The ADS and SWORD-ARM: Deposit charges, costing tools and e-repository sustainability

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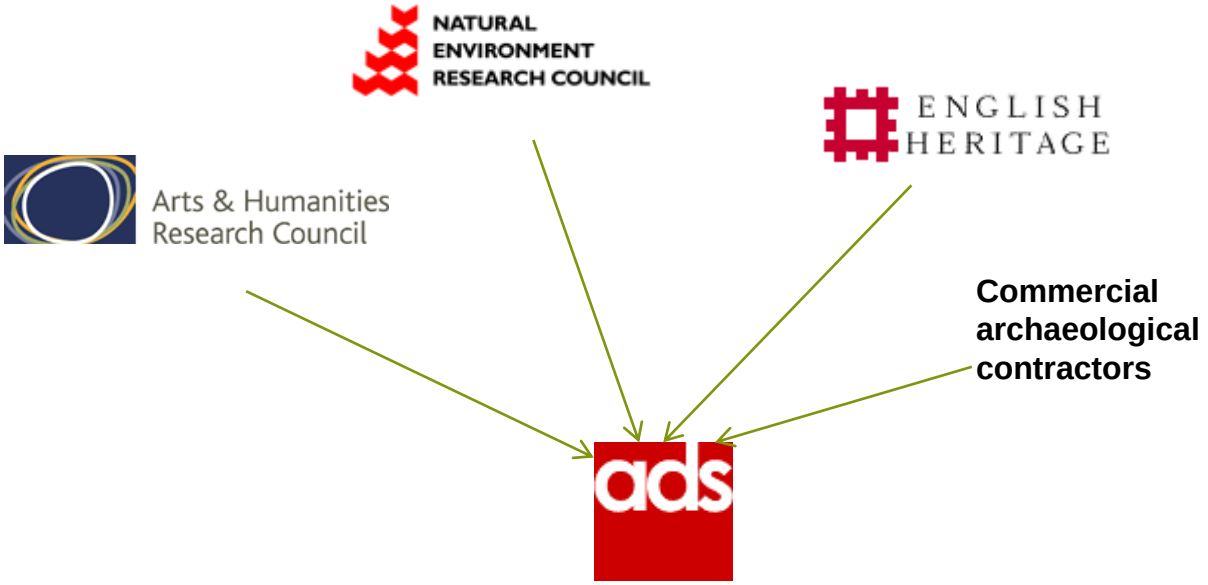
How did it all start ?

"Supporting research, learning and teaching with free, high quality and dependable digital resources."



The Archaeology Data Service: Staffing

- Set up in 1996 – 2 members of staff
- Currently c.15 members of staff
  - Director
  - Deputy Director (Collections)
  - Deputy Director (Access)
  - Administrator
  - Systems Manager
  - 3 Applications Developers
  - 6 Digital Archivists
  - 1 IfA/HLF trainee
- Based within the University of York

ADS Charging Policy

ADS one-off deposit charge levied at point of deposit:

- Included in project costing – to research council, public body, or commercial contractor
- Starts at c. £250; can be up to c.£50,000
- Generally < 3% of project costs
- Costing based on:
  - Number of files
  - Complexity
  - Size

ADS Charging Policy

- ADS digital data deposit charges followed principle of museum ‘box charges’
- Archaeological contractors familiar with this approach – a one-off charge for deposit
- English Heritage introduced Digital Storage grants, to be applied for at end of project
- But - archiving has to be seen as part of project publication process, and planned from outset

Costs of digital preservation

C = A + I + D + R

C (Cost of preservation) =

A (Management and Administration)

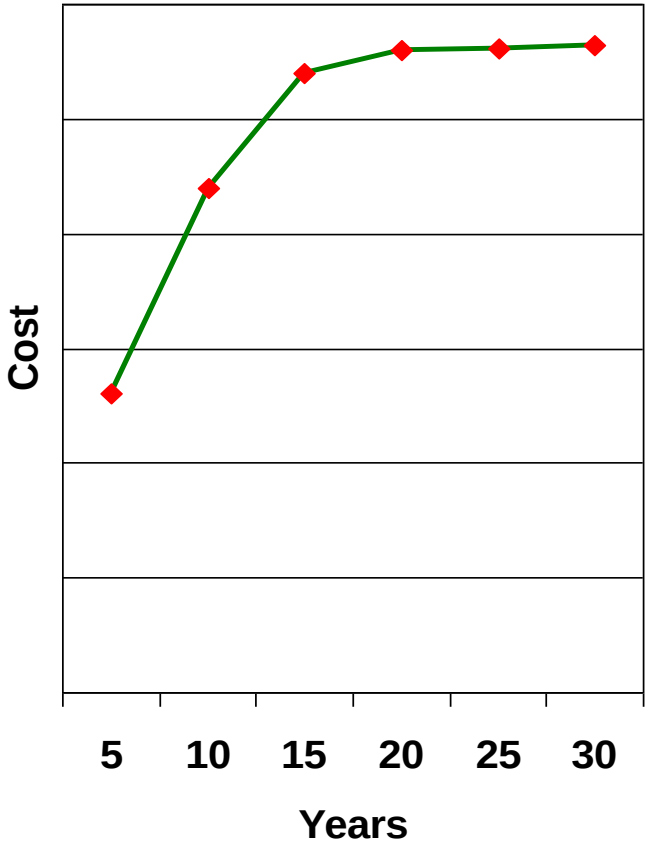
I (Ingest costs)

D (Dissemination costs)

R (Refreshment costs)

Refreshment costs

Retention period	Cost for refreshment	Cumulative total (pence)
5 years	9 + 4 = 13	13
10 years	9 - 3 + 4 – 1 = 9	22
15 years	9 – 6 + 4 – 2 = 5	27
20 years	9 – 9 + 4 – 3 = 1	28
ongoing		28.1



ADS charging policy: widely emulated

The situation in 2012: explosion in data deposits

After 15+ years experience of digital archiving within archaeology, we are seeing a move toward 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

The origins of the SWORDARM project

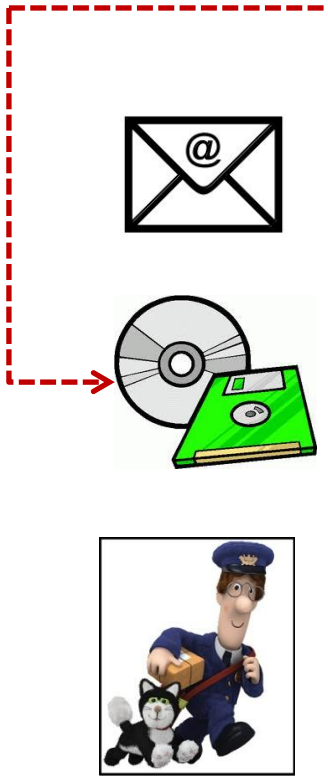
These, and other, projects have highlighted the need for an automated system for file upload and metadata deposition if the process of a scalable and sustainable digital archive is to become a reality.

… a semi-automated, project-based system, that allows for the deposition of archaeological data and metadata through the use of a SWORD-style protocol. It will develop a costing module that will make the charging process more transparent for the community. It will streamline the ADS infrastructure making its procedures more efficient and, perhaps more significantly, make the future of the digital repository more sustainable in the long-term.

What will the automated ingest system do?

1. Allow users to upload files directly to the ADS repository
2. Building on existing structure it will link files to existing metadata from the online recording form for fieldwork projects (OASIS)
3. Allow users to add additional and new metadata for projects
4. Semi-automate the accessioning of files and associated metadata within the ADS Collections Management System, streamlining the archiving process
5. Allow users to set up and manage ‘accounts’ that will allow for the creation of sample costings, allowing them to make informed decisions over selection and retention and provide for the semi-automated billing of charges.

Managing deposits: current workflow



Problems

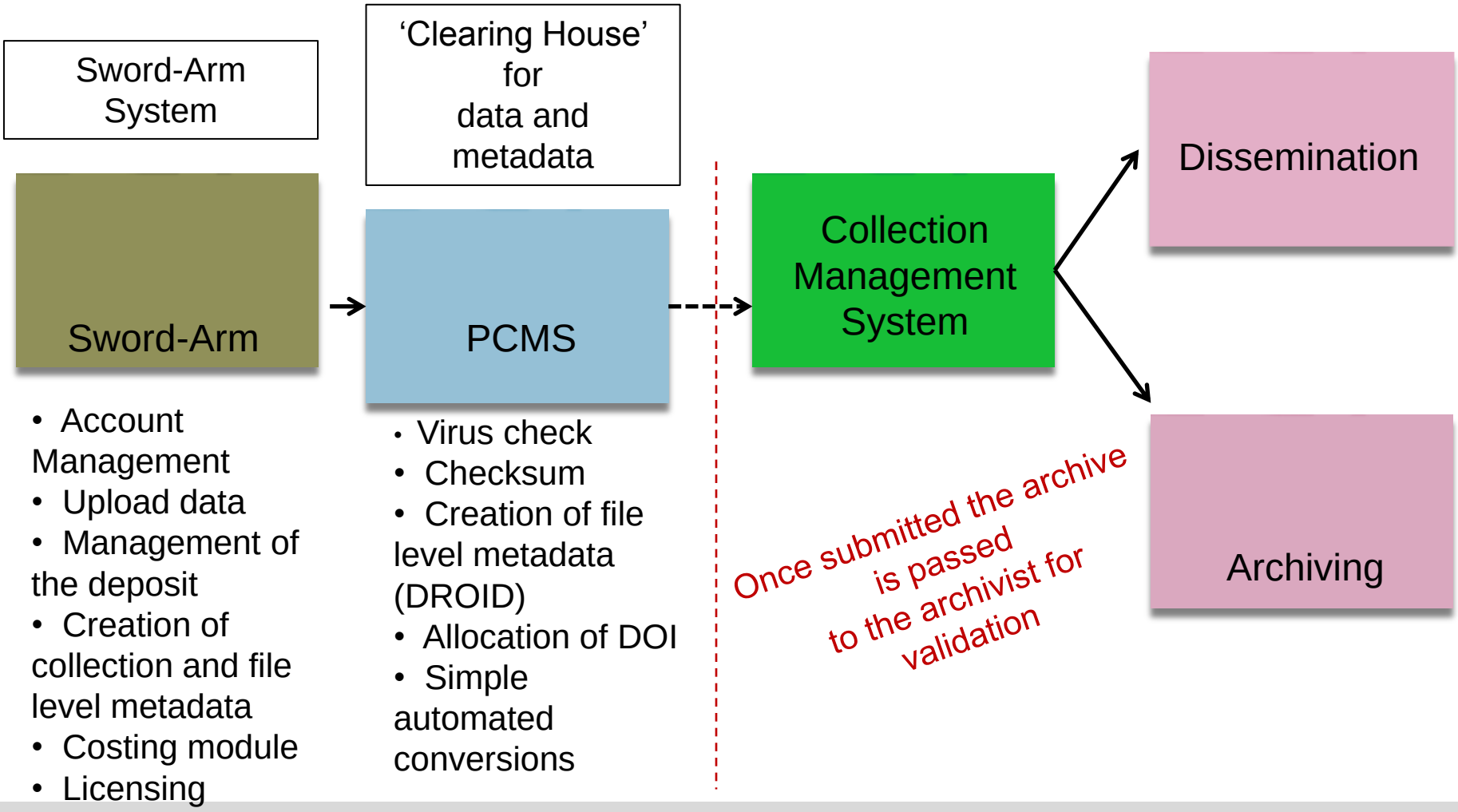
- Protracted
  - Physical movement of data and metadata is not ideal
  - Archive or metadata often incomplete = negotiation
- Inefficient
  - Duplication of effort
- Inflexible for user

sion

Dissemination

Archiving

Managing deposits: SWORDARM workflow



The most important questions…

1. What to call the system when it is finished!
   ADS e-archiving system or **ADS easy**

2. How much will it cost to use?

Deposit using **ADS easy** will be c. 50% cheaper than using the standard manual methods

Cost Module

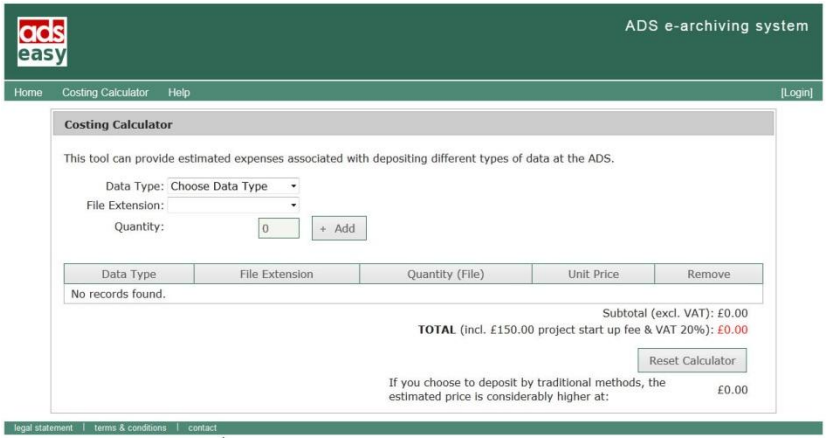
Cost Module

Unregistered

Registered

Sand Box
Allowing users to 'test' various costing options

ads easy
Formal 'quote' for archiving based on a per file basis



- Cost control
- Depositor control of archive allowing involvement in selection and retention of files
- Manage multiple depositions
- Pricing based upon 'economies of scale'
- Financial encouragement for use, making it 'cheaper'

How have we come up with the levels of cost?

… we have tried to keep things simple with a start up fee covering elements of management and administration for each project and then a range of prices usually per file; the more complex the file type the more expensive to deposit. So we'd charge £1 for a .csv file and up to £6 for an .au audio file that takes a lot more time to check, document and preserve. Experience has taught that the only circumstance where we can really benefit from economies of scale is when dealing with image files and that too is taken into consideration within the charging model.

ADS Blog
March 21st 2012

http://archaeologydataservice.ac.uk/blog/sword-arm/

Follow-up

SWORD-ARM

Information on the SWORD-ARM project
http://archaeologydataservice.ac.uk/research/swordarm

Keep up to date with SWORD-ARM through the project blog
http://archaeologydataservice.ac.uk/blog/sword-arm/