

Paper Abstract: Archiving Archaeological Spatial Data: Standards and Metadata

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The Spatial Heritage & Archaeological Research Environment I.T. (SHARE IT) project was a collaborative venture supported by the Heritage Council (Ireland) under its Irish National Strategic Archaeological Research Programme 2008. Partners were drawn from research (the Discovery Programme), academia (School of Archaeology, UCD; Digital Media Centre, DIT), and archaeological consultancy (Margaret Gowen Ltd) with the aim to develop a strategy for the archiving and dissemination of spatial archaeology landscape data sets, initially LIDAR, aerial orthoimagery and geophysical survey. The project goal was to develop a pilot web mapping application tool for data exploration and use in further research. One of the key research challenges was to identify a suitable digital archiving strategy for spatial landscape data and this was approached by a review the current best practices that have been adopted within the cultural heritage sector and within the wider professional community. Standards organizations specific to cultural data such as the Archaeological Data Service (ADS) and ARENA (Archaeological Records of Europe Networked Access) were consulted on their prescribed policy. Issues addressed included:

- What are the adopted data formats and standards for the sharing and long term archival preservation of digital spatial data?
- Are there any prescribed metadata formats associated with the storage of digital archaeological and spatial data that should be adopted?
- Are there any standards organizations that can assist and integrate Irish digital spatial data into an international framework?

This paper discusses the findings of this process and how it shaped our recommendations for the management of spatial archaeological landscape data and the development of an archiving policy. Amongst the topics it will consider are:

- The importance of the OAIS model as an archival system.
- The need for metadata schema compliant with international standards such as ISO 19115 and INSPIRE.
- The advantages of expanding keyword fields to include controlled vocabularies and thesauri to standardise the description of geographical and cultural components.
- The definition of “preferred” data formats for archiving and dissemination of information.
- The need for a comprehensive copyright and access policy to accompany the archiving process.
- The financial implications and cost models available to calculate the lifecycle costs of implementing an appropriate archival strategy.

In conclusion the paper will consider how the understanding gained from this approach to archiving spatial data may be applied to a wider range of cultural digital resources.

Keywords: *OAIS, cultural heritage, spatial data, thesauri, archiving*