JISC

Project Name	*e-Infrastructure Use Cases and Service Usage Models (eIUS)* *University of Oxford*
Project Website	http://www.eius.ac.uk/
Report compiled by	*Dr Michael Fraser, Dr Mercedes Arguello Casteleiro* *Dr Sue Fenley, Gabriel Hanganu*
Reporting period	*April – September 2008*

Section One: Summary

During this period from April to September there have been significant difficulties with staff recruitment, however this situation has improved with the appointment of a 0.5 Senior Analyst and a Project Manager (0.2 FTE). Recruitment of additional staff in Oxford and in Manchester in the near future should bring the project up to full working capacity. From April to June the focus of the project remained on the investigation and preparation of Service Usage Models (SUMs) from existing experience reports (interviews and supporting evidence) and use cases; conducting interviews and raising awareness of the project at a number of conferences and other events. Since June 2008 there has been a significant improvement in the number of interviews completed and subsequent work on the Use Cases.

The project should now continue smoothly with the full remit for the Use Cases being completed. Hence Work packages 3 and 4 (Experience Reports and Use Cases) have been delayed but are now being completed at a faster rate, while work has continued on Work package 5 (SUMs). Progress relating to Work packages 9 (Dissemination), 6 (Engagement) and 8 (Interactive Website) is also reported.

Section Two: Activities and Progress

Work package 1: Project management

Matthew Mascord worked part time on the project until the beginning of this reporting period. In June 2008 the project appointed both a 0.5 Senior Analyst (Gabriel Hanganu) and a 0.2 Project Manager (Sue Fenley). Up to a further 1 FTE is expected to be appointed by November 2008 (with 0.5 FTE in Manchester and a further 0.5 FTE in Oxford).

Work package 2: Survey and Scoping e-Infrastructure

The scoping study was completed and published in the previous reporting period

Work package 3: Experience Reports

Interviews performed in this period:

1	Comb-e-Chem (Chemist)	Manchester, June 08	M. Arguello
1 + 1	ESDS International	Manchester, June 08	M. Arguello
1	Taverna (Biologist)	Manchester, July 08	G. Hanganu
1	eMinerals	Cambridge, July 08	M. Arguello
5	Archaeology (VERA)	Silchester, July 08	G. Hanganu & M. Arguello
2	Humanities computing	Silchester, July 08	G.Hanganu
1	Condor (disease control)	Manchester, Aug 08	M. Arguello
1	Condor (quantum chemistry)	Liverpool, Aug 08	M.Arguello

Planned interviews:

- MIMAS Landmap service, Possibility of complementing with MAPTUBE – GeoVUE,
- NaCTEM (National Centre for Text Mining)

Emails have been sent out to other researchers requesting their participation; however there is a considerable delay in getting responses back and in trying to contact suitable practitioners. Where consent has been granted, interview data resulting from interviews undertaken by e-Uptake and Engage are being mined for suitable evidence to support use case development. Where necessary this data may be supplemented by a short follow-up interview (e.g. by telephone).

Work package 4 Use cases
Further work has been done on Use cases:
Completed Use Cases
Use Case 1 – Engineering Science (medical image analysis) – MRC
Use Case 2 – Applied Econometrics - ESRC
Use Case 3 – Computational Biochemistry -BBSRC
Use Case 4 – Corpus Linguistics - AHRC
Use Cases in progress (interviews done and transcribed)
* Grid Computing for Radiotherapy (Cardiff Feb08) - MRC
* Modelling and Simulation for e-Social Science (Leeds March08) - ESRC
* Comb-e-Chem (Chemistry) - EPSRC
* ESDS International (e-Social Sciences) - ESRC
* Taverna/myExperiment - BBSRC
* eMinerals - NERC
* VERA (Archaeology) - AHRC
* Humanities computing - AHRC
* Condor (Disease control) - BBSRC
* Condor (quantum chemistry) - EPSRC
Candidate Use Cases (interviews not yet completed)
* MIMAS Landmap Service
* MAPTUBE - GeoVUE
* NaCTeM (National Centre for Text Mining)
Work package 5 Domain and Service User models
There has been further development of Service Usage Models within the e-Framework in the
following areas. Please see attached report for more information
Work package 6 Stakeholder and Community Engagement
Workshops and a Roadshow are being planned for the end of the project. Meetings have been held
in London (face-to-face and via Skype) on Community engagement.
Work package 8 Interactive website – Community portal
Work has been done on updating the website and in linking this with the Engage website
Work package 9 Dissemination
There has been substantial work on this work package with presentations at major conferences –
All Hands and Oxford eScience and with e-Infrastructure meetings. These are further reported
below. There is goodwill among the researchers interviewed and a willingness to contribute to joint
publications. eIUS have been invited to contribute to iSGTW (International Science Grid).

Section Three: Institutional & Project Partner Issues

The project team comprises a Project Manager (0.2 FTE, Oxford); Senior Analyst (0.5 FTE, Oxford);
Research Associate (1 FTE, Manchester); and four Investigators (0.25 FTE). Further staff will be
recruited on a consultancy basis to ensure the project fulfils its objectives. The project team now
meets monthly by (mainly) audio conference. Each site holds weekly meetings. There are no
significant issues to report. Like many distributed projects, communication between sites and
between members of the project team remains a key success factor.

Section Four: Outputs and Deliverables

Concentration in this reporting period has again been on the Experience Reports (Work package 3)
and the Use Cases (Work package 4). Thirteen of these interviews have now been conducted and
all of these interviews have now been transcribed. The Use cases for each of these areas are now
being developed, along with new areas for interviews and further expansion of some of the specific
subject areas to allow for a fuller use case to be developed.

Section Five: Outcomes and Lessons Learned

The development of the Use Cases has produced interesting comments on how applicable these are to other areas and how important the range of different subjects/topics is within this. The project has chosen a specific range of topics to broadly relate to each of the research councils. There is no scientific attempt to be a representative cross section of the researchers presently engaged in using e-infrastructure, but rather the priority is given to identifying the success stories, especially those with potential for engaging researchers whether within similar or entirely different fields. Perhaps inevitably the bulk of interviews have been conducted with activities arising from the e-Science Programme (including arts and humanities projects funded either via the JISC VRE Programme or the joint AHRC/EPSRC/JISC research programme). Where possible the project is also highlighting dependencies on institutional or international e-infrastructure. Issues of sustainability and continued development in this area have been considered as these Use Cases will need to be updated in the future.

Section Six: Evaluation

The project conducts formative evaluation of the outputs through iterative feedback from participants in the interviews and researchers epitomised in the use cases. We expect this process to become more open and efficient via the publication of use cases for comment on the Engage website.

Section Seven: Dissemination

The following dissemination activities were undertaken in this period:
Publications:
* M. Argüello, S. Peters, and P. Ekin: Towards a collective knowledge base: sharing the expertise acquired on developing grid-based e-science and e-social science applications. Online proceedings of Oxford e-Research Conference, Oxford, UK, September 2008
* M. Argüello, P. Ekin, A. Turner, S. Peters, P. Townend, M. Fraser, P. Halfpenny, R. Procter, A. Voss, and M. Jirotka: Highlighting e-Infrastructure patterns in Grid-based e-Social Science applications. Accepted for Regular Session presentation at UK e-Science All Hands Meeting 2008 (AHM 2008), Edinburgh, UK, September 2008
* M. Argüello, P. Ekin, S. Peters, M. Fraser, P. Halfpenny, R. Procter, A. Voss, and M. Jirotka: A case study about how e-Infrastructure is used within the Social Sciences. Online proceedings of 4th International Conference on e-Social Science, Manchester, UK, June 2008
Presentations to specific conferences:
* 4th International Conference on e-Social Science. Paper title: A case study about the use of e-Infrastructure elements used within the Social Sciences
* All Hands 2008-09-26 – Highlighting e-Infrastructure patterns in Grid-based e-Social Science applications, September 2008, Edinburgh
* eScience 2008-09-26 - Towards a collective knowledge base: sharing the expertise acquired on developing grid-based e-science and e-social science applications - Oxford
* eIUS: e-Infrastructure Use Cases and Service Usage Models, at JISC Innovation Forum, July '08
Other dissemination activities:
Engage, e-Uptake, and eIUS, a small common flier has been released and distributed at relevant events (e.g. JISC Innovation Forum)
Future plans for dissemination include a booklet and videos from the researchers which will now be included in the project brief.

Section Eight: Risks, Issues and Challenges

The risks associated with the project have been noted in previous sections.

The risk with researchers or service providers reluctant to engage has been resolved more slowly than expected and we now have sufficient high quality research projects to fulfil the project brief. There has been considerable work involved with setting up and undertaking the interviews. The supportive community engagement group has facilitated meetings and this is now allowing all three projects to share information. The production of SUMs is now progressing well despite the earlier problems and excellent feedback on these has been received, encouraging further development and completion of the remaining SUMs from the completed Use cases.

Section Nine: Collaboration and Support

The lack of engagement across the research community in eScience is being addressed and the collaborative effect of the 3 projects has been welcomed. As all 3 projects put information on their sites and the Engage site, including interview transcriptions (in a secure subversion area), this makes it easier to assess if it is possible/useful to interview a specific researcher or team. The issue of re-use is an important one and the continued benefits of having several projects simultaneously in similar areas has been invaluable. A researcher from Göteborg University and University College of Borås (Sweden) has been following what eIUS is doing (conference papers, material through the ENGAGE Website etc), and has developed a Use Case in a similar fashion to eIUS; and is currently trying to address the construction of SUMs in a similar way to eIUS. The main difference is in terms of ICTs inside and outside the eIUS scope, as the researcher is not as restricted in terms of e-infrastructure. The research community is becoming more aware of eInfrastructure and is likely to benefit from this combined effort across all 3 projects.

Section Ten: Financial Statement

The project has had a significant under spend due to the lack of a full time researcher and project manager in Oxford from January until June. This post has now been filled and it is expected that new researchers will be recruited in the near future. This will significantly reduce the overspend. The financial statement includes the budget from the 1st April until the 31st August 2008, together with projected expenditure to the end of September.

Section Eleven: Next Steps

The project will complete the outstanding use cases prior to beginning another iteration of the interview-use case cycle.

In parallel existing SUM material will be made available via the e-Framework wiki and further SUMs developed from the use cases.

Dissemination activities in the next period include the development of video research 'trailers' (sub-contracted to a production company). The project's online presence will be consolidated, probably around the Engage website (depending on the outcome of discussions with Engage and e-Uptake).

Linking with other members within the e-Infrastructure community and with the partner projects e-Uptake and Engage will continue, and combined end of project events will be developed with all 3 projects.