

**RUSSELL UNIVERSITIES GROUP IT DIRECTORS/CONSORTIUM  
OF RESEARCH LIBRARIES (RUGIT/CURL): SHARED SERVICES  
WORKING GROUP**

**INVITATION TO TENDER**



**A shared research data service for the UK  
Feasibility Study**

Ref: T07:043

Issued: 15 November 2007

# RUSSELL UNIVERSITIES GROUP IT DIRECTORS/CONSORTIUM OF RESEARCH LIBRARIES (RUGIT/CURL): SHARED SERVICES WORKING GROUP

## A shared research data service for the UK

## Feasibility Study

### INVITATION TO TENDER

#### Summary

1. This document invites tenderers to submit proposals to undertake a study into the feasibility of developing and maintaining a national shared digital research data service for the UK's Higher Education Institutions (HEIs). Any resultant contract will be under the terms of the OGC Buying Solutions "Catalist" agreement for consultancy.
2. The deadline for receipt of proposals (via the LSE's In-tend© electronic tendering system) is 12:00 (noon) on Friday 4 January 2008. The work undertaken by the appointed contractor is expected to take 8 to 10 months and should be completed by the end of January 2009 at the latest.

#### Background

3. In April 2007 The Higher Education Funding Council for England requested expressions of interest in leading feasibility studies in the area of HE shared services<sup>1</sup>. The Russell Group IT Directors (RUGIT - [www.rugit.ac.uk](http://www.rugit.ac.uk)) and the Consortium of Research Libraries (CURL - [www.curl.ac.uk](http://www.curl.ac.uk)), with the support of the Joint Information Systems Committee (JISC - [www.jisc.ac.uk](http://www.jisc.ac.uk)), the British Library ([www.bl.uk](http://www.bl.uk)), and the Research Information Network (RIN - [www.rin.ac.uk](http://www.rin.ac.uk)), submitted a joint expression of interest in the area of a shared digital research data service for the UK and were successful in obtaining funding with which to carry out the study. A small Working Group of RUGIT and CURL members, led by the London School of Economics, is managing this project. To see the universities in membership of the Russell Group click onto [www.russellgroup.ac.uk](http://www.russellgroup.ac.uk).
4. HEFCE guidelines for projects funded in this phase of the Shared Services programme state that the following outcomes must be delivered:
  - a. An in-depth **analysis** of the proposed shared service opportunity compared with *current provision*; to determine whether there is a case for change.  
  
And if a case is made:-
  - b. A fully worked through **business case**, including opportunity costs, with options appraisal and recommendations for the preferred approach.
  - c. Outline proposals should be presented relating to the **governance and management** of the shared service, the agreement between the partners and the vehicle to be used to operate the service.
5. These outcomes therefore form the basis of the required **deliverables** for this tender. However, with regard to the first deliverable, the immature and emergent nature of the UK's research data curation, storage and management requirements means that "current provision" does not offer an

---

<sup>1</sup> Shared services: invitation to submit expressions of interest (Circular letter 09/2007). HEFCE, 2007. [http://www.hefce.ac.uk/pubs/circlets/2007/cl09\\_07/](http://www.hefce.ac.uk/pubs/circlets/2007/cl09_07/)

adequate baseline for assessing the scope for efficiencies resulting from shared provision. The contractor for this feasibility study must therefore be able to develop a baseline model (based on the entire projected UK HE data output being managed and curated by individual HEIs) as well as a range of alternative models based on shared national services, in order to enable meaningful assessment of the costs and benefits to be undertaken.

6. This study is intended to assess the feasibility and costs of developing and maintaining a national shared digital research data service for UK Higher Education Institutions (HEIs). Such a research data service is seen by the project sponsors as forming a potentially crucial component of the UK's e-infrastructure for research and innovation, and one which will add significantly to the UK's global competitiveness. The ultimate goal of this project is to create a business case for the development of a national research data service which a) is supported by CURL and RUGIT members as describing the solution they require to see implemented; b) is supported by JISC and HEFCE as being of benefit to the entire HE sector; c) creates a fully costed proposal, with breakdown of the expected costs, benefits and route map for implementation, which is signed off by the consultancy and the steering committee as being appropriate for initiating discussions for funding the realisation of the project. Additional information about the research data management requirement is provided in the following section.

## A shared research data service

7. The UK's e-science Core Programme, managed by the Engineering and Physical Sciences Research Council (EPSRC), has been widely recognised as a world leader in the identification and exploitation of opportunities for research to benefit from the high capacity for data storage and transmission of modern IT infrastructure. E-science (the term is often used interchangeably with e-research, reflecting the increasing application of this infrastructure to social sciences and humanities research) can be broadly characterised as data-intensive, collaborative, and frequently involving researchers in locations distant from each other.
8. The development of Grid computing, with new approaches to the management of access and authentication, and the sharing of data (Grid middleware), has made it easier for researchers to exploit research methodologies that generate large data volumes. Addressing the associated data management requirements has, however, lagged behind other aspects of e-research development. The scale of this challenge has been flagged by several recent reports (for example<sup>2, 3, 4, 5</sup>). The Digital Curation Centre (DCC) was established under phase two of the e-science Core Programme (and co-funded by JISC) to explore the technical challenges around data management, but its remit excluded the direct provision of data curation services.
9. Over the next decade, we expect an increasing proportion of the UK's research activity to acquire the characteristics of e-science; and, in particular, for the volumes of data it generates to grow very rapidly. In other words, e-science is likely to become mainstream. It is important to understand that the data management challenge is by no means restricted to so-called "big science", although large-scale facilities in areas such as particle physics generate huge data volumes. More modestly-funded projects in all disciplines will also bring data challenges of varying complexity. The issue of the data deluge is not going to be restricted to Russell Group universities, although they can reasonably expect to have the largest volumes of research data to deal with. All UK universities will be affected by the problem and all should be involved in benefiting from a UK-wide research data service.

---

<sup>2</sup> Dealing with data. UKOLN, 2007

[http://www.jisc.ac.uk/media/documents/programmes/digitalrepositories/dealing\\_with\\_data\\_report-final.pdf](http://www.jisc.ac.uk/media/documents/programmes/digitalrepositories/dealing_with_data_report-final.pdf)

<sup>3</sup> Researchers' use of academic libraries and their services. Research Information Network, 2007.

<http://www.rin.ac.uk/files/libraries-report-2007.pdf>

<sup>4</sup> The data deluge (Briefing paper). JISC, 2004.

<http://www.jisc.ac.uk/media/documents/publications/datadelugebp.pdf>

<sup>5</sup> e-Science curation report: data curation for e-science in the UK. Prepared for the JISC Committee for the Support of Research, by Philip Lord and Alison Macdonald. The Digital Archiving Consultancy Ltd, 2003.

[http://www.jisc.ac.uk/uploaded\\_documents/e-ScienceReportFinal.pdf](http://www.jisc.ac.uk/uploaded_documents/e-ScienceReportFinal.pdf)

10. Articulation of the data management requirement at institutional level, by researchers, is starting to increase as data volumes grow, and as more research funders (notably the UK's research councils) develop policies for the management of data outputs generated by grant holders. Researchers' own expectation is often that the institutional library or IT service will make the necessary provision; although this has started to happen on a small scale, HE managers have serious concerns about the cost, scalability and sustainability of purely local solutions, and the duplication of effort going forward.
11. Although some of the UK's Research Councils have data centres for their outputs, and there are some discipline-based repositories at national and international level, the large gaps in the UK's current provision, and the lack of a coherent and consistent UK policy framework, mean that the challenge of managing this data and ensuring its long-term sustainability and potential re-use defaults to the individual HEI.
12. HEFCE has invested significant sums of money with JISC to build the Integrated Information Environment<sup>6</sup>, and consequently the infrastructure now exists in the UK to deliver the vision of the shared research service. The RUGIT/CURL proposal aims to realise the excellent R&D work that JISC has been doing in the field, including the work on federated access and Shibboleth where the UK is a world leader, and turn it into a workable service in support of research.
13. This is not, however, just a question of data storage capacity. In itself, that could indeed be delivered as a shared service and would produce savings for the sector, but it would add no value to the research process. Instead, what is proposed is much more comprehensive and has the potential to add immense value to researchers. The active management of the creation, selection, ingestion, storage, retrieval and preservation of research data - the "data lifecycle" - is now recognised as a complex process requiring an integrated approach. Increasingly, researchers will require access to previously generated data sets, and the facility to undertake new analyses and syntheses of, and to annotate, existing data, and a national managed service could facilitate this.
14. The full scope of research data includes the widest possible range of data volumes from relatively small data sets up to vast data volumes generated by research in fields such as particle physics. It also includes great variety and heterogeneity of data. Examples could include: complex data used in climate modelling, aerodynamics, molecular modelling, bioinformatics; video and image archives used in archaeology, anthropology and drama; massively large data sets used in particle physics.
15. There are significant cultural issues relating to the willingness of researchers individually or in groups to consider the sustainability of their data, and to place trust in digital data repositories whether as depositors or users. These are likely to require a collective stakeholder approach. At the same time significant differences are already becoming apparent between disciplines in terms of their attitude towards and engagement with these issues. The study will need to take careful account of these.
16. CURL and RUGIT, supported by their Library and IT colleagues in universities across the UK, believe that there is a strong case for a national shared service in order to provide the capacity, skills, and R&D investment needed to sustain UK research data on a cost-effective basis. A national shared service might take a number of forms, with components provided by HEIs, the Research Councils, and other agencies. An important example of an existing shared service in the HE sector on the scale envisaged is JANET, which provides continually developing infrastructure and network applications through a collaborative shared service model. The feasibility study will review and appraise the possible options.
17. Such a shared service would represent a critical component of the national e-infrastructure for research identified in the Treasury's *Science and Innovation Investment Framework 2004-2014*<sup>7</sup>. In February 2007 JISC published on behalf of the Office of Science and Innovation (OSI) a report *Developing the UK's e-infrastructure for science and innovation*<sup>8</sup>, intended to set out in more detail what the e-infrastructure should comprise and to help define its future development. The report

---

<sup>6</sup> Integrated Information Environment:

[http://www.jisc.ac.uk/whatwedo/themes/information\\_environment.aspx](http://www.jisc.ac.uk/whatwedo/themes/information_environment.aspx)

<sup>7</sup> Science and Innovation Investment Framework 2004-2014. HM Treasury, 2004.

[http://www.hm-treasury.gov.uk/spending\\_review/spend\\_sr04/associated\\_documents/spending\\_sr04\\_science.cfm](http://www.hm-treasury.gov.uk/spending_review/spend_sr04/associated_documents/spending_sr04_science.cfm)

<sup>8</sup> Developing the UK's e-infrastructure for science and innovation:

<http://www.nesc.ac.uk/documents/OSI/report.pdf>

makes several references to data management; one of the six sub-groups commissioned by the OSI was specifically tasked to look at data preservation and curation. (The OSI has now become the Science and Innovation Group of the Department for Innovation, Universities and Skills).

18. The OSI report stopped short of setting out a detailed roadmap for action. Nevertheless, CURL and RUGIT see the publication of the report, and the current government interest in shared services, as a crucial opportunity to take this work forward to the next stage. The contractors for this study will be expected to play close attention to the OSI report, and to build on its conclusions.
19. There is a clear risk that the UK's position among the global leaders in e-research and digital library and information management will be lost unless effective national solutions are developed for the long-term management of research data. The UK's competitors are already investing in this area: in particular, the US is prioritising the delivery of a national network of digital data stores within the development of its national e-infrastructure. The US National Science and Technology Council has established an Interagency Working Group on Digital Data to develop a national approach to data storage and curation. The National Science Foundation's Office of Cyber infrastructure, with an initial annual budget allocation of \$127M, has just delivered NSF's Cyber infrastructure Vision for 21st Century Discovery<sup>9</sup>.
20. Other European countries are also keenly aware of the challenges and opportunities associated with this aspect of e-infrastructure: the EU has commissioned a major study under FP6 aimed at enhancing the use of digital repositories in science (e-SciDR). The European Strategy Forum on Research Infrastructures (ESFRI), a high-level advisory group set up by the EC, published a *European roadmap for research infrastructures in 2006*<sup>10</sup>. This states:

*Data management and curation is becoming more and more important. While data quality has always been a key issue in scientific research, new measurement methods have increased the amount of data in many areas by orders of magnitude. This makes data management much more difficult, and curation of the data by humans becomes impossible. Combining data from different sources and measurements is crucial in many areas of, e.g., environmental and medical research, posing difficult issues of data integration.*

21. The study must take account of the international context, particularly the European one. The ESFRI roadmap and the forthcoming European Research Area (ERA) green paper should be studied and potential links with a UK service highlighted.
22. The current project is in line with the HEFCE objective for sustaining a high quality HE sector, 'to promote and support continued investment in the HE infrastructure, so that it remains fit for purpose and can adapt to change, now and in the future'<sup>11</sup>.
23. This study also has the strong support of JISC as an important element in building the national e-infrastructure. The proposal aligns with Aim 1 of the JISC strategic vision: 'JISC will work with the Office of Science and Innovation and the Research Councils to deliver a national e-infrastructure for research', and with Aim 3, 'To promote the development, uptake and effective use of ICT to support research'. Within Aim 3, priority 2 envisages strong cross-sector collaboration: 'In collaboration with the Research Councils provide a robust, trustworthy, secure, interoperable and scalable infrastructure for the transmission, storage, sharing, accessibility and dissemination of research data and outputs (July 2009)'<sup>12</sup>.
24. The study will be required to take account of the outcomes from the forthcoming ITT from JISC for a Research Data Preservation Study, which is due to report by March 2008. JISC is also expected soon to release two further relevant invitations to tender. These are:
  - 1) Development of a Data Audit Framework – to enable institutions to carry out an audit of departmental research data collections, awareness, policies and practice for research data curation and preservation.
  - 2) A report with recommendations on skills, role and career development of data scientists, and

---

<sup>9</sup> NSF's Cyberinfrastructure Vision for 21st Century Discover (NSF 07-28). Arlington VA: National Science Foundation, 2007.

<sup>10</sup> European roadmap for research infrastructures: report 2006. Luxembourg: Office for Official Publications of the European Communities, 2006

[ftp://ftp.cordis.europa.eu/pub/esfri/docs/esfri-roadmap-report-26092006\\_en.pdf](ftp://ftp.cordis.europa.eu/pub/esfri/docs/esfri-roadmap-report-26092006_en.pdf)

<sup>11</sup> HEFCE Strategic Plan 2006-11: updated April 2007

<sup>12</sup> [http://www.jisc.ac.uk/aboutus/strategy/strategy0709/strategy\\_aim\\_one.aspx](http://www.jisc.ac.uk/aboutus/strategy/strategy0709/strategy_aim_one.aspx)

the associated supply of specialist curation skills available to the research community.

A call from JISC in September 2007 for projects to explore Federated Tools and Services for control of access to research data is also relevant. The consultants selected to carry out our feasibility study must take account of these and any further relevant JISC studies and work closely with their project leaders.

Other related studies to be considered include:

- 1) Work on biomedical datasets commissioned by the British Library and the Wellcome Institute.
  - 2) A vision called "Beyond e-Science" from the e-Science Directors, who feel that the UK is losing its global lead because of a lack of co-ordination of e-infrastructure and related activities.
  - 3) A draft Large Facilities Roadmap due out for consultation in late 2007 from RCUK. This document will outline what the Government and the Research Councils would like to see in large research facilities in the next 10 to 15 years.
25. Despite the lack of national coordination, there are pockets of world-class practice in the UK which the contractors will need to explore, and which may provide a platform for the development of a UK-wide framework. These range from NERC's distributed network of data centres to the UK's involvement in the European Bioinformatics Institute (EBI).
26. The business plan for the preferred scenario(s) identified by the feasibility study's analysis package will need to take account of the capital and revenue costs at HEI and/or national level of data ingest, storage, preservation, retrieval and access. It will also need to explore the costs of developing and sustaining a workforce of appropriate capacity and with the necessary blend of disciplinary and informatics skills. The business plan development should also address possible mechanisms for charging some or all of the costs of the shared service to institutions, and the relationship between any such charging model, the dual support system for research (the UK funding councils and the Research Councils), and full economic costing of research.
27. The outline governance and management proposals should be developed with reference to the key stakeholders identified in para 32, and to other shared services used by the HE sector, including existing Research Council-funded data centres, the UK Data Archive and JANET. UCAS and HESA may provide useful governance models. These examples are intended to be illustrative and not prescriptive. The study could also address the possibility of commercial partnerships.

## Terms of reference

28. The principal aims of this feasibility study under the Shared Services programme are:
- a. to develop further our understanding of the UK's current and future requirements in the area of research data services
  - b. to work with the other major stakeholders, including the JISC, JANET.UK, the Rutherford Appleton Laboratory, the Russell Group, Research Councils UK (RCUK) and the constituent Research Councils, the British Library and the Research Information Network (RIN) to identify the priority areas for action
  - c. to develop a number of options/scenarios for the shared service ranging from a "do nothing" scenario at one end of the spectrum to a managed national service at the other, and to undertake a detailed appraisal of each option, including an assessment of the costs and benefits
  - d. to develop a detailed business plan for the preferred option(s)
  - e. to indicate both the scale of investment required and an estimate of the likely return on investment
  - f. to present outline governance and management proposals for the preferred option(s).
29. The feasibility study should take account of the following:
- a. published, unpublished and ongoing studies on research data issues, in particular those emanating from some of the key stakeholder bodies outlined in paragraph 32 below
  - b. current and emerging drivers for the HE sector to provide research data storage, including

- e-research programmes, changes in research practice, technology developments, and wider cultural, social and political issues
  - c. current data management policies at institutional and research funder level, including policies for the selection and review of data for deposit
  - d. projection of future capacity of HEIs to provide for data, including very large datasets, taking account of the wider context, including workforce issues
  - e. current good practice in the UK and worldwide, in the commercial sector as well as the public sector, covering strategic frameworks and benchmarks for managing the data lifecycle, including metadata creation, storage and the application of standards
  - f. curation and preservation at a high strategic level, including data format migration, retrieval and management; issues relating to data volumes and heterogeneity, as well as needs to provide simultaneous access to data from multiple sources should be considered at a high strategic level
  - g. principles and policy frameworks for access to and re-use of research data, including authentication, with reference where appropriate to the current RIN/JISC/NERC study *Publication and quality assurance of research data outputs*, due for completion at the end of 2007
  - h. the scalability, sustainability, and resilience of each of the possible solutions for a shared service compared with leaving provision to individual HEIs
  - i. the role of research funders in establishing policies for data management
  - j. the implications for workforce development, including the information management and lifecycle skills needed for the management of national storage and curation facilities, with particular reference to the requirements for subject domain knowledge and informatics skills
  - k. the state of market and sector technological readiness to implement solutions, including the potential for an outsourced solution in the commercial technological market
  - l. the impact of various scenarios on JANET and any other relevant national infrastructure, bearing in mind the need to support and enable international collaboration.
30. A number of HEIs are further advanced in their approach to identifying their data storage and management needs than most. The study should include in-depth examinations of their work (case studies) to inform its consideration of the contribution which individual HEIs can make, but it should also aim to assess in broad terms the preparedness of the rest of the sector in terms of data management. The Library and IT Directors of three Russell Group universities (Bristol, Leeds and Oxford) have agreed to act as case studies given that they are among the HEIs which have started to explore the state of their current research data. At the same time the study could benefit from a case study in a non-Russell Group university, and the Librarian and IT Director of Leicester have agreed to be the fourth case study.
31. The feasibility study should be at a strategic level and should not address technical details. In particular, the study does **not** need to address: learning and teaching, virtual research environments (VREs) and portals, records and document management, bibliographic outputs, and technical aspects of metadata and ontologies, except insofar as these relate to the principal aims set out in para 28.
32. The feasibility study will require links to be made with and evidence to be sought from a wide range of stakeholders/partners, including RCUK and its constituent Research Councils, JISC, JANET.UK, the Rutherford Appleton Laboratory, the Russell Group, the British Library and the RIN. We would expect the contractor to draw on the expertise of the Digital Curation Centre and the Digital Preservation Coalition during the course of the study. Additional stakeholders include: the Russell Group, the Universities and Colleges Information Systems Association (UCISA), Society of College, National and University Libraries (SCONUL), UKOLN, OSI, EDINA, the National Grid Service, MIMAS, The National Archives, NCeSS, NESL, AHDS and ESDS.

Please note the guide to abbreviations and organisations in Appendix E. Details of various stakeholders are in the attached lists.

33. This is a prestigious commission and requires a sound understanding of the UK's Higher Education sector and its attendant funding streams, the data challenges facing researchers both inside and beyond the HE sector and issues surrounding shared services including VAT legislation. A suitably qualified and experienced professional, likely to be an IT or Library director, will be appointed to manage the consultancy on a half-time basis (see para 38) and will provide guidance to the consultants on the culture of the sector. This project also requires the ability to compile a persuasive and compelling business case. Potential contractors are asked to consider whether they would wish to work closely with one of the relevant agencies, such as UKOLN or the DCC, as partners or subcontractors, in order to maximise access to UK HE-specific knowledge in this area. The Working Group does not wish to be directive on this point. It should be noted that it is almost unique for the HE sector to come together in such numbers and with such enthusiasm to drive forward a project like this. It is also very unusual for the sector to invite high-level consultants to work on such a project. This is an assignment which will have extremely high visibility across the sector. It may lead to the development of a national research data service which could have a profound significance for the medium to long term success of the UK in showcasing its research productivity.

## Deliverables

34. The main output from the study will be a **report** to the RUGIT/CURL Shared Services Working Group. This report should contain an Executive Summary, key recommendations, analysis of feasibility, option appraisal, business plan, risk analysis and service governance suggestions. The successful contractor may be required to deliver presentations on the report's findings.
35. The **report** will cover the following areas:
- a) **Feasibility study analysis**, to include the following but see also paragraph 29 above:
- i. an analysis of the present situation and the role currently played by HEIs and research funders
  - ii. an analysis of the current requirements of research funders regarding research data outputs, and the extent to which these are met
  - iii. a gap analysis in terms of currently available data storage, curation and management facilities, and an assessment of the capabilities and capacity required by the sector over the next 10 years; the contractor should build on JISC's previous work, and make use of the tools/resources developed by JISC's Data Audit Framework.
  - iv. an outline assessment of the position of the UK's principal competitors (US, Canada, Australia, Germany, France, Japan) and also emerging competitors (India and China) in terms of readiness to meet the data management challenge
  - v. identification of a range of options/scenarios for the provision of a service, ranging from a "do nothing" scenario to a fully managed integrated national service, including the phasing of implementation
  - vi. identification of a "baseline" for current costs (which might relate to the "do nothing" option), insofar as this is possible given provisos in paragraph 5 above
  - vii. a detailed appraisal of each option, including an assessment of the costs and benefits, the criteria to include procurement, management options, service delivery models (e.g. distributed or centralised), scalability, ease of use by researchers, security and resilience
  - viii. an analysis of how the proposed new service provision might align with existing research data storage services
  - ix. a thorough analysis of stakeholder interests, including identification of possible partners in any future shared service
  - x. success criteria including constraints and dependencies
  - xi. recommendations regarding preferred model(s) to take forward to business plan stage

b) **Business Plan**, for proposed viable option(s), building on the options appraisal developed in the analysis and setting out:

- xii. project and service objectives
- xiii. estimates of the capital and revenue, transition costs etc, costed on a full economic cost (fEC) basis.
- xiv. identification and analysis of potential sources of funding (including HEFCE), for project and service start up and for on-going running
- xv. opportunities for additional income generation (for example from selling services to third parties or to HE researchers in relation to outputs from commercially funded research)
- xvi. assessment of the sustainability of the capital costs and ongoing running costs for the service, including return on investment, project payback period(s) and proposed profiles for repayment of start up funding
- xvii. the impact of VAT, making clear any differences in treatment used between options and including proposals to reduce VAT impact where possible
- xviii. assessment of non-financial benefits, such as the strategic benefits to the UK HE sector (and beyond), learning opportunities
- xix. assessment of the potential to extend beyond the UK HE sector
- xx. a detailed plan and commentary, highlighting key milestones and deliverables
- xxi. the progression path from a start-up pilot phase to a large scale service to the whole sector
- xxii. success criteria with constraints and dependencies (political, organisational, economic, social or technological, etc) which might influence development or take up of the service
- xxiii. analysis of key risks and mitigating actions

The Business Plan should follow the principles set out in “Investment decision making”, HEFCE 2003/17, [http://www.hefce.ac.uk/pubs/hefce/2003/03\\_17.htm](http://www.hefce.ac.uk/pubs/hefce/2003/03_17.htm)

c) **Shared service vehicle Structure, Governance and Management**, to include:

- xxiv. recommended legal status and corporate structure of the proposed shared service vehicle
- xxv. provision for any liabilities
- xxvi. recommended internal management and staffing structure
- xxvii. relationships with and implications for HE, commercial and other partners and key stakeholders
- xxviii. an outline policy framework for managing UK research data
- xxix. funding model, for illustration only, possible models could include:
  - xxx. financial accountability
  - xxxi. cost-effectiveness
  - xxxii. capacity for strategic, operational and risk planning
  - xxxiii. arrangements for performance monitoring and review
- xxxiv. responsiveness to stakeholder and customer needs (including researchers and research funders), with outline plans for communication and dissemination
- xxxv. in order to demonstrate the sector’s engagement with the Corporate Social Responsibility agenda, it is important that the impacts in terms of equality, diversity and sustainable development are assessed

36. The report must be lucidly written and clearly presented, and be capable of being readily understood by a non-technical audience. The RUGIT/CURL Working Group will wish to circulate the report widely and expects to use it to support the case for investment in this area at a high level.

## **Project governance**

37. Governance of the production of the feasibility study outlined will be undertaken by the RUGIT/CURL Working Group referred to in para 3.
38. The consultants will be supported by a dedicated half-time manager at IT or Library director level who will manage the project. He/she will explain and guide the consultancy team through the culture of the HE sector and will have excellent relationships with all the IT/Library/JISC/HEFCE key players, to ensure that the project team understands the scope and quality requirements of the brief. The manager will also co-ordinate the involvement with the consultancy of the Library and IT directors of the four case studies (see para 30), to ensure that the information gathered for the consultants will assist them to develop the architecture requirements for the solution. The case study site teams and the manager will ensure that current costs of existing services are established and they will support the consultants in agreeing the likely running costs of the proposed solution.
39. The successful contractor will be required to meet with the RUGIT/CURL Working Group in the early stages and at key stages thereafter to discuss the requirements, direction and progress and ensure common understanding. There will also be meetings between the contractor and the project manager as required. Meetings will for the most part be held at the LSE.
40. Members of the Working Group will also be available for guidance throughout the project term as required.
41. Monthly progress reports will be required throughout the project.
42. Strategic oversight for the study will be provided by a high-level Steering Committee consisting of a few members of the Working Group plus representatives from the list of key national stakeholders outlined in paragraphs 28b and 32. The consultants together with the manager will be required to give one or two presentations to the Committee.

## **Intellectual property**

43. Any information gathered during the course of the study and not already in the public domain is deemed to be the property of the lead institution, the London School of Economics and Political Science (LSE). The information provided in the report, and the rights to all other output, shall become the property of LSE. The LSE acknowledges that HEFCE will wish to use the report to inform others in the sector of the work undertaken in shared services and will therefore publish the document either in full or in part.

## **Timescale**

44. The work is expected to take 8 to 10 months and should be completed by the end of January 2009 at the latest. It is intended that the contract for this study will be awarded in time to allow for a start-date of early March 2008 at the latest. A draft final report should be delivered via email by the end of November 2008 for consideration and input by the RUGIT/CURL group. The final study is expected to be delivered on or before end of January 2009 and preferably by the end of calendar year 2008. Tenderers should describe in some detail the methodology and timescales they wish to propose.

## **Funding available**

45. £175,000 to £190,000 is available for the study, including any expenses and applicable VAT.

It is estimated that a total of 95 consultancy days would be required to complete this project. This is an approximation; but indicative of the budget available for this study and would assist the meaningful comparison of bids. We would welcome your views on whether the figure of 95 days is an accurate assessment of the time required to achieve the objectives of a project of this size and

complexity.

## Criteria for evaluation of tenders

46. The key evaluation criteria will be (with relative weightings indicated in brackets):
- compliance with and understanding of the terms of reference (10%);
  - suitability of proposed methodology (25%);
  - quality and feasibility of work plan and milestones (25%);
  - relevance of the previous experience of the organisation and personnel involved in the project (15%);
  - proposed engagement with project stakeholders (15%);
  - value for money (10%).

These criteria will be applied for short listing purposes, after tender responses, and at the formal presentation to the assessment panel, and references will be also be taken up.

## Project Management

47. The project will be expected to adhere to good project management practices, regular reporting, and participation in meetings as appropriate.

## Format of proposals

48. The tender proposals must clearly identify:
- The scope of the project
  - Background and rationale for the proposal with explanations of the key elements involved;
  - The proposed methodology (ies) to be used throughout the project including management structures, and justification for their use;
  - A detailed work plan with milestones and deliverables;
  - A description of the envisaged final output;
  - A risk assessment for the activities proposed;
  - Named staff to be used in the main areas of work, together with details of their relevant expertise and experience, showing clearly where management responsibility for the project will lie (note: the consultancy must not remove or change the named consultants without the prior written agreement of the manager);
  - The proposed costs of the project, broken down into different phases as appropriate and detailing the relevant rates and time commitment for each member of the project team to be employed on the project; please use the structure as laid out in Appendix
  - Confirmation of the proposed project timetable and start date;
  - Full contact details for a single point of contact for all correspondence.
  - Relevant experience with comparable projects, in particular within the HE sector
49. The proposal (which should not exceed ten sides of A4 exclusive of supporting material) should be submitted **via the In-tend© system only** (Microsoft Word or PDF), **by 12:00 (noon) on Friday 4 January 2008**. At <https://in-tendhost.co.uk/lse/>. It is anticipated that presentations by short listed tenderers will be held at the LSE in week commencing 4 February 2008.
50. The RUGIT/CURL Working Group reserves the right not to award a contract.

## Further information

51. All enquiries regarding this invitation to tender should be sent to Jean Sykes, Librarian and Director of IT Services, London School of Economics and Political Science [j.sykes@lse.ac.uk; tel: 020 7955 7218]. The response may be notified to all tenderers.

You are required to treat all information relating to this Tender as confidential and to limit the dissemination of information within your organisation on a need-to-know basis.

On no account before the Tender opening date, is the Tenderer to contact or communicate with any other person concerning this Invitation to Tender unless the LSE redirects the enquiry.

## **APPENDIX A : TENDERING REQUIREMENTS**

### **1: Contractual Terms**

The appointed Tenderer's offer shall be accepted under the terms of the OGC Buying Solutions "Catalist" agreement for consultancy.

### **2: Tender Response**

The submission of a tender response for this particular requirement, does not guarantee automatic acceptance of any tenderer as an Official Supplier to the LSE.

### **3: Tender Documents**

Tenderers must not alter the wording of any part of the Tender (including the Terms, Form of Tender or main body of the tender). Any changes made will not be recognised by the LSE and any subsequent contract entered into shall be deemed to be as per the Tender documentation issued.

### **4: Inducement**

All Tenderers must note the following warning applies in connection with any Contract awarded to you by LSE: *Tenderers are forbidden to give or offer any gifts or consideration whatsoever as an inducement or reward to any employee or agent of the LSE. Such action will have the effect of negating all current and future Contracts.*

### **5: Modification by the LSE**

If necessary, the LSE shall review the Tender return date but only under exceptional circumstances will an extension of time and date by which the Tender must be submitted will be granted.

### **6: Cost of Tender**

The LSE will not be responsible for any costs or expenses incurred by the Tenderer in connection with the preparation or delivery or in the evaluation of the Tender.

NB: The use of the In-Tend© tendering software is free of charge to tenderers.

### **7: Validity Period of Tender**

All details of the Tender, including prices and rates, are to remain valid to acceptance for the period specified in point 3 of the Form of Tender.

### **8: Currency of Tender**

Tender prices shall be expressed in UK Pounds Sterling.

### **9: The LSEs Discretion**

The LSE does not undertake to accept the lowest Tender, or part, or all of any Tender, and the acknowledgement of receipt of any submitted Tender shall not constitute any actual or implied agreement between the LSE and the Tenderer. The LSE reserves the right to accept any part, or all, of any Tender at its sole discretion.

### **10: Results of Tendering**

An evaluation team will consider all Tenders correctly submitted and will invite short listed tenderers to interview with a view to reaching a contractual agreement subject to clarification of any outstanding matters. All tenderers will be notified of the outcome in due course.

Please note that the only valid form of notification will come from an Authorised Officers of the LSE, this being Ms Jean Sykes and/or Ms Margaret Newson. You must not, under any circumstances, accept the award of the contract from any other member of the LSE.

### **11: Confidentiality**

As a publicly funded body, the LSE is required to maintain a record of your offer for audit purposes. However, the School policy is to treat such information as commercially confidential and, subject to the requirements of the Freedom of Information Act 2000, will not disclose it to any other party than its auditors without first alerting the relevant Tenderer of its possible disclosure.

## **APPENDIX B : ADDITIONAL INFORMATION REQUIRED FROM TENDERERS**

1. (Company) Name (inc. legal status e.g. PLC, etc):
2. Address:
3. VAT registration number:
4. Company registration number (if applicable):
5. If you presently, or have previously supplied the LSE, state when and name a contact:
6. To the best of your knowledge, do you (or any of your senior staff and/or directors) know in a non-business capacity, any member of the LSE's staff ? If so, please give details:
7. In the last three years, has any contract with you or your organisation been terminated on the grounds of your failure to comply with UK legislation prohibiting discrimination or contract conditions relating to Equal Opportunities in the provision of services? YES NO

## **APPENDIX C : PRICING SCHEDULE**

It is estimated that a total of 95 consultancy days would be required to complete this project. This is an approximation; but indicative of the budget available for this study and would assist the meaningful comparison of bids. Please complete this pricing schedule based on this figure, itemised by grade of consultant and their time allotted to the project.

In addition, we would welcome your views on whether the figure of 95 days is an accurate assessment of the time required to achieve the objectives of this project.

<b>NAME AND JOB TITLE (INCLUDE CV)</b>	<b>£ (ex VAT) DAY/HALF DAY RATE</b>	<b>TOTAL HOURS TO BE WORKED</b>

<b>FIXED FEE – based on 95 days work</b>
<b>£(ex VAT)</b>

**Please include a maximum amount for miscellaneous expenses i.e. for travel, accommodation etc**

## **APPENDIX D : FORM OF TENDER - to be completed by tenderers**

Submitted by:

---

Name & job title of person authorised to complete and sign this Form of Tender  
(*Electronic signatures are acceptable*)

---

Signature: \_\_\_\_\_

Dated: \_\_\_\_\_

In response to this Invitation to Tender:

1. I have read the information provided in the tender documents, I offer to supply the services described in such manner as defined.
2. I confirm that I am authorised to complete the Form of Tender.
3. The specification, information and prices offered in this Tender are guaranteed to be held as valid for 90 days from the published date of the Tenders being opened by the LSE. I confirm that the terms of the Tender will remain binding upon me and may be accepted by the LSE at any time before that date.
4. I confirm that the prices in the Tender Offer have been arrived at independently, without consultation, communication, agreement or understanding for the purpose of restricting competition, as to any matter relating to such prices, with any other Tenderer or with any competitor.
5. I have not knowingly been disclosed the prices which have been quoted in the Tender, directly or indirectly, to any other Tenderer or competitor, nor will they be so disclosed.
6. I confirm that I have made no attempt, or will make no attempt, to induce any other person or firm to submit or not to submit a Tender Offer for the purpose of restricting competition.
7. I agree that any other terms or conditions or any general reservation which may be printed on any correspondence emanating from my organisation in connection with this Tender or with any contract resulting from this Tender, shall not be applicable to this Tender or to the contract.
8. The price shall be as shown below on this Form of Tender. I understand that I will be notified of any arithmetical errors within my Tender Offer submission and may be requested to either stand by any discrepancies or withdraw my offer.
9. I understand that the LSE is not bound to accept the lowest, or indeed any Tender.
10. Any resultant contract will be under the terms and condition of the OGC Buying Solutions "Catalist" agreement for consultancy.
11. I agree that the construction, validity, performance and execution of any Contract that may result from this Tender shall be governed by and interpreted in accordance with English Law and shall be subject to the exclusive jurisdiction of the Courts of England.

## **APPENDIX E : ABBREVIATIONS AND ORGANISATIONS**

AHDS: Arts and Humanities Data Service: <http://ahds.ac.uk/>

British Library: <http://www.bl.uk/>

CURL: Consortium of Research Libraries: <http://www.curl.ac.uk/> *\*Please note that CURL is in the process of changing its name to RLUK (Research Libraries UK) and the formal process of changing will take place during 2008*

DCC: Digital Curation Centre: <http://www.dcc.ac.uk/>

DIUS: Department for Innovation, Universities and Skills: <http://www.dius.gov.uk/>

DPC: Digital Preservation Coalition: <http://www.dpconline.org/>

EBI: European Bioinformatics Institute: <http://www.ebi.ac.uk/>

EDINA: <http://edina.ac.uk>

EPSRC: Engineering and Physical Sciences Research Council: <http://www.epsrc.ac.uk/>

ERA: European Research Area: [http://ec.europa.eu/research/era/index\\_en.html](http://ec.europa.eu/research/era/index_en.html)

ESDS: Economic and Social Data Service: <http://www.esds.ac.uk/>

ESFRI: European Strategy Forum on Research Infrastructures: <http://cordis.europa.eu/esfri/>

fEC: Full Economic Costing

HE: Higher Education

HEFCE: Higher Education Funding Council for England: <http://www.hefce.ac.uk/>

HEI: Higher Education Institution

HESA: Higher Education Statistical Agency: <http://www.hesa.ac.uk/>

JANET: Joint Academic Network: <http://www.ja.net/>

JISC: Joint Information Systems Committee: <http://www.jisc.ac.uk/>

LSE: London School of Economics and Political Science: <http://www.lse.ac.uk/>

MIMAS: <http://www.grid-support.ac.uk/>

National Archives: <http://www.nationalarchives.gov.uk/>

NCeSS: National Centre for e-Social Science: <http://www.ncess.ac.uk/>

NERC: Natural Environment Research Council: <http://www.nerc.ac.uk/>

NESC: National e-Science Centre: <http://www.nesc.ac.uk/>

NGS: National Grid Service: <http://www.grid-support.ac.uk/>

NSF: Office for Cyber infrastructure: <http://www.nsf.gov/dir/index.jsp?org=OCI>

NSF: National Science Foundation: <http://www.nsf.gov/>

NSTC: National Science and Technology Council: <http://www.ostp.gov/nstc/index.html>

OSI: Office of Science and Innovation (now the Science and Innovation Group of the Department for Innovation, Universities and Skills)

PFI: Private Finance Initiative

PPP: Public-Private Partnerships

R&D: Research and Development

RCUK: Research Councils UK: <http://www.rcuk.ac.uk/>

RIN: Research Information Network: <http://www.rin.ac.uk/>

RUGIT: Russell Universities Group IT Directors: <http://www.rugit.ac.uk/>

Russell Group: <http://www.russellgroup.ac.uk/>

SCONUL: Society of College, National and University Libraries: <http://www.sconul.ac.uk/>

Shibboleth: [http://www.jisc.ac.uk/publications/publications/pub\\_shibboleth.aspx](http://www.jisc.ac.uk/publications/publications/pub_shibboleth.aspx)

SIG: Science and Innovation Group of the Department of Innovation, Universities and Skills

UCAS: <http://www.ucas.com/>

UCISA: Universities and Colleges Information Systems Association: <http://www.ucisa.ac.uk/>

UK Data Archive: <http://www.data-archive.ac.uk/>

UKOLN: UK Office for Library and Information Networking: <http://www.ukoln.ac.uk/>

## **IN-TEND©**

### **INSTRUCTIONS FOR TENDERERS**

#### **How to Log-on to the In-tend© Website:**

To access your individual secure homepage:

1. Click on the link for the In-tend© website: <https://in-tendhost.co.uk/lse/>
2. Click on the 'Login' button on the left-hand side of the homepage, this will bring up another screen where you should enter your User ID number, email address and password and then click 'login'.

From this page you will be able to: view and change your company details; access tender information and documents; send and view correspondence.

#### **How to view and download tender documents once logged in:**

1. Click on the 'My Tenders' button – this will bring up the tender information
2. Click on 'View Tender Details'
3. Click on 'View Documents'

On this page you will be able to view and download the tender documents relating to this tender.

#### **Uploading your completed tender return documents:**

To upload your completed tender document:

1. Log in to your secure home page
2. Click on the 'My Tenders' button
3. Click on 'View Tender Details'
4. Click on 'View Documents'
5. Either click on 'browse' and choose the correct document or type in the path to the document.
6. Click on the 'upload' button. You will receive a notification on the screen to say your document has been uploaded successfully and it will be added to your list of 'My documents for Return'

#### **Submitting your Return:**

Once you are happy that you have uploaded the correct documents, click on the 'Submit Return' button at the bottom of the screen. You should then receive a notification on the screen that your Tender has been received by the site. You will be able to print off a receipt for your records. If you do not receive this message your submission has been unsuccessful.

#### **Closing Date and Time:**

The closing time for submissions is controlled by the 'Server Time' on the website which is displayed at the top of this page.

**Please ensure you allow sufficient time for the documents to be uploaded and submitted by the closing date and time.**

#### **Correspondence and Requests for Further Information:**

Any correspondence relating to this tender will be sent to you via the website. When you log-on to the website you will have a message on your homepage informing you if you have any unread correspondence. You will also receive an email informing you that there is new correspondence on the website.

Any requests for further information concerning this tender should be sent via the website. You can do this by clicking on 'Create New Correspondence' on your homepage.

***Please do not hesitate to contact LSE Purchasing Services should you have any queries concerning the In-tend© system.***

**Contact: Ms Margaret Newson, Purchasing Manager, LSE  
on 020 7955 6635 or [m.newson@lse.ac.uk](mailto:m.newson@lse.ac.uk)**