and Spreadsheets
     - 2.2.3. Geographical Information Systems
     - 2.2.4. Geophysics and Remote Sensing
     - 2.2.5. CAD and Vector Images
     - 2.2.6. Raster Images
   - 2.3. Part 3: Documenting the Project
     - 2.3.1. Creating Metadata Records for Datasets

1. Depositing with the ADS

1.1. Why Deposit?

The Archaeology Data Service (ADS) collects, catalogues, [illegible] archaeologists. These pages describe the process of dep[illegible]

What is in the ADS collection?

The ADS will provide an archival home for any archaeological data of interest to UK archaeologists. The ADS collections' scope is thus international, although priority will be given to the archaeology of the British Isles. Where existing archival bodies work to preserve digital collections, the ADS will collaborate with these bodies to facilitate more uniform access to on-line information. The ADS will prioritise its acquisitions policy according to perceived gaps in the provision of electronic information. Accessioned data will include CAD files, databases, digital aerial photograph interpretations, excavation archives, geophysical and other survey data, GIS files, images, satellite imagery, spreadsheets, texts, VRML files, and any other digital formats relevant to archaeological research.

Data resources which are offered for deposit to the ADS will be evaluated to:

- Assess their intellectual content and thus the level of potential interest in their re-use.
- Assess how (even whether) they may viably be managed, preserved, and distributed to potential secondary users.
- Assess the presence or absence of another suitable archival home.

More information about the criteria for evaluating datasets can be found in the ADS Collections Policy.

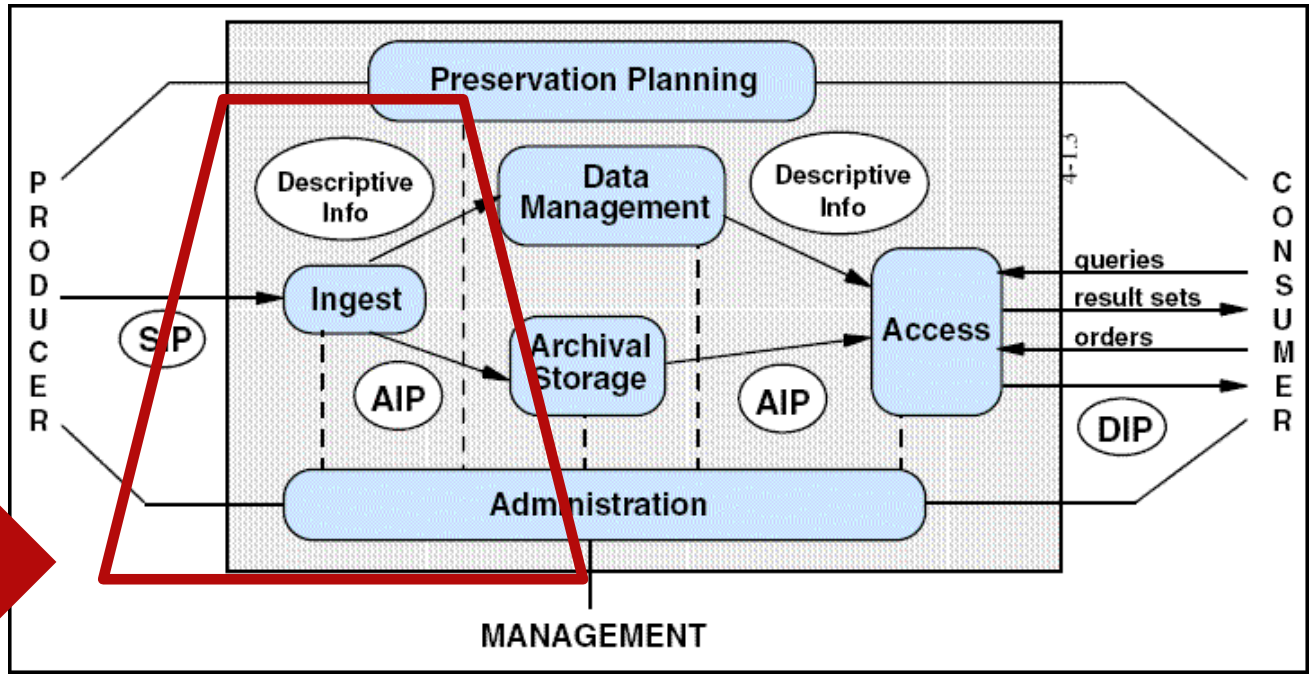
Including templates for and examples of metadata to create a well formed SIP

Survey Type	Field Name	Description	Metadata
All Surveys	Survey Type	*The type of survey (ie. Gradiometry, Resistivity, GPR, etc)*	Resistivity
	Instrumentation	*The model or equipment employed in survey*	RM15
	Area Surveyed	*The size of the area surveyed*	200 square metres
	Method of Coverage	*The track or path taken for the survey (ie. Zigzag, Regular Grid)*	Zigzag
	Traverse Separation	*Distance between traverses*	0.5m
	Sample Interval	*Distance between taken readings*	0.5m
	Position of First Traverse	*A general location of the first line of the square/survery*	NE corner of Grid 001
	Direction of First Traverse	*A general direction of the first line of the square/survery*	SSW
	Data grid size		20m
Earth Resistance Surveys	Electrode configuration	*Electrode configuration used e.g. 'Wenner'*	twin-probe
	Electrode spacing		1.0m
	Multiple configurations	*If using multiple electrode array e.g. 'Geoscan MPX15'*	n/a

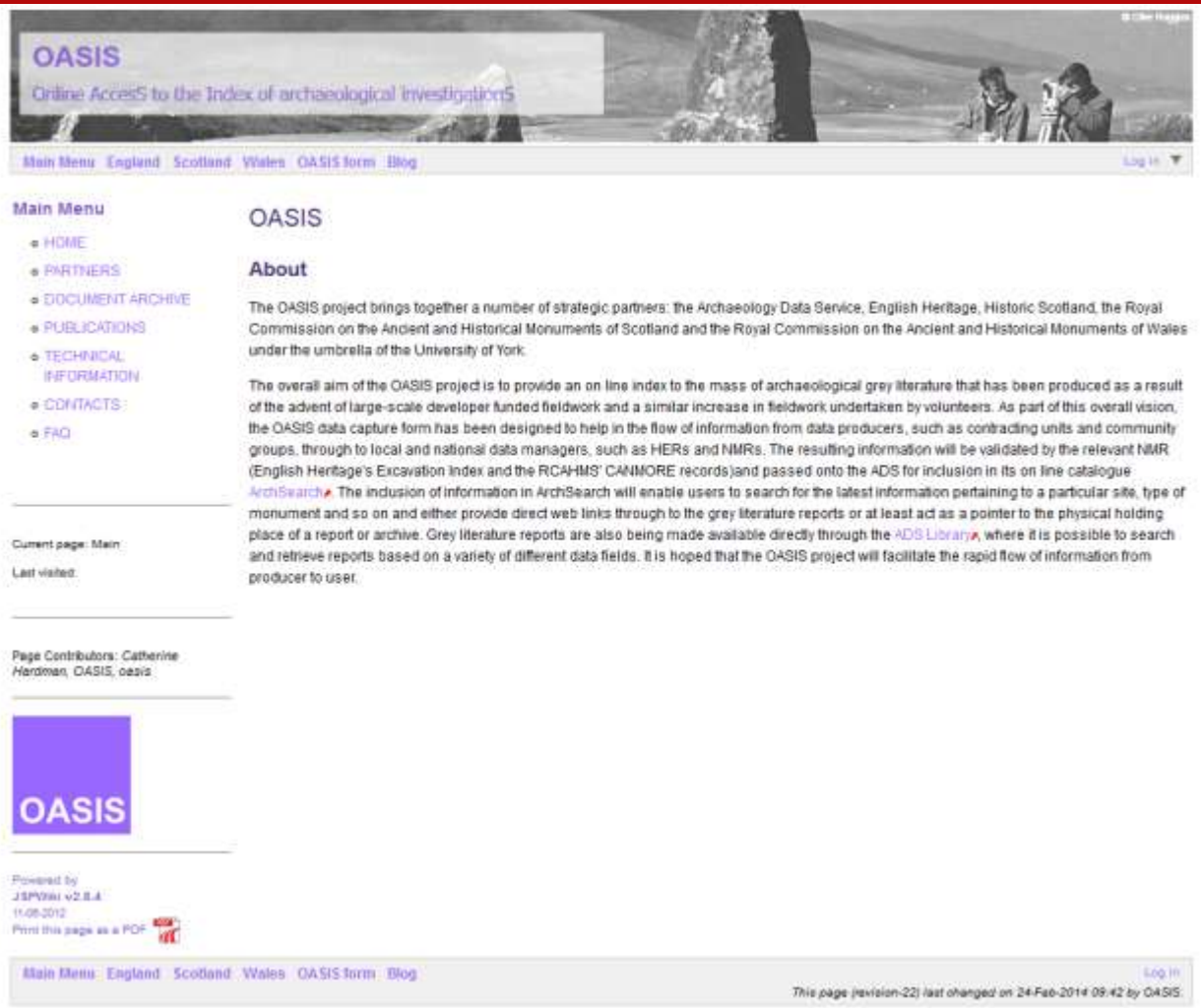
On-line options for archiving

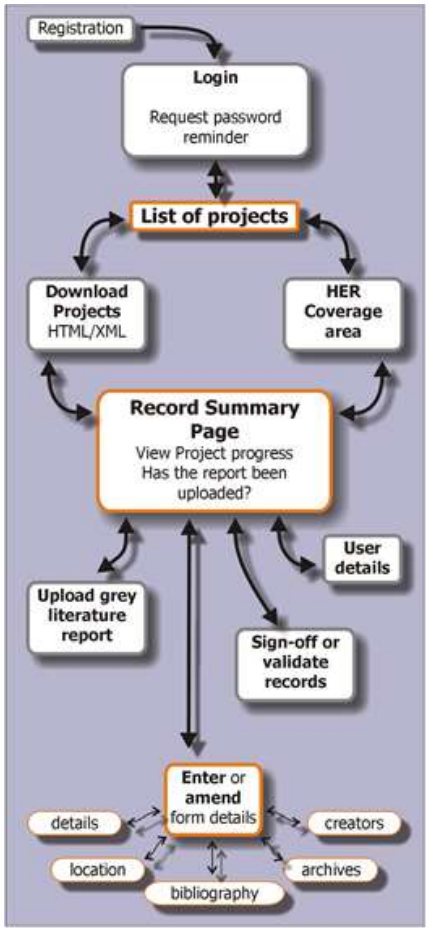
- We follow the Open Archival Information System (OAIS) reference model

This is the area that we have been concentrating our efforts on; to get a well formed SIP and AIP

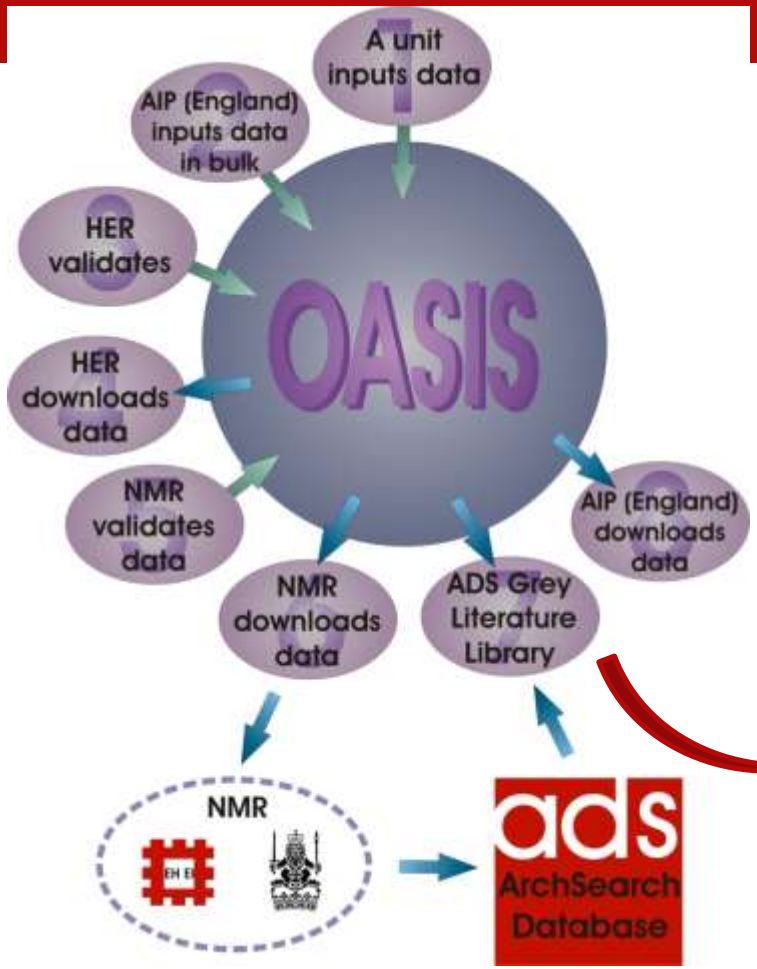


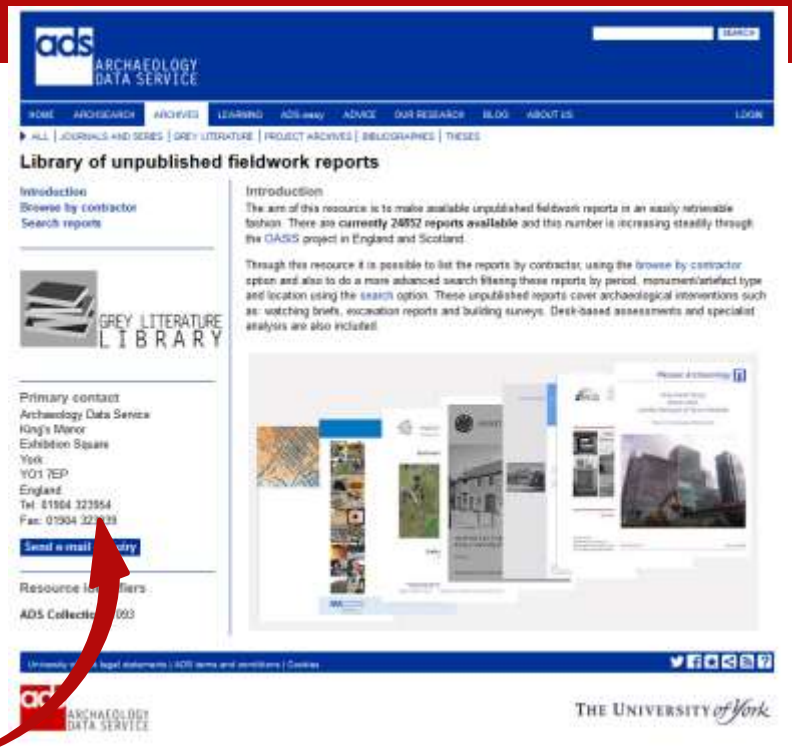
OASIS for reporting across the UK





The archive bonus





Nearly 25,000 reports with over 300 new reports added per month

Benefitting from the archive bonus of the grey lit library

University of Reading

The rural settlement of Roman Britain

Newsletter | January 2014 | Issue number 3

Realising the Research Potential of Developer-Funded Roman Archaeology in England

Welcome to our third project newsletter. The project has been running for over 18 months now, and this newsletter provides you with an update on progress and information on upcoming events. We welcome feedback and contact addresses can be found at the end. Background information on the project is available on the following websites:

- http://www.cotswoldarchaeology.co.uk/discover-the-past/
- www.reading.ac.uk/archaeology/research/roman-rural-settlement/

The project has two principal strands: The Roman Rural Settlement Project and the Romano- British Towns Project.

The Roman Rural Settlement Project

Data Collection from local Historic Environment Records (HERs) is being carried out by Cotswold Archaeology with funding from English Heritage. The interpretation and analysis of the data is undertaken by a team from the University of Reading (Dr Alex Smith, Dr Mervyn Allen and Dr Tom Brindle) under the direction of Professor Michael Fulford, with funding from the Leverhulme Trust. The creation of a database and web-based GIS interface is being led by Tim Evans of the Archaeology Data Service at the University of York.

Huge area excavation of Romano-British rural settlement in north-west Cambridge © Cambridge Archaeological Unit (photo by Paul Boley/Skyhigh & David Hobbs)

Progress on Data Collection

Data collection has continued unabated throughout autumn 2013 and the early winter. Progress has been steady; data collection of the grey literature resource is now completed for the West Midlands (joining the South East, East Midlands and East Regions previously completed) and is close to completion for the large South West region with consultation ongoing in North Somerset and Dorset only. Currently the team are collecting the resource for Yorkshire and the Humber region and have been making early inroads into the North West and North East. Enthusiastic, helpful responses to the project team from local HER's are commonplace, even in areas under resource stress (which has often impacted upon the maintenance of HERs). The project team are extremely grateful for the support provided and so far over 2,100 grey literature reports have been collected.

Excitingly, the resource in the Yorkshire and Humber region is proving to be larger than expected and should lead to some interesting research conclusions. Data collection in the Yorkshire and Humber region is expected to be finished by the end of February 2014. Data collection for the North West and North East regions is scheduled for completion in the Spring of 2014.

Perhaps the biggest success of the data collection element of the project so far has been the extensive production of high quality PDF/A OCR documents of formerly paper-only reports. Of the grey literature reports collected so far, well over 750 have been digitised from paper-only copies (typically these comprise older reports that were only provided to HERs in paper format). The digitisation programme has resulted in the increased interactivity of the grey literature resource (with the capacity for internal searching) as well as significant HER enhancement benefits. The majority of HERs consulted during

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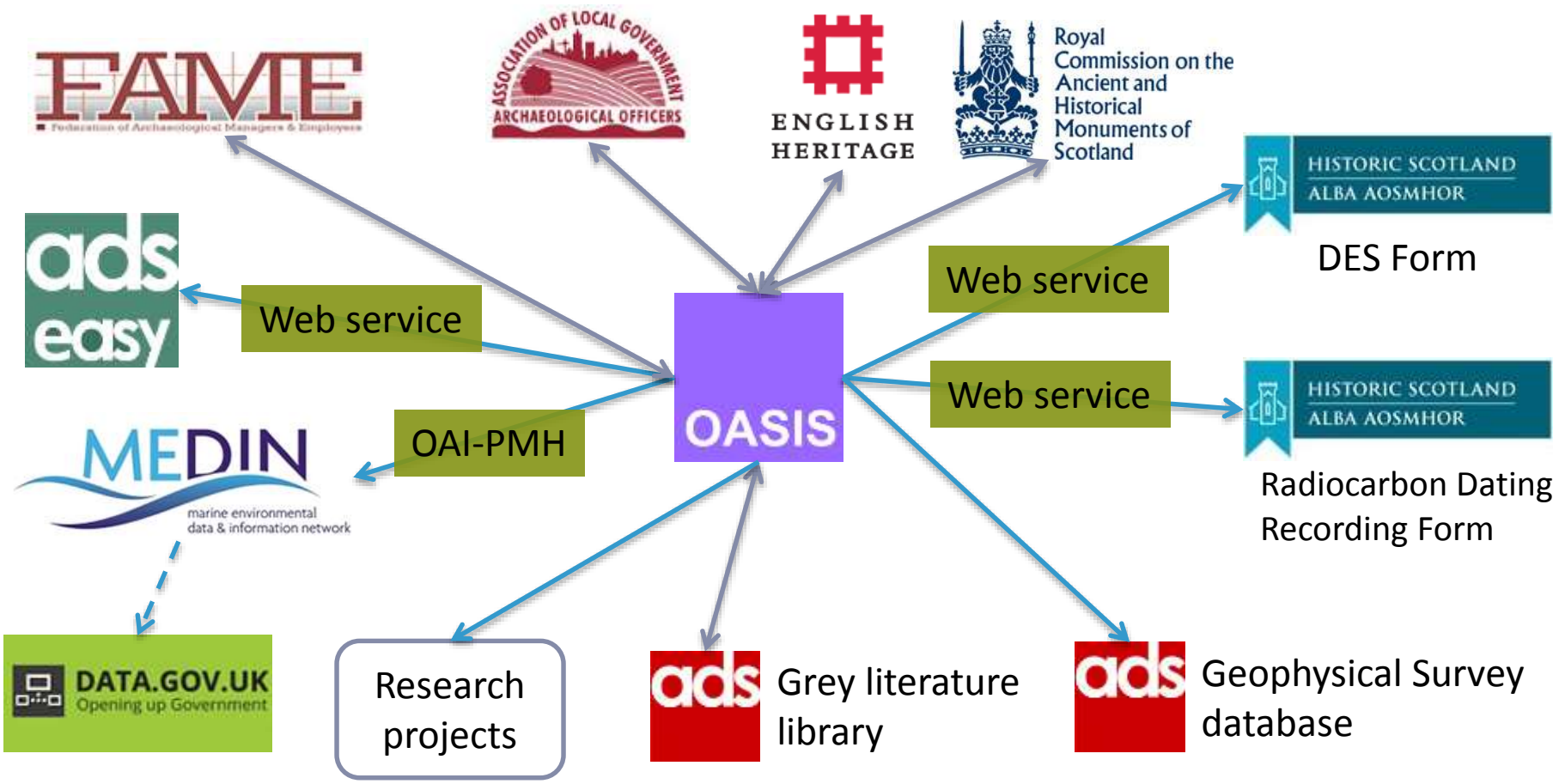
Page 1 of 3

New funded research based on the newly accessible mass of grey literature from developer funded archaeology.

…could we achieve the same by accessing a large corpus of excavation data sets?

…and benefitting by sharing open metadata too



Archiving Digital Data

After 15+ years experience of digital archiving within archaeology, we are seeing a move toward some organisations submitting digital archives to the ADS as a norm.

Southampton's Designated Archaeology Collections Programme

Stricklands, Chapel Road, Southampton
OASIS ID wessexar1-92058
Excavation 23 Aug 2009 - 27 Sep 2009
Wessex Archaeology

The Deanery, Chapel Road, Southampton
OASIS ID wessexar1-92410
Field evaluation 06 Feb 2006 - 10 Feb 2006
Wessex Archaeology

The Deanery, Chapel Road, Southampton
OASIS ID wessexar1-97044
Open-area excavation 04 Aug 2008 - 22 Oct 2008
Wessex Archaeology

20-26 College Street, Southampton
OASIS ID thamesva1-40314
Field evaluation 28 Jan 2008 - 29 Jan 2008
Thames Valley Archaeological Services

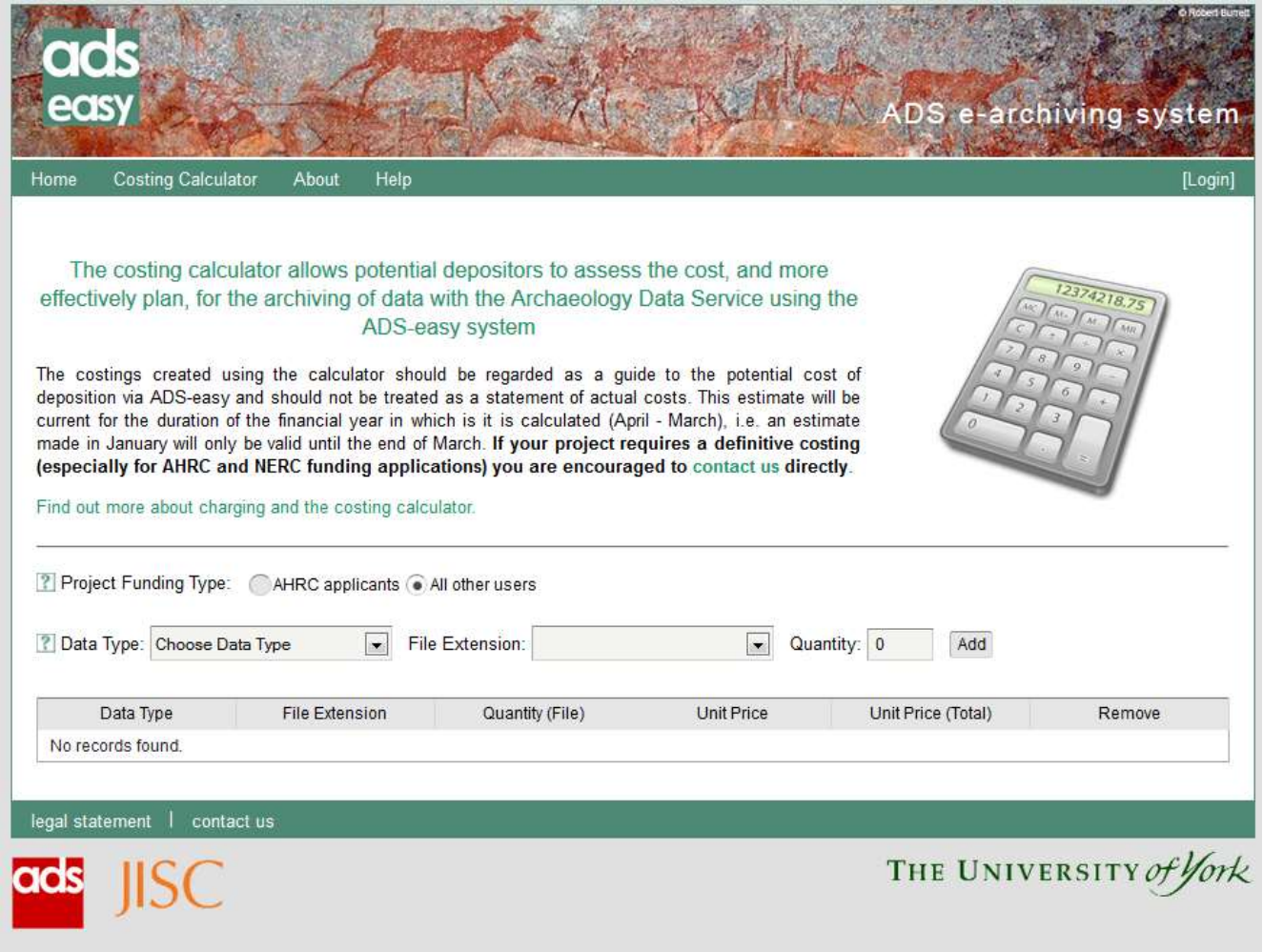
Woolston Riverside, Southampton
SITE CODE SOU1483
Field evaluation 2 Jul 2008 - 18 Dec 2008
Thames Valley Archaeological Services

The 'Coach House',16 Bevois Valley Road, Southampton
SITE CODE SOU1516
Building Recording 2 Nov 2009 - 12 Nov 2009
Southern Archaeological Services Ltd

Wessex Archaeology Image Archive

Aligning with changing data awareness
The ADS e-archiving system – ADS-easy

New Costing Calculator; for estimates and costs

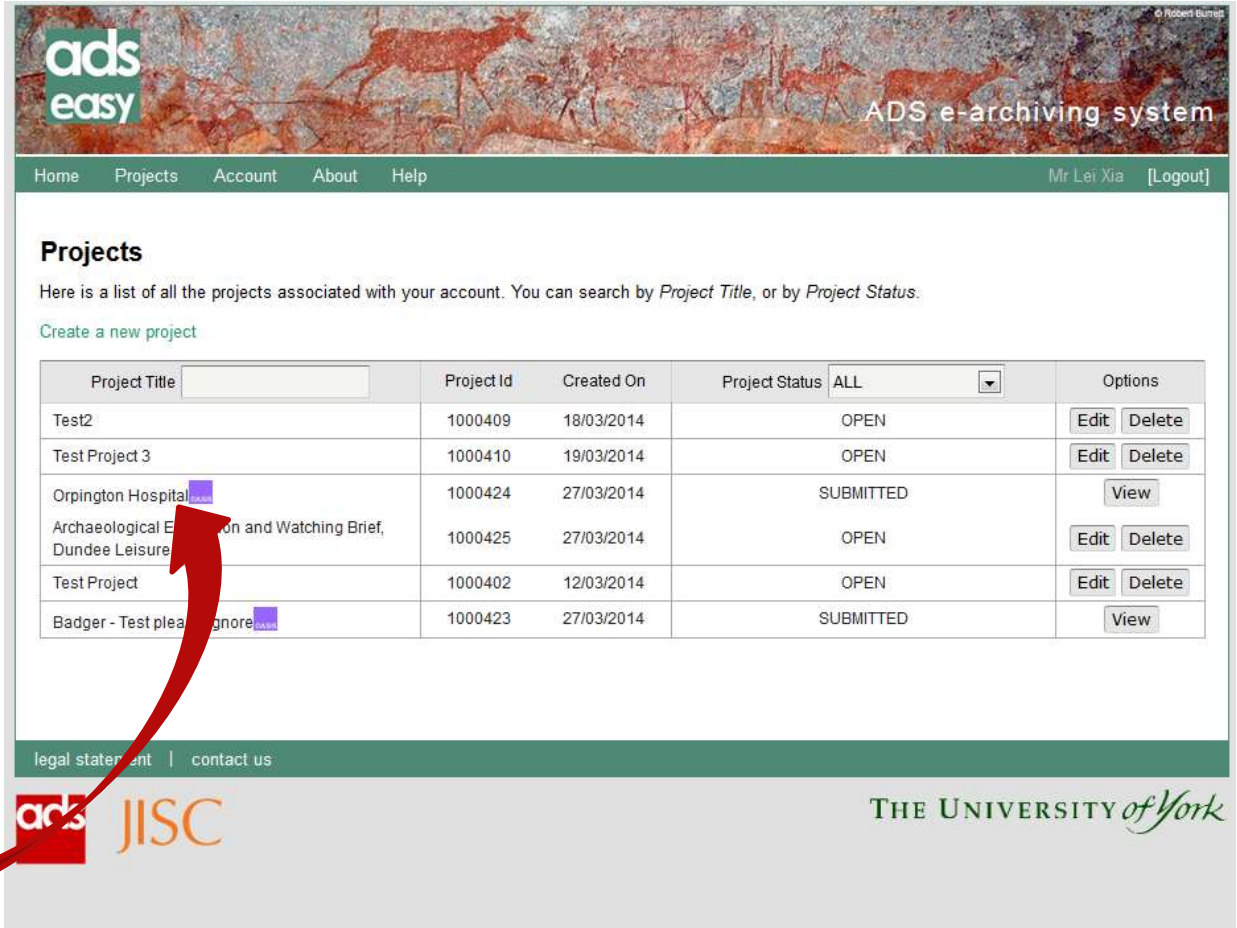


Use it without logging on to work out estimates for project proposals or tenders

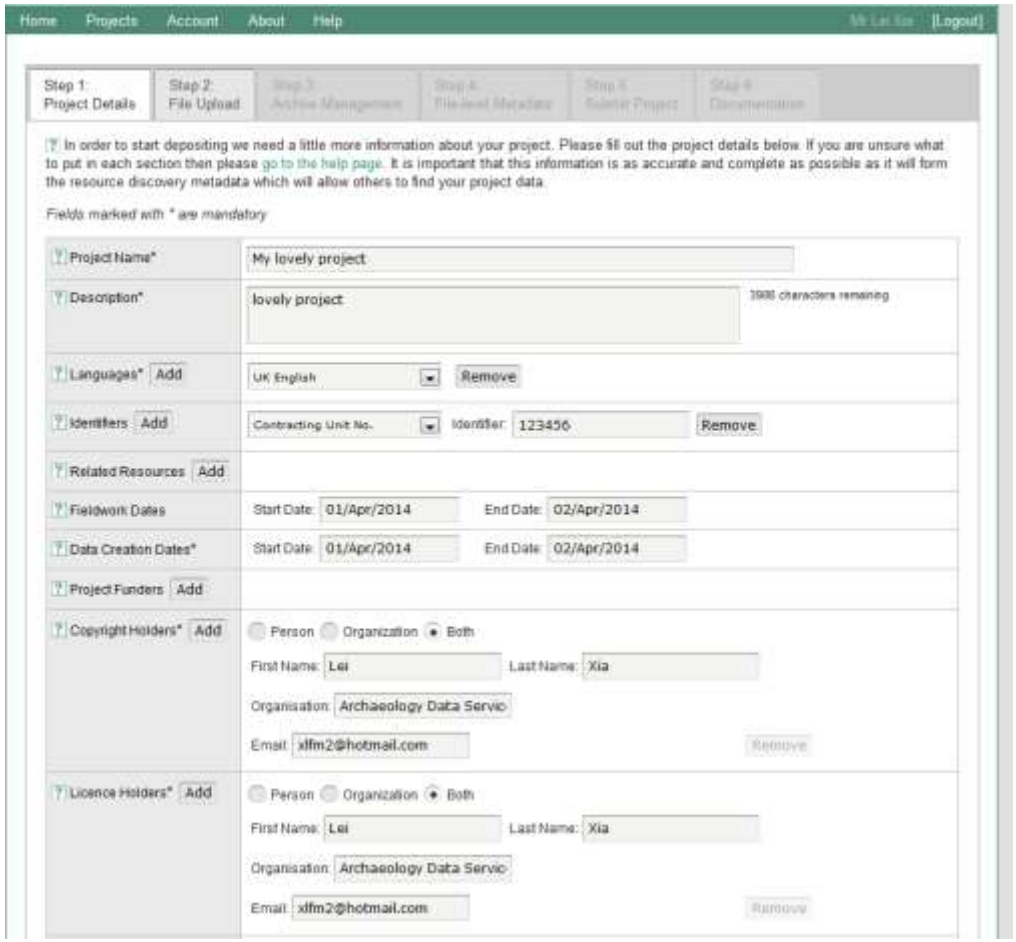
ADS-easy gives you a project ‘area’ or account

A user can see a list of their projects and the status of the projects

I’ll come back to the purple squares!

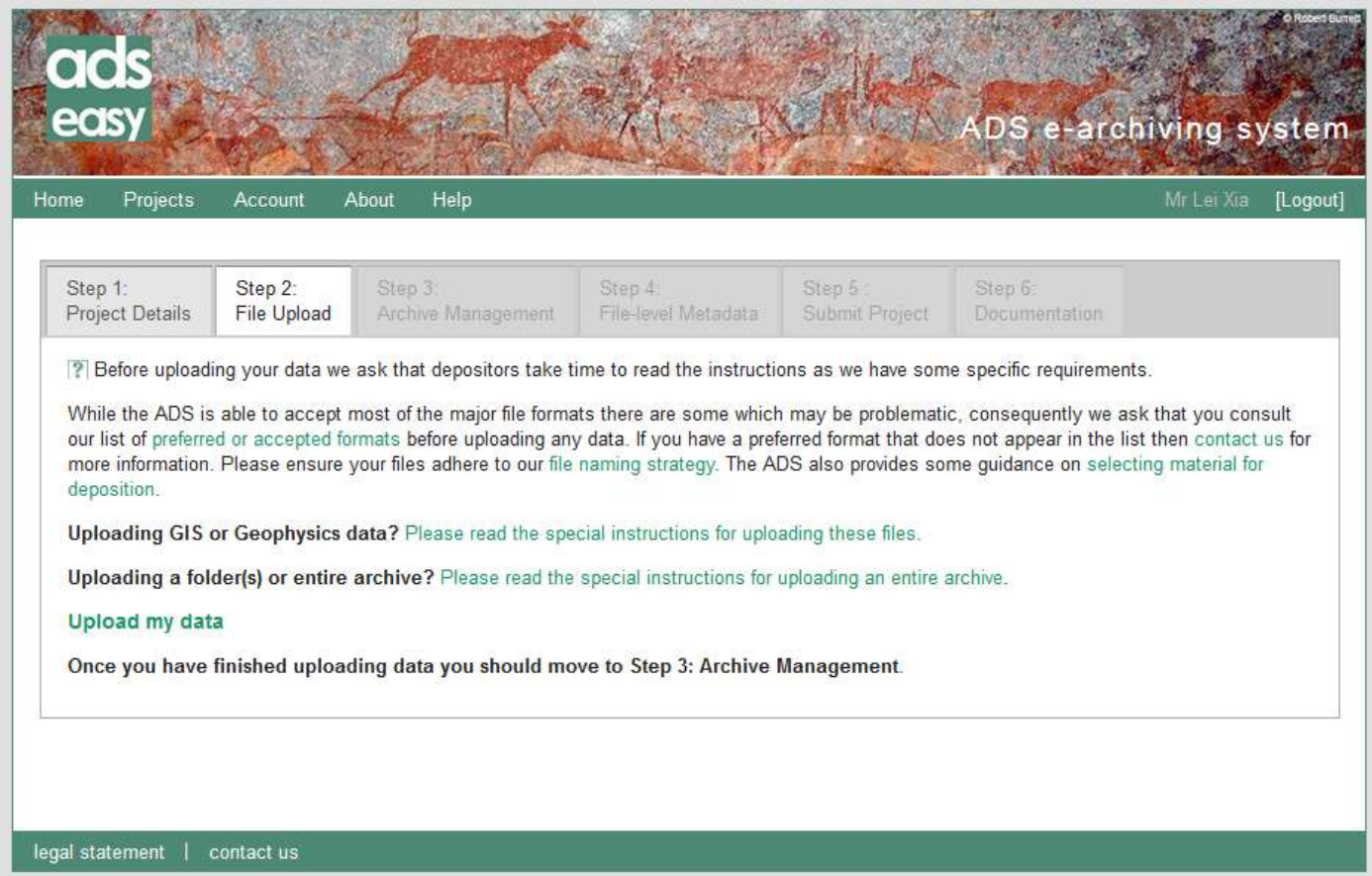


Step 1: insert project level resource discovery details

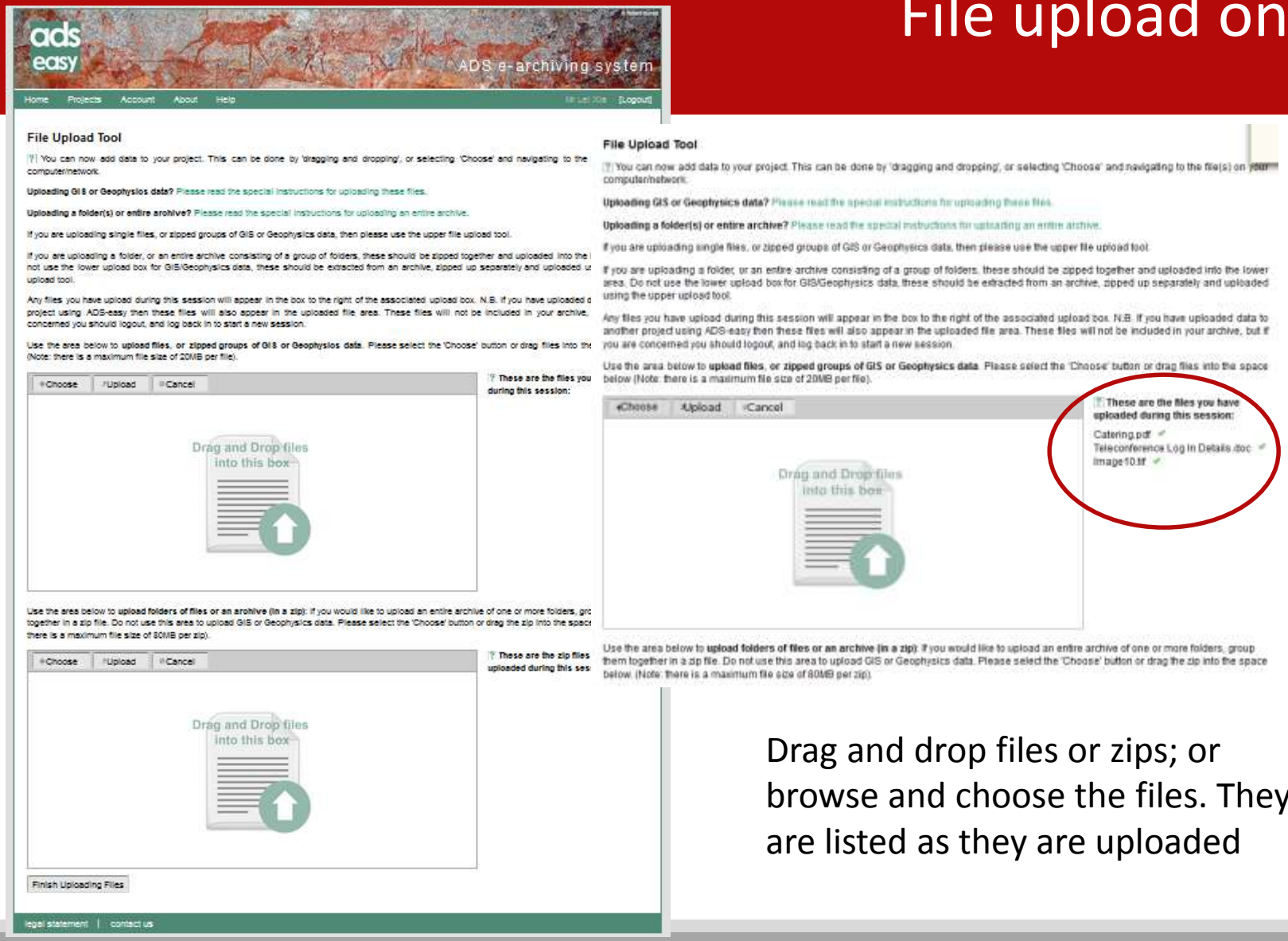


The fields are controlled to encourage proper use of standards and fulfil the ADS archive requirements

Step 2: Upload the files you want to include



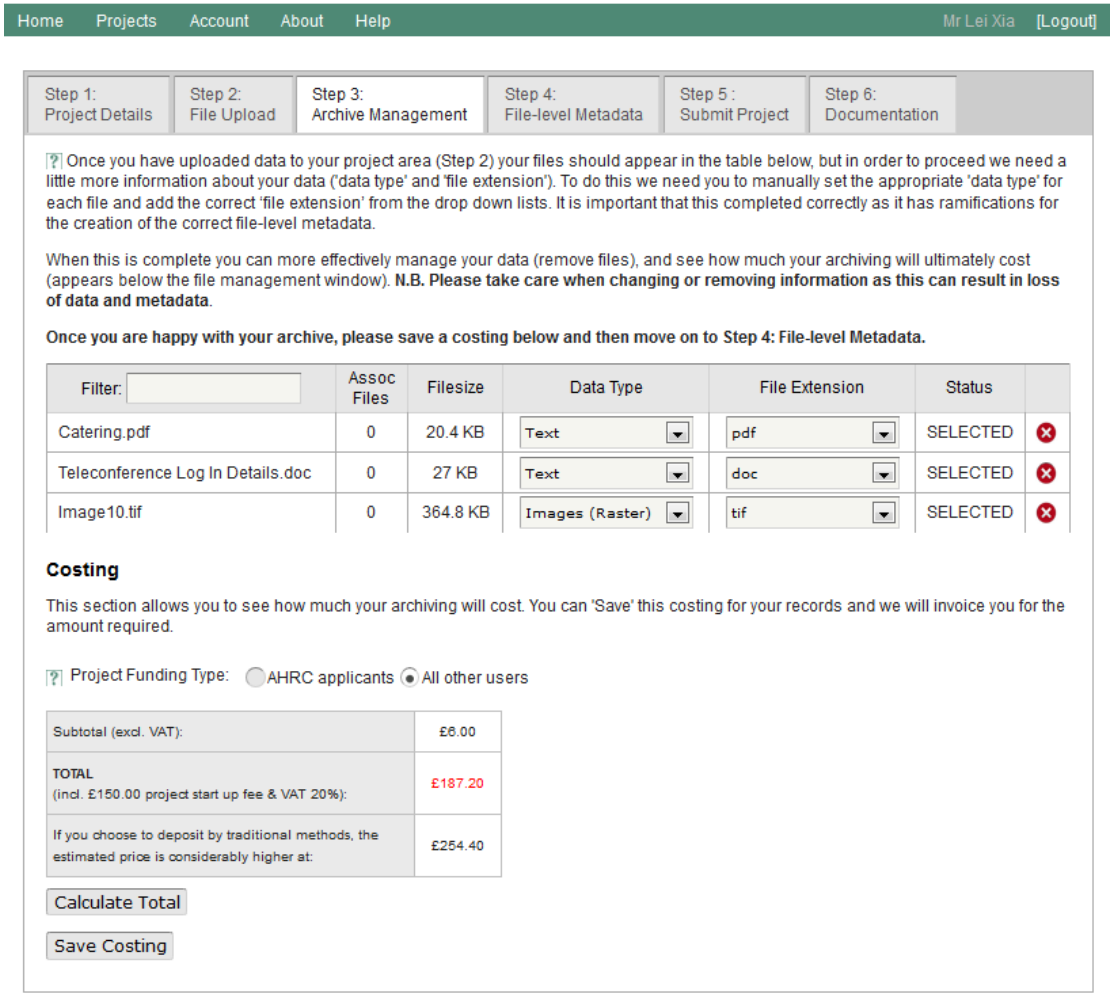
File upload online



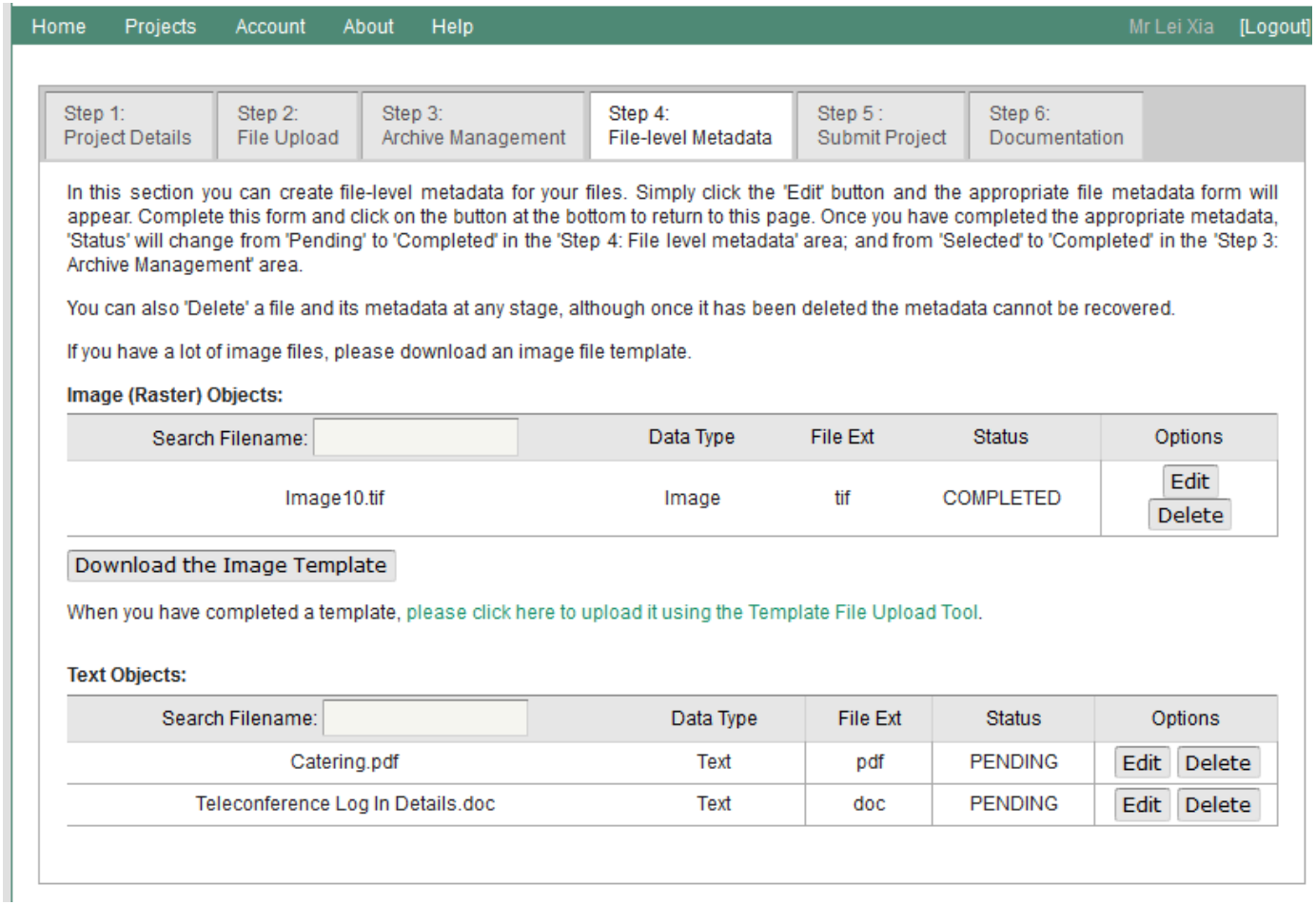
Drag and drop files or zips; or browse and choose the files. They are listed as they are uploaded

Step 3: Manage you archive and cost the archive

- See a list of your files
- Allocate a data type to help with file level metadata
- Delete what you don't want
- Calculate the archive cost
- Save your costing info

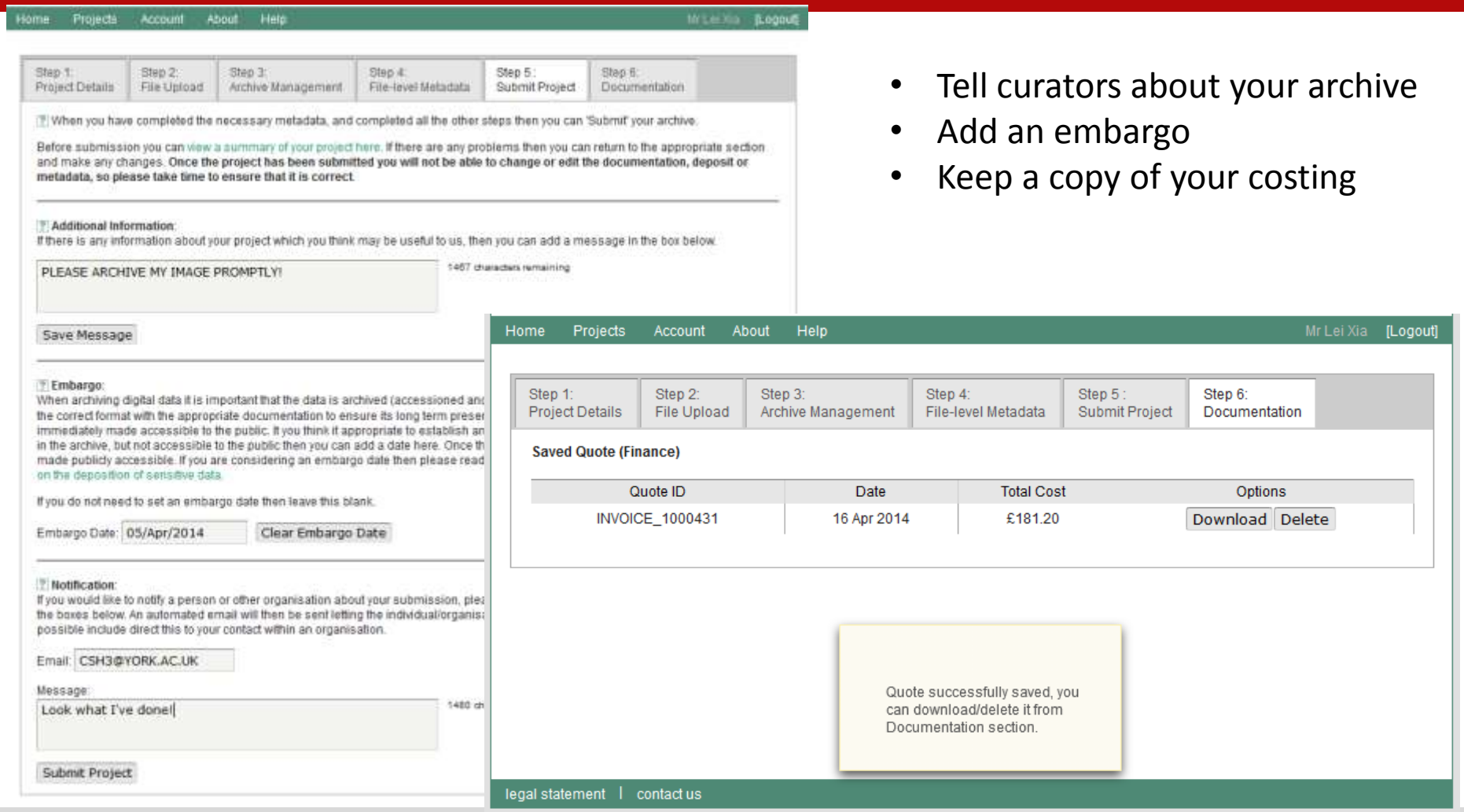


Step 4: Complete file level metadata for the files



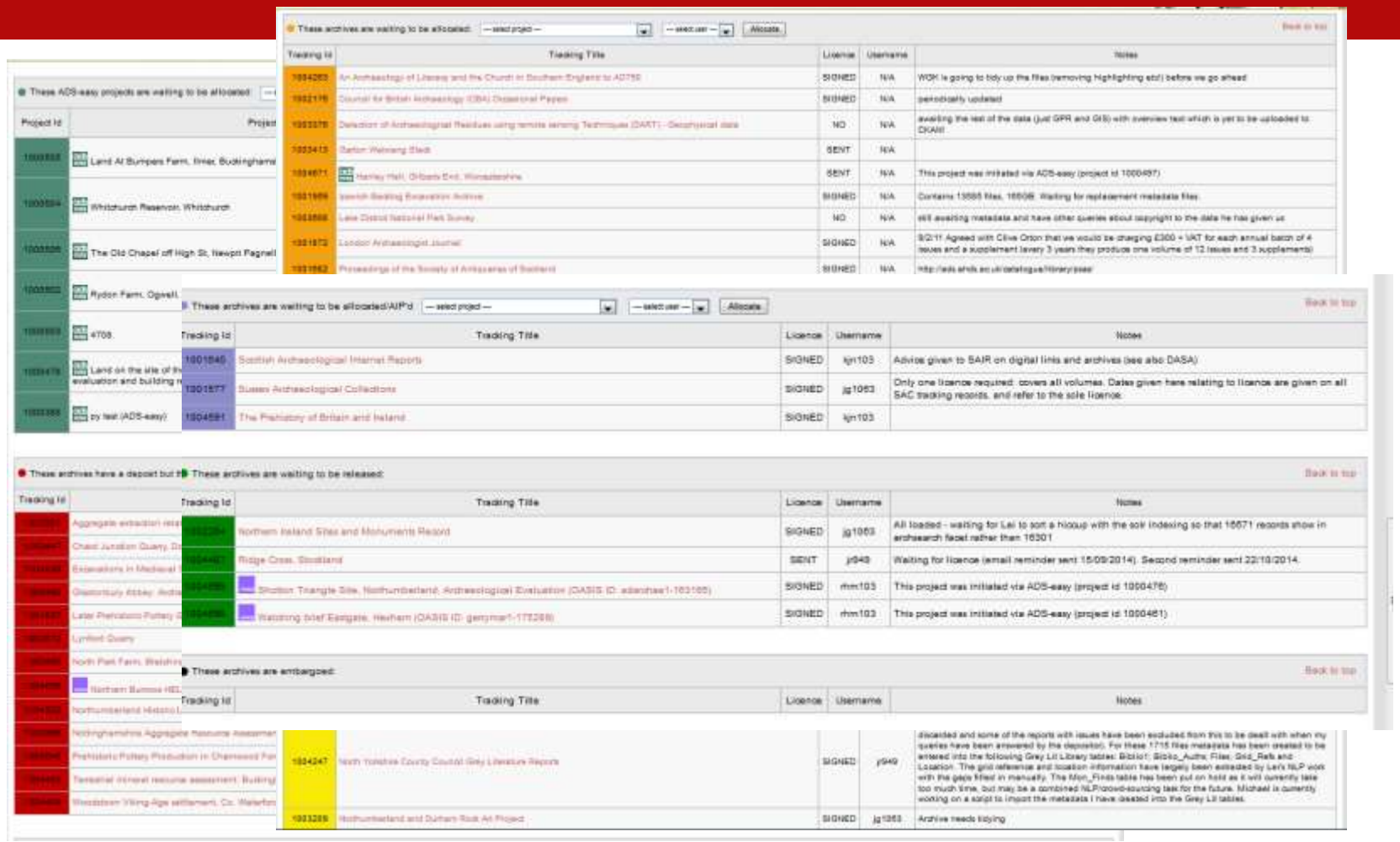
Either use a web form or upload a spreadsheet template

Step 5 and 6: Administer and submit your project



- Tell curators about your archive
- Add an embargo
- Keep a copy of your costing

Internal alignment and Project Management: Collection Management System



A history of continuous development

Over 18 years:

The funding has changed
The clientele has changed
The website has changed (3 substantial changes)
The rate of deposition has changed
The nature of the content of deposition has changed
More legislation and ‘guidelines’
Accreditation
Development of digital archives and repositories (the ‘competition’)

Keep in touch

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http://www.facebook.com/archaeology.data.service

catherine.hardman@york.ac.uk