Arts and Humanities e-science Support Centre: A proposal

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Summary
This proposal is for the development of an Arts and Humanities e-science Support Centre. It will be based in and take advantage of the AHRC and JISC funded services, the Methods Network and the Arts and Humanities Data Service.

Engagement with e-science is a newly emerging area for the arts and humanities and as such, it is extremely important that a cohesive programme is developed to support research activity that can fully engage with, and benefit from, all that it has to offer. To that end the AHDS and the Methods Network envisage developing the support centre as a joint programme that provides a set of clearly defined services and activities. These should be presented to the community as a cohesive set of services and activities that they can both access and benefit from.

We propose that the goals of the Centre should be:

1. Providing the practical assistance and liaison with the existing e-science infrastructure that arts and humanities researchers will need in order to use the grid technologies.
2. Carrying out advisory and training activities in support of e-science in the Arts and Humanities.
3. Facilitating interdisciplinary work and the exchange of expertise on e-science, both within the Arts and Humanities community, and by means of outreach the scientific and engineering disciplines, and to the existing e-science community, nationally and internationally.
4. Developing and supporting further partnerships between the arts and humanities community and the existing e-science support infrastructure that will support advanced research methods.

The Centre will be jointly managed by the senior staff of the AHDS and AHRC Methods Network.

Introduction and Background

Over the last decade and a half, ICT and Arts and Humanities research practice has been broadly complementary. That was a happy accident, based on the fact that most computing software developments were programme/machine specific, the development of cheaper memory was contributed to the development of computing methodologies for the arts and humanities, and the network functionality was on the basis of an active/passive relationship of server-client. That agenda is now changing. E-science is about programming power and about pro-active
relationships as between server to server and programme to programme and (in the Access Grid) research practitioner to research practitioner. These are all tools that will be of key significance to what arts and humanities researchers are going to be doing over the next ten years.

The community now finds itself in the position of having access to an unprecedented amount of digital materials, in the form of texts, images, moving image and audio materials, and datasets. While the creation, management and preservation of digital resources continue to present challenges that require ongoing support and engagement, the question of how best to provide support for researchers who wish to creatively engage with this body of material for advanced scholarship has become critical. The development of the AHRC Methods Network is an important first step in addressing this need, and the MN will be actively collaborating with the AHDS to ensure a solid balance of support for the creation and use of such resources. However, in order to share data, collaborate creatively on research, and to develop new research methodologies, the community will increasingly have to turn to grid technologies to support large-scale data management and sharing.

Advanced methods that support the discovery of, and engagement with, digital resources will require collaboration with the scientific, computer science and engineering communities, and collaboration within the e-science framework is therefore a crucial step towards building such partnerships. It is also important to understand that this sort of engagement with digital resources for advanced scholarship is not a by-product of digitization, but a key component in the digital “life-cycle” that should be addressed at the very outset of digitization projects.

What is needed to support this activity is a centre which is able to represent the A&H community in this area to other sciences, learn from them, and provide a means of identifying where e-science can be best implemented. The centre should also be able to provide the practical support that art and humanities researchers require in order make use of the existing e-science infrastructure.

**Proposed Centre Activities**

It is important that any A&H E-science Centre does not focus merely on the technology and ‘the grid’. Rather it must be embodied in research processes, methods and knowledge production. The key objective should be to develop, encourage and support new and novel ways of undertaking research and knowledge creation by utilising and adapting e-science concepts, tools, and ways of working.

To fulfil these goals, the Centre will undertake the following range of activities:

1.) Investigation of the nature and role of data, digital information and data standards in scholarly research
   a. The impact of digitisation on scholarly research
   b. What are we digitising, how and why – and how this affects scholarly research processes and outcomes
c. What standards do we have/need – development of common frameworks and tools that would enable critical mass of digital information to be brought together
d. Data sharing and scholarly communication – use of the grid, web publishing, quality standards and benchmarking

2.) Networked research: collaboration and communication
   a. Support for building new forms of collaboration and use of the Access Grid
   b. Investigation of the type of research that would benefit from the new collaborative forms of working
   c. Identification/development of tools to support collaborative working from analysis and design through to publication

3.) Tools and technology watch and registry of e-science activities and the development of new tools and methods
   a. Evaluation and review
   b. Updates and Archive
   c. Promote and support access
   d. Gather case studies of concrete examples
   e. Support use
      i. Training and help desk
      ii. Advice and documentation
      iii. Seminars and working groups
      iv. A summer school for humanities and arts technologists

4.) Intermediary and liaison activities
   a. Liaison with the National E-science grid centre; NaCTeM; NeSSC etc.
   b. Advice and guidance
   c. Support for projects
   d. Consultancy, project development, project management
   e. Developing projects and seeking funding

5.) ‘Dating Agency’
   a. matchmaking, bringing together for instance, information and computer scientists, engineers, social scientists, medics etc. with arts and humanities scholars
   b. Seminars and workshops to promote/support joint activities

### Staff

The Support Centre would employ two FTEs. One post would be based in the AHRC Methods Network, and one in the AHDS. These posts would provide support and coordination for the projects, promotion and dissemination of, and support for, E-Science in the A&H research community, and a publicly available E-Science knowledge-bank.
I just put this in as the proposed name: we should let DR decide if this to be a centre/network/project/hub…