

## Notes on the Second Meeting of the ARENA Project Partners.

Held at the Danish Agency for Cultural Heritage, Copenhagen, Denmark.

3<sup>rd</sup> and 4<sup>th</sup> June 2002.

### Action Points for the ARENA Partners

- ❖ To meet again before the EAA conference at Thesaloniki on Wednesday 25<sup>th</sup> September 2002. Exact venue to be arranged by Jon Kenny.
- ❖ To make further contact with other European projects with similar interests to take part in a round table session at the EAA conference. Any contacts to be referred to Jon Kenny.
- ❖ All partners to send Jon Kenny a list of the fields that exist in their SMR level databases. Translated to English.
- ❖ Partners from the Danish Agency for Cultural Heritage and the Museum Project to consider further the possibility of making available excavation data.
- ❖ When partners receive a proposed set of top-level types and subjects from Jon Kenny they will need to map their own terms for these onto the terms circulated. Partners will also need to add their own keywords to the list with an English equivalent if possible.
- ❖ When partners receive a mapping of UK period terms to a numeric date from Jon Kenny they will need to carry out their own mapping in the same way.
- ❖ Partners begin work on preparing excavation level archives paying particular attention to compatibility with Dublin Core and format standards. See ADS standards as a guide:  
<http://ads.ahds.ac.uk/project/goodguides/excavation/>  
The ADS guidelines to depositors contains useful advice on the documentation of archives and suitable formats for the various data sets within an archive:  
<http://ads.ahds.ac.uk/project/userinfo/deposit.html>
- ❖ Jon Kenny will apply layered metadata to the Cottam excavation archive and circulate the results to partners for consideration.

### Action Points for Jon Kenny

- ❖ To make arrangements for the meeting at Thesaloniki.
- ❖ To coordinate presentations from other European projects for ARENA roundtable at EAA.
- ❖ To coordinate the collection of fields from partners SMR level databases.
- ❖ To draw up a proposed set of site / monument types and subjects for ARENA and distribute to the partners.
- ❖ To map UK time periods to a numeric core and distribute to partners.
- ❖ To apply layered metadata approach to Cottam archive and distribute to partners.
- ❖ To liaise with Tony Austin over circulation of a questionnaire document requesting the specifications of each partner in preparation for Z39.50 or OAI.
- ❖ To produce a timetabled work plan for the actions raised above.

### Persons Present:

Julian Richards (ADS, University of York, UK), Jon Kenny (ARENA Project Officer, ADS, University of York, UK), Tony Austin (ADS, University of York, UK), Andrzej Prinke (Poznan Archaeological Museum, Poland), Oscar Aldred (FSI, Institute of Archaeology, Iceland), Henrik Jarl Hansen (National Agency for Cultural Heritage, Denmark), Claus Dam (National Agency for Cultural Heritage, Denmark), Eske Wohlfahrt (National Agency for Cultural Heritage, Denmark), Irina Oberlander-Tarnoveanu (cIMeC, Institute for Cultural Memory, Romania), Jon Holmen (The Museum Project, University of Oslo, Norway), Øyvind Eide (The Museum Project, University of Oslo, Norway).

## Notes on the Meeting:

### 1. Presentation on the ARENA project.

**02/071** The meeting was preceded by a presentation given by Jon Kenny to members of the Danish Agency for Cultural Heritage introducing the ARENA project.

- Particular thanks are extended by the ARENA project to the Danish National Agency for Cultural Heritage for their hospitality in holding the meeting and making arrangements for our stay in Copenhagen.

### 2. Minutes of the Previous Meeting.

**02/072** The minutes from the previous meeting were accepted as a true record of the last meeting held in Crete.

**02/073 Matters Arising.** The ARENA roundtable session at Thessaloniki was raised. This will be an open session based around short presentations given on other European projects. Participants are likely to be:

AREA (Nathan Schlanger) <http://www.inha.fr/area-archives/>

ARCHTERRA (Martin van Leusen or one of the ARENA partners who participated in the project) <http://archterra.cilea.it/>

CIDOC CRM (Martin Doerr) <http://cidoc.ics.forth.gr/>

ERPANET (Peter McKinney) <http://www.erpanet.org/>

HEREIN (Nicholas Dautier or one of the ARENA partners who participated in the project) <http://www.cultivate-int.org/issue2/herein/>

Others who may attend are Pathways to Cultural Landscapes

<http://www.odense.be/projects/project7.html> and CIPHER <http://www.cipherweb.org/>

### 3. Presentations on Technologies.

**02/074** Short presentations were given by partners on specific technologies that the ARENA partnership is considering using.

**02/075 Dublin Core and Metadata (Julian Richards).** An important issue for resource discovery, key problem area will be language. Dublin Core deals with this through key words consequently ARENA will have to develop a basic thesaurus.

**02/076 OAI and Z39.50 Technologies (Tony Austin).** Both technologies are available as freeware; other commercial technologies are very expensive. OAI is designed to be simple and is easier to install. Z39.50 is more flexible but requires more technical support. It is possible for OAI systems to sit within a Z framework, so ARENA could accommodate both as ADS has access to both.

**02/077 XML (Øyvind Eide).** Øyvind explained the origins of XML as a language for marking up text in publishing. The language has a set of 'friends' to aid writing applications known as schema and style sheets. XML inserts 'tags' into text that the print trade uses to indicate that sections of text should be printed in a specific form, bold or italic for example. But 'tags' can also mark types; types of object or place for example. The sentence below is 'tagged' to identify objects and places that can be extracted.

The <object> stone axe </object> was found in <place> Copenhagen</place>.

Øyvind considered that XML tags can probably be made to map onto Dublin Core database structures for metadata, the ways of thinking behind them are very similar.

The W3C web site contains detail of XML: <http://www.w3.org/XML/>

**02/078 Resources on the ARENA web site.** Following the presentations on technical issues the meeting resolved that a resources area should be created on the ARENA web pages allowing access to ARENA meeting notes, PowerPoint presentation slides, handouts and relevant web connections.

#### **4. Archives.**

**02/079** Each partner presented the archives that they will be making available to the ARENA portal. These contained both summary and SMR type data that contain basic information on many sites and a number of other projects. Some of the other projects were excavation archives; others were more extensive summary archives and historical archives.

#### **02/080 Romania; cIMeC.**

**SMR records:** cIMeC will use an archaeological sites database containing about 4,500 records. These do not have individual spatial information but map onto the nearest village that does.

**Excavation archive:** cIMeC will use an early multi site paper archive that requires digitisation. The archive contains a variety of information, text (short summaries) and images from sites identified between 50 – 100 years ago. The archive covers the lower Danube region. cIMeC see this is an important preservation and access initiative. Some of the sites are no longer visible as they were; others have since been excavated. Most of the sites are from the Roman and Medieval periods (Romanian periods are: Roman, Migration, Early Med, Late Med and Modern). The text contains a lot of material on finds including some references to where finds were stored; there are also some bibliographic references. The records include notes on some 300 excavations and some sets of notes making observations on sites.

#### **02/081 Denmark; National Agency for Cultural Heritage.**

**SMR records:** The Danish National agency for Cultural Heritage hope to make the whole SMR of 160,000 records available. They suggested that if this large number of records proved a problem they might make a subset available e.g. the Viking Age part of the SMR, containing some 2 – 3,000 records.

**Excavation archive:** The Danish National agency for Cultural Heritage will also make one of their special collections available that include the DKC subset database on the Bronze Age. The special collections include limited SMR type data, which contain a site layer and an object layer. These cover about 450 locations, other possibilities include a specific local museum or particular site types such as abandoned or excavated churches or fortifications. [**Note:** Following discussion there is a strong likelihood of making the Vorbasse archive available].

#### **02/082 Iceland; FSI, Institute of Archaeology.**

**SMR records:** FSI have SMR like data available they have a responsibility, contracted by local government, to survey sites in Iceland. This process generates data in two ways; first as a documentary survey and second by a field survey that validates the documentary work. This has generated some 56,000 records, the process is not complete however, some regions are complete, some have only reached the documentary research stage and others have not begun. Stage one does not generate geospatial coordinates but stage two does. The process does generate lists of site types etc that can map onto Dublin Core.

It is proposed to make available data from two regions where work is most complete, one just north of Reykjavik and one at Akureyri the second city of Iceland. Sites are well defined by type and function but will map poorly onto period. This is really only a function of Iceland having two periods medieval and modern; there are only 23 definitely identified Viking sites in Iceland.

**Excavation archives:** FSI have specific data collections that can be made available. The Grefill database; which is a finds database from five sites giving find types, contexts, archive references and photographs. FSI can also make the Hofstadir excavation archive available. This is a site located near a lake in central Iceland. There have been a number of interventions and the current excavation is in its last season this summer. The whole ranges of data sets are available, documentary, excavation, context records, sections, some digital images, post excavation material samples etc.

## **02/083 Poland; Poznan Archaeological Museum.**

**SMR records:** Poland has a detailed and systematic SMR the AZP. This has been carried out on a regional basis by contract archaeologists. Poznan Archaeological Museum administers its regional part of the AZP. The AZP has been digitised since 1986 and the record has been migrated up to a windows based system. The national AZP has a very large database recording right down to single potsherd finds. Poznan Archaeological Museum proposes to use the Poznan district to which the museum has the rights. This relates to about 30,000 records. The data entries include location, geography, geomorphology, period, types using a controlled dictionary, details of discovery, risk to site and a quality rating. The quality rating may be used to filter out the best of the 30,000 entries.

**Excavation archives:** There are two possibilities: One is a rich cemetery dating to 2<sup>nd</sup> / 3<sup>rd</sup> century and presumed to be part of the migration of Goths from Scandinavia through Poland / Ukraine to the Black Sea. This site has recently been published. It was a rescue excavation on the trans European Gas pipeline. The site contains full burial records and inventories, detailed sections on specific finds, and a section on facial reconstruction carried out by the Poznan medical academy. The archive contains a lot of images. The second alternative is archives relating to the early Slavic Fortresses, including APs of the sites and some with excavation records of varied type.

## **02/084 Norway: Museum Project, University of Oslo.**

**SMR records:** The Museum project currently runs the SMR for Norway but will soon have to submit for competitive tendering process. They do however; have a deal that allows them to continue to use the current published version of the SMR. This can be found on a web site called ARKEOLAND (<http://www.arkeoland.uib.no/fastmFS.htm>) this provides a complete SMR excluding coordinates. The sites are located by farm that does have a coordinate and should be more than enough for plotting. The database contains fields such as site ID, type, dating, excavated/unexcavated and farm name.

**Excavation archive:** The second data sets available are more detailed museum catalogues, which can also be viewed at ARKEOLAND. These currently cover the museums at Oslo, Bergen and half of Tromso, with Trondhiem and Stavanger to come. These archives give find ID type and dating, acquisition information and place, they also give more interpretation but do not always link to SMR data. There is also a topographic archive that may give some linkage between finds and SMR. There are some possibilities for excavations; Kaupang is still in process. The excavation teams concerned would need persuading to participate in ARENA.

## **02/085 UK: ADS, University of York.**

**SMR Records:** ADS have access to SMR data and National Monuments Record data for the UK. This is already mapped onto Dublin Core as metadata so can easily be used by ARENA.

**Excavation archives:** Three sites are definitely being made available for the ARENA project with a fourth possible: The Danebury archive (a key Iron Age hill fort in the south of England that links to Cunliffe's publication of the site). The Ager Terrconensis survey (a landscape survey of the Tarragona Region of North East Spain, in particular the Roman provincial capital and its hinterland). The Cottam (Yorkshire) excavation archive; an Anglian and Anglo Scandinavian rural settlement site excavated and published by Julian Richards that ARENA can use as a test bed site. The fourth archive that may become available comes from the Jubilee Line Extension excavations of Roman Southwark in London. These projects may be added to by three other major projects; the Channel Tunnel Rail-link and two excavations archived under the Digital Archiving Pilot Project for Excavation Records (DAPPER) project, Eynsham Abby and the Royal Opera House.

## **02/086 Who are our primary audience?**

Discussion of projects available to ARENA and the next issues on the agenda required clarification of the project's primary audience. Agreement was reached on the following:

“The academic and further education communities, local government professionals and the general public working on family and local history or specialist holidays.”

General tourist and schools education issues are covered by a number of other digital archive projects and Virtual Reality projects.

## **5. ARENA Themes.**

**02/087** The presentation of archives made it clear that ARENA is to present a combination of SMR records and excavation archives.

### **02/088 Entry to the Site.**

- The ARENA site will probably be entered through the SMR records. For most sites this will be all that is available. Excavation archives will also have an SMR record so they can be accessed via this route. As there will be many SMR records hits and only a relatively small number of archives a projects list will also be required to allow searchers to go direct to the excavation archives.
- ARENA may need to point out the limitations of the data to avoid disappointment. Most data will be SMR records and may ultimately (below metadata level) be available only in the local language.

### **02/089 Period.**

- Period was identified as a theme that can be mapped across the ARENA partners. Jon Kenny to facilitate the mapping of partners periods to a numeric core.

### **02/90 Other Possible Themes.**

- The use of limited lists of site types and archaeological subject themes was discussed and agreed upon. Examples of site types are cemetery, barrow or settlement whilst subjects might be state formation, power, early Christianity or trade.
- Jon Kenny was detailed to generate a set of site types and subject elements from the current ADS metadata. These types and subjects will then be mapped onto the equivalents at the partners who in turn may add types or subjects of their own.
- The resulting sets of site types and subject areas will combine to form ARENA's core thesaurus for interoperability.

### **02/091 Geospatial Themes.**

- The availability of grid references was variable between the partner's archives but all could point to a nearby settlement or farm. It was decided that this gave a degree of focus suitable to the project needs. Searching will be achieved through a map-based system provided at the top level.
- The problems of large scale maps plotting large numbers of sites in some areas and very few in others were discussed. It was decided to use density maps such as those used by ADS, preventing users from clicking on areas with poor or no coverage.
- A set of period based options would allow users to refine searches at this top-level map based search.

### **02/092 Themes; Conclusions.**

- The idea of mapping lists archaeological subjects and site types between the partners will be carried forward, first by Jon Kenny who will produce an initial list that will be mapped onto and added to by the partners.

- Jon Kenny is also to facilitate the mapping together of periods amongst the partners onto a numeric core.

## **6. Copyright Issues.**

### **02/093 Copyright a local issue.**

- This subject was carried forward from the previous meeting.
- It was decided that copy write issues have to be dealt with at the local level.
- Partners should be aware that there might be issues for those who operate as an OAI target. Data for which they have a licence is harvested by another organisation that then makes it available. This is an area that has not been tested out in law as far as we are aware and should only be noted at this point.

### **02/094 Local Licence Agreements.**

- ADS distributed the licence agreements and terms and conditions that they use.
- All partners will need to have some kind of agreement / licence system in place to use data. There are local differences that mean that individual organisations will have to put into place measures that are appropriate to their own circumstances.

## **7. Map Based Searching.**

### **02/095 No Common Boundaries Between Partners.**

- It was noted that in terms of using map interfaces to overcome national boundaries our particular partnership is hampered by having no common boundaries.

### **02/096 Density Map First Point of Entry.**

- As decided earlier in the meeting the initial map interface will be a top level density map to show areas of high and low coverage. (See flow chart below 02/099).
- The top-level density map will allow a set of tick boxes to select particular period sites to restrict the number of hits if required. The period specific maps will return from pre-prepared maps that are “hard wired” into the search facility.

### **02/097 Stages after First Point of Entry.**

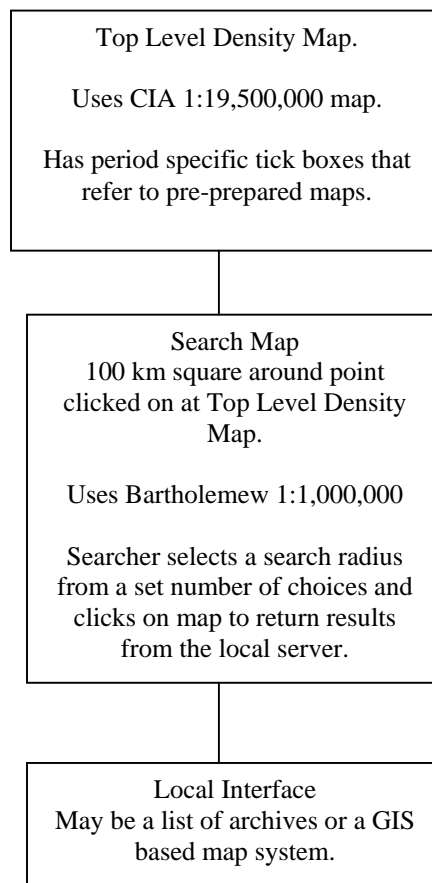
- A click on the top-level density map will bring up a map (e.g. 100km square). (See flow chart below 02/099).
- The interface will then allow the searcher to select sites from a specific radius.
- Finally results may be presented as a list or in some cases GIS interface at the local server.
- A point will come in the process when a searcher moves onto the local server that provides either a list or a further map interface.

- Partners need to begin work on developing their own interface at this level, whether it be list or map based.

#### **02/098 Maps for Searching.**

- The meeting decided to use a single top-level map-base with a single scale. (See flow chart below 02/099).
- It was decided to use a CIA 1:19,500,000 map as the top-level density map that “drills down” to a Bartholemew 1:100,000. Both the CIA and Bartholemew maps are available to ADS under licence.
- Below the common map-based levels the local server can be consulted. Even at the local level we will still need to maintain a common site design to maintain the ARENA identity.
- Resolution can vary from partner to partner depending on the availability of coordinates or desire to prevent sites being located by “treasure hunters”.

#### **02/099 Flow Chart Demonstrating Map Based Search Process.**



**02/100 Panning.** ADS have built panning software that will be made available if required.

**02/101 Using Symbols to Help with Language.** It should be possible to highlight particular periods, types or even depths of data by using symbols or colours.

#### **8. Presenting Larger Archives Through Layered Dublin Core Metadata.**

**02/102** Jon Kenny presented a method for using layered Dublin Core metadata. ADS will use this approach to present its ARENA archives.

- The method is available for the other partners to use if they wish. A description of layered Metadata will be made available on the ARENA web site.
- Jon will apply the new scheme to the Cottam archive that will be used as a trial archive and circulate the results for partners to consider at a later date. Cottam has been published through Internet Archaeology and the archive is already stored by the ADS.
- The key addition that layered Dublin Core metadata presents is a set of interpretive groupings of data. Dublin Core metadata is commonly used to refer to objects such as archives (its original intention) but is used here to refer to interpretations. These may be simple interpretations such as a monument type (barrow or settlement for example) but may also relate to interpretive themes or concepts such as state formation, power, early Christianity or trade.

### **9. Technology for Interoperability.**

**02/103** As lead partner ADS will be able to make both Z39.50 and OAI technology available to the ARENA project. The partners will use the following technology to make their records and archives available:

ADS (UK).	Will maintain the portal and make Z39.50 and OAI available.
FSI (Iceland).	Probably OAI.
Danish National Agency for Cultural Heritage.	Z39.50
cIMeC (Romania)	OAI
Museums Project (Norway)	Z39.50
Poznan Archaeological Museum (Poland)	OAI

Jon will circulate a document requesting the specifications of each partner.

### **10. Next Meeting.**

**02/104** The next meeting will take place at the 8<sup>th</sup> Conference of the European Association of Archaeologists. We will meet on the day before the academic content of the conference begins i.e. 25<sup>th</sup> September 2002. The ARENA roundtable session will take place during the three days of the conference. Partners should note that delegates for the conference registering before June 30<sup>th</sup> will receive reduced rates.

### **11. Reminder Re: Submission of Accounts.**

**02/105** All partners are reminded that the Interim Report and Financial Accounts must be submitted by ADS to the Commission by 15<sup>th</sup> Dec 2002 at the latest.

- To achieve this we will need to close our accounts on 31<sup>st</sup> October 2002.
- Each partner will then need to get an account to Jon Kenny as soon as possible after 31<sup>st</sup> October detailing expenditure (in Euro) broken down by the categories contained in the budget (Administration (overheads), Assistance functions, Consumables, Telephone/postage, Equipment, Travel and Subsistence).
- The actual end of the financial year is of course 30<sup>th</sup> November 2002. Should you have expenditure due to clear in November you may project your accounts forward to take this into account. Especially if you are in danger of under spending.
- Remember you will need to be able to show a “paper trail” (receipts etc) supporting your accounts if the Commission requires an audit of our accounts.
- It is possible to increase expenditure in one budget category and reduce another by 20% or less. If you do this you must inform Jon Kenny who will inform the Commission.