JISC 16/11 call

Cover Sheet for Bids **(All sections must be completed)**	
Please indicate which strand you are applying for:	C1
Name of Lead Institution:	King's College London
Name of Proposed Project:	UK Research Information Shared Service (UKRISS)
Name(s) of Project Partners(s) (except commercial sector – see below)	British Library, Brunel University, euroCRIS, University of Exeter, University of Edinburgh
This project involves one or more commercial sector partners ~~**YES**~~ **/ NO** (delete as appropriate)	Name(s) of any commercial partner company(ies) Cottage Labs

Full Contact Details for Primary Contact:	
Name:	Dr Simon Waddington
Position:	Software Development Manager
Email:	simon.waddington@kcl.ac.uk
Tel:	02078481985
Address:	26-29 Drury Lane, London WC2B 5RL.

Length of Project:	16 months		
Project Start Date:	1st February 2012	**Project End Date:**	31st May 2013

Total Funding Requested from JISC:	£293,804.60
Total Institutional Contributions:	£73,451.15

Outline Project Description: The UKRISS project will determine the feasibility, requirements and scope of a national research information reporting service and build a proof-of-concept infrastructure for this service. The project will carry out an extensive feasibility study, including in its remit a survey of use cases and an examination of the metadata and technical infrastructures necessary to deliver it. The study will involve a wide range of stakeholders including research organisations, UK funding councils and charities that fund research. The CERIF standard will play a central role, and the project is supported by euroCRIS. Based on the results of the feasibility study, the project will seek to implement a proof-of-concept service which will be used to test the long-term viability and sustainability of a national service of this kind. A detailed evaluation of the service will be carried out with stakeholders to determine the benefits in terms of effort and costs in gathering research information. The project will build on the results of previous JISC RIM projects such as RMAS, R4R, MICE and BRUCE as well as interacting with existing national and international organisations and services.

I have looked at the example FOI form at Appendix A and included an FOI form in this bid	**YES /** ~~**NO**~~ (delete as appropriate)
I have read the Funding Call and associated Terms and Conditions of Grant at Appendix B	**YES /** ~~**NO**~~ (delete as appropriate)

Proposal: UKRISS

Submitted by: King's College London (KCL); British Library (BL); Brunel University (BU); Cottage Labs (CL); euroCRIS (EC); University of Exeter (EX); University of Edinburgh (ED)

1. Appropriateness, Fit to Programme Objectives, Overall Value to JISC Community

1.1 Objectives

1.1.1 The project will perform a detailed feasibility study of the requirements for a national research information management service, which will provide an integrated approach to the gathering, analysis and dissemination of this information as required by funders. This will include:

- A requirements gathering study on a representative sample group of research organisations, and funding bodies including UK funding councils and charities.
- Scoping of the metadata requirements for such a service, based on the CERIF (Common European Research Information Format) standard.
- Detailed specification of the data mappings to the CERIF standard necessary for a fully interoperable research information architecture to operate in such a service.
- Detailed specification of the technological requirements for such a service, and the resource implications that such a service would imply.

1.1.2 Based on the results of the feasibility study, and subject to its acceptance by JISC, to build and evaluate a pilot, proof-of-concept system for national research information reporting.

- The system will be based on open standards and where practicable open source, provide for a wide range of institutions, and adhere to software development best practices.
- The system will build directly technologies from previous projects when this is the most cost effective solution, particularly RMAS, which has already developed a framework for exporting data in CERIF format for processing by applications running in the cloud.

1.1.3 To review the sustainability options for such a service and to and make appropriate recommendations for its long-term viability, including a close examination of the potential for scalability to a national production system.

1.2 Relevance to the call objectives

1.2.1 The proposal directly addressed the objectives in item 8 of appendix C as follows:

- Providing an extensive set of use cases from a diverse range of ROs, funders and agencies, including NERC, MRC, ESRC, HESA, RCUK and AMRC (point a).
- Performing a rigorous feasibility study involving work on business needs, metadata and technological approaches (point b).
- Building on previous JISC RIM projects carried out by the partners including R4R, MICE, BRUCE and RMAS (point c), and engaging with national and international bodies.
- Building a proof-of-concept service infrastructure based on open standards that supports a wide range of reporting requirements and connectors (point d).
- Making sustainability a core part of the project plan, including detailed consultation with stakeholders and JISC Advance, and allocation of resources to handover (point e).

1.3 Background

1.3.1 The reporting of research information is a complex and expensive activity for research organisations (ROs). The UK does not currently have a national reporting infrastructure. Instead institutions are responsible for collating and submitting the required metadata to funders. This inevitably results in duplication and increased costs across the sector.

1.3.2 ROs across the UK are at different levels of maturity in managing research information, which needs to be taken into account in designing a national service. Some ROs, particularly large HEIs have invested in commercial CRIS systems such as PURE (Atira), Elements (Symplectic) and Converis (Avidas). Others have developed in-house systems to facilitate the gathering of information. Many ROs, particularly smaller organisations with limited resources, still rely on storing information in spreadsheets and preparing information by hand.

1.3.3 The Common European Research Information Format (CERIF) has emerged as the preferred format for expressing research information across Europe. CERIF has been piloted in for specific applications, but not as a format for reporting requirements across all UK ROs.

1.3.4 A number of national services already exist that are closely related such as Grants on the Web and the Research Outcomes System. Integration with these systems is a key use case for the project to reduce manual data transfers and duplication. Research reporting also requires information sharing across institutions. Many institutions subscribe to commercial services such as citation databases (e.g. Thomson-Reuters Web of Science), which creates additional costs.

1.4 Overall approach

1.4.1 The project is structured as two phases. Phase 1 comprises a feasibility study, in which we will gather and analyse the requirements of the main stakeholders (funders and ROs), determine the scope of the national service, produce the technical design and evaluate the key software components. In phase 2, we will implement the proof-of-concept system, writing any custom code required for system integration and user interfaces, and performing evaluation.

1.4.2 We have defined phase 1 to be nine months in duration, with a further seven months for phase 2. By conducting a thorough feasibility study, we will significantly increase the likelihood of success and better anticipate problems, both in terms of the value proposition as well as potential technical issues.

1.4.3 Phase 1 involves a number of complex tasks. In particular, consulting with a wide range of stakeholders is likely to be time-consuming but essential for obtaining buy-in. Phase 2 has a critical dependency on phase 1. By including the CERIF mappings, technical design and detailed technical investigations in phase 1, we can significantly reduce risk of failure at the implementation stage.

1.5 *Phase 1: Feasibility study*

1.5.1 The strategy for the requirements gathering will aim to leverage project partner's existing cross-sector relationships to identify appropriate individuals within key stakeholder organisations (partner institutions, additional ROs, funders and charity sector). In order to maximise the applicability of the study, this stakeholder analysis and mapping will ensure a representative sample of ROs are identified, covering HEIs and non-HEIs and different sizes and maturity levels in research reporting.

1.5.2 Requirements and existing practices in research information reporting will be captured across key stakeholders (including research managers, research administrators, ICT support and institutional repositories) via a series of in-depth structured interviews and questionnaires as appropriate. A project workshop, at the end of this phase, will aim to bring together the different stakeholder groups to validate requirements and use cases. In some cases, the information may be confidential and proprietary, so we will ensure appropriate non-disclosure

mechanisms are in place. The requirements will be supplemented with information collected in previous JISC studies including RMAS and BRUCE to avoid duplication of previous work.

1.5.3 Key issues that will be addressed in requirements gathering from ROs are current practices and infrastructure for collecting research information, gaps in the current provision, interactions with other external services, precise details and formats of the data required to be submitted to funders, requirements for a two-way data transfer and information on the current costs of research reporting.

1.5.4 Research information contains personal data relating to individual research staff, which is covered by data protection legislation. The study will explore the extent to which institutions are prepared to share this information with a third party service provider and explore the technical and contractual prerequisites.

1.5.5 Key issues to be addressed in collecting requirements from funders include inputs on the types of the data to be collected, required interactions with other national systems and the reporting functions to be implemented. We will use international contacts to learn from countries such as Norway that have already implemented a national reporting service.

1.5.6 We will determine use cases for connection with other national services such as HESA reporting and Grants on the Web.

1.5.7 Stakeholder requirements will be aggregated and prioritised according to their business value and a list of essential and nice to have requirements drafted. These will be reviewed by the steering board.

1.5.8 To enable work on data mappings to CERIF, we will collect a representative sample of reporting data from partner and other institutions during the requirements study. EC will provide technical consultancy and support for any proposed extensions to the standard.

1.5.9 We will review architecture and software components developed in previous RIM projects for reuse. The RMAS cloud connector, the BRUCE report generation tools and CERIF Solr indexer are likely to be of particular value. EC have extensive experience in architecting CERIF based systems, and will assist in validating the overall design. The RMAS project conducted an extensive review of commercial supplier offerings, which we will leverage in the selection of system components.

1.5.10 A shortlist of proposed options will be proposed to JISC will be supplemented by SWOT, and cost benefit analysis. A detailed risk analysis will be performed. We will take into account both the risks phase 2 development as well as potential issues in moving from a proof-of-concept to a national service. Dependencies on existing services and business processes will be addressed.

1.5.11 Since the findings of phase 1 will largely determine the development activities in phase 2, we have chosen not to anticipate the findings of the study by including specific software vendors as partners. We will determine the approach taken in phase 2 based on a careful analysis of the stakeholder requirements and the clearly identified business benefits of running a national service. The national service may comprise a full CRIS or a set of CRIS based microservices.

1.5.12 We will provide a range of services and connectors to meet the needs of ROs across a wide range of maturities in their research reporting infrastructure. We will include both HEIs as well as non-HEIs.

1.6 Phase 2: Pilot development and evaluation

1.6.1 The development of the proof-of-concept will be based on open standards. We will consult regularly with JISC Advance to leverage their development expertise. We will use a rigorous approach to development based on agile methods. The proof-of-concept will be deployed and tested on cloud infrastructure.

1.6.2 We will provide technical documentation to facilitate operation and further development of the service by a third party, as well as detailed interface specifications.

1.6.3 The shared service will feature multiple connectors to the institution to cater for the diverse reporting infrastructure requirements of UK ROs as identified in phase 1. These will include:

a. Direct data entry through a web browser for institutions with no CRIS system.
b. A secure web service and specification to enable institutions with existing CRIS systems to implement their own connector.
c. A reference open source implementation of a CERIF system to CERIF system connector.

1.6.4 We will implement connectors to other national systems such as Grants on the Web, e-Val and the Research Outputs System, if these are deemed practical and serving a clear business need by the feasibility study, and can be achieved within budget. We will consider SWORD as a standards-based method for depositing research information into the shared service. The service will interoperate with the existing RMAS infrastructure at EX.

1.6.5 Pilots will be run by at least four ROs including KCL, BU, EX and ED. In these pilots, we will demonstrate diverse connection methods to the service and diverse reporting requirements. Since it is not practical to run a large number of onsite pilots, we will invite research administrators from other ROs to upload their sample data to one of the pilot systems.

1.6.6 The evaluation study will validate the system against the initial requirements. We will estimate the potential cost savings taking into account factors such as staff time in completing the reports, reuse of data from other shared services, estimated running costs of the national service, costs of integrating with existing internal systems, and savings through sharing of subscriptions to publisher citation systems and other external services.

1.6.7 We will evaluate use of the proof-of-concept service for REF submissions.

1.7 Expected outcomes, programme-level outcomes, benefits for the wider JISC community

- Identification, piloting and evaluation of services that can be offered at a national level (either a full or partial CRIS) to achieve cost savings for research information reporting across the sector.
- Estimates of the cost savings and benefits that can be accrued from providing shared reporting services
- Suitability of the service as a method for generating information for REF submissions.
- Recommendations for integration with other national services such as Grants on the Web and the HESA reporting service.
- Design and implementation of interfaces to the national shared service that support institutions at different levels of maturity in research reporting including web access and access via a secure web service.
- Improved understanding of how the CERIF standard can be applied to meet the reporting requirements of a wide range of ROs.

2. Quality of Proposal and Robustness of Workplan

2.1 *Project partners*

2.1.1 The **Centre for e-Research** at **King's College London (KCL)** has a focus on developing ICT solutions to support research activities across the College, including research information systems and digital repositories. The Centre led the JISC funded RIM projects R4R and MICE.

2.1.2 **British Library (BL).** Science, Technology and Medicine (STM) team aims to support of the UK research community, by understanding its information and data behaviours and needs. The team has participated in a range of JISC and software development projects and partners on delivery of the UK Pubmed Central free-to-access archive of biomedical research papers.

2.1.3 **Brunel University (BU).** The team led the BRUCE project, aimed at developing a prototype CERIF-based analysis and reporting tool. Brunel has implemented the Symplectic Elements software in 2008 which is now linked to the repository to improve management of research publications. The team has expertise in research information manipulation and has been involved for many years in institutional returns to HESA and HEFCE.

2.1.4 **Cottage Labs (CL)** is a cooperating group of HE domain expert developers who take a community-based approach to software development. They work extensively on open source and produced much of the software for the BRUCE project.

2.1.5 **euroCRIS (EC)** is a not-for-profit association registered in the Netherlands and is mandated by the European Commission to maintain, develop and promote CERIF. euroCRIS members provide the project with expertise in CERIF and international CRIS experience.

2.1.6 The **University of Exeter (EX)** team has extensive knowledge of active research systems suppliers through the creation of a research systems procurement framework for RMAS. The RMAS project has also defined CERIF standards for system integration, both internally between systems within the HEI and for external communication via cloud-based infrastructures.

2.1.7. The **University of Edinburgh (ED)** is an unfunded partner, which has consented to running of a UKRISS pilot through CL at their institution.

2.1.8 KCL, BU, BL and EX have previous experience in JISC RIM projects, which will allow us to build extensively on existing knowledge. KCL and BL previously collaborated on RIC development. CL and BU worked together on the BRUCE project.

2.2 Workpackage Breakdown:

2.2.1 **WP 1: Project management.** Responsible: KCL.
The cross-institutional nature of the project will necessitate close liaison between all parties; in particular, there will be weekly telecoms and regular face-to-face meetings.
Outputs: Project plan; Web site and blog; Exit plan; Progress reports (after 6, 12 months); Feasibility Study at end of month 9; Final Report.

2.2.2 **WP 2: Requirements gathering, analysis and business case development**.
Responsible: BU, KCL, BL, CL.
Scope and design of study. Data gathering by structured interviews, focus groups and questionnaires with stakeholders (funders and ROs). Gap analysis and detailed functional specification of service.
Outputs: Report on use cases, shared service requirements and business case.

2.2.3 **WP 3: System architecture and infrastructure.** Responsible: CL, KCL, EX, EC.
Choice of Business Intelligence (BI) system and infrastructure. Specification of service features. Design of connectors and user interfaces.
Outputs: Report on technical design and technology options for shared service.

2.2.4 **WP 4: CERIF mapping**. Responsible: KCL, BU, CL, EC. analysis. Mappings of raw data to CERIF. Gap analysis of CERIF and recommendations for standardisation. *Outputs:* Recommended CERIF sub-schema and extensions.

2.2.5 **WP 5: Implementation.** Responsible: CL, KCL, EX. Technology evaluations and initial prototyping. Integration and configuration of BI system. Implementation of connector to enable interfacing to multiple institutional systems. *Outputs:* Software for shared service pilot system.

2.2.6 **WP 6: Pilot deployment.** Responsible: CL, KCL, EX, ED. Institution-specific configuration of the shared service. Setting up of trials with research administration staff.

Outputs: System configuration documentation and software.

2.2.7 **WP 7: Evaluation.** Responsible: BU, KCL, EX, CL. **See section 3.2.**

2.2.8 **WP 8: Sustainability.** Responsible: KCL, CL. **See section 2.10.**

2.2.9 **WP 9: Dissemination.** Responsible: All (KCL lead). **See section 3.3.**

2.3 Outline Project Timetable

Phase	1									2						
Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
WP1																
WP2																
WP3																
WP4																
WP5																
WP6																
WP7																
WP8																
WP9																

2.4 Summary of Main Deliverables

- Feasibility study report covering the use cases, business case and technology recommendations for a shared research reporting service.
- CERIF sub-schema and mappings.
- Recommendations to euroCRIS for standardisation of required CERIF extensions.
- Technical design document defining the functionality and interfaces of the shared research reporting service (provided as an Appendix to the final report).
- Software to implement the proof-of-concept service and connectors.
- Final report describing the evaluation of the proof-of-concept shared service, the expected benefits and recommendations for migration to a production service.
- Core JISC project documentation (Project Plan, Project Reports, Final Report); blog.

2.5 Project management structure

2.5.1 Waddington will have overall project management responsibilities. A project management group, consisting of Waddington, Scoble, Sudlow, Trowell, Gartner and Jeffery will meet by phone conference at least once a month to discuss progress.

2.5.2 The following have agreed to sit on the Steering Board: **Josh Brown** (JISC), **Gerald Lawson** (NERC Research Information Systems, RCUK Secretariat), **Dr Astrid Wissenberg** (Director of Partnerships and Communications, ESRC), **Geraldine Clement-Stoneham** (Knowledge and Information Manager, MRC), **Maja Maricevic** (Head of HE, British Library) and **Liz Philpots (**Head of Research, AMRC). This group will meet at least four times to provide input on strategy and requirements.

2.6 Engagement with national bodies

2.6.1 We will engage with UK funding councils and RCUK. Individuals responsible for managing research reporting across all the funding councils will be contacted through the Steering Board to ensure the full range of perspectives, systems and processes are captured.

2.6.2 We will interface with HESA through **Andy Youell**, Director of Standards and Development. We will include the potential overlap with HESA data gathering at an early stage of the requirements gathering. HESA already run a national service infrastructure and we will learn from their knowledge and experiences.

2.6.3 The Association of Medical Research Charities (AMRC) have agreed to research and source funders in the charity sector who we can interview in the feasibility study.

2.6.4 Keith Jeffery and Mark Cox (KCL) are members of the **UK Research Information Management Group**, which we will leverage to build additional contacts with the UK research information community.

2.6.5 Norway has a national research information infrastructure. **Katrine Weisteen Bjerde** of Cristin will provide insights into the challenges and opportunities based on their experiences. We will explore further opportunities for international collaboration through EC.

2.7 Engagement with related projects and services

2.7.1 The project will review thoroughly the work of previous JISC RIM projects such as IRIOS, CERIFy and STEP F to determine where previous work can be reused.

2.7.2 In WP8 Sustainability, we will engage with JISC and JISC Advance in months 9 and 10 to review in detail the technical options for the implementation phase. We have allocated a further two months at the end of the project to complete the handover of the software to JISC.

2.8 IPR

2.8.1 IPR in all documents will be retained by the authors and host institutions but made freely available on a non-exclusive licence. Any software created will be made available as open source. IPR in the CERIF standard is held by euroCRIS but is made freely available with acknowledgement.

2.9 Risk Analysis

Risk	Prob (1-5)	Sever. (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Difficulties recruiting and retaining staff.	1	3	3	As far as possible, existing named staff will be employed on the project.
Lack of consensus from stakeholders.	2	3	6	Scoping of the national service is intended to be flexible to allow for different use cases.
Unforeseen technical issues in the implementation.	2	3	6	We have opted for a longer feasibility study in which we can thoroughly investigate the technical options and reduce risk.
Lack of take-up of the proof-of-concept solution.	3	3	9	We have dedicated considerable time to requirements gathering and scoping with a wide range of stakeholders.

2.10 Exit and Sustainability

a) There will be regular reviews of progress both with the project management and steering board to ensure the objectives are attainable and aligned with current business needs. We

will review progress regularly with JISC. At the end of month 9, we will conduct a detailed review of the feasibility study will JISC and other key stakeholders.

b) Detailed sustainability planning will begin towards the end of phase 1. At this point, we should have sufficient knowledge about the scope, potential benefits and technology options of a national service. We will agree a plan with JISC for handover of the project outputs. Prior to the end of the project, the prototype will be installed on third party infrastructure. At all stages of the project, including requirements analysis, architecture and implementation, our approach will be informed by the constraints of moving to a national production service.

3. Engagement with the Community

3.1 Stakeholders analysis and engagement

Stakeholder	Interest / stake	Importance
Funding bodies (funding councils, charities, etc.)	Reduced costs and overhead of managing REF submissions. Improved access to information reports.	Very High
Research administrators in ROs doing research reporting	Simplify the task of submitting research information, saving time and resources.	Very High
euroCRIS and CERIF developer community	Contributes further development and uptake of the CERIF standard.	High
HEFCE	Cost savings for research information reporting across the sector. Increases transparency through open access to non-sensitive information.	High
RO community	Reduces the burden of research reporting on the institution. Simplifies data sharing between ROs. Provides aggregated information to submitting RO.	High
JISC	Demonstrates the feasibility of a national shared service based on aggregating knowledge gained from previous JISC RIM programmes.	Medium
HESA	Supports institutions in making HESA returns by providing shared reporting tools.	Medium
Commercial suppliers	Existing suppliers would potentially be (negatively) impacted by a national reporting service.	Medium

3.2 Evaluation

3.2.1 An evaluation will be carried out with research administrators at the pilot locations to determine the value of the proposed system and to determine the likely savings in cost and effort. The evaluation will include representatives from other institutions who can upload sample reporting data into the pilot system for evaluation purposes.

3.2.2 A review will be held with the steering board members to evaluate the system functionality and performance. In particular, we will assess the benefits for funders and link those to the costs of development.

3.2.3 A functional and technical review with JISC Advance to determine the value and technical implementation of a production national shared service.

3.2.4 A key step in the evaluation phase will be to demonstrate the use of the proof-of-concept system to generate the information required for the REF. Again we will evaluate this capability with a range of sample data from different research organisations.

3.3 Dissemination and Outreach, including Programme activities

3.3.1 We will hold a workshop at the end of the project to disseminate and demonstrate the results to the community of ROs including HEIs and funders. We will summarise the feedback as part of the evaluation study.

3.3.2 The findings of the project will be presented at major events attended by key decision makers such as the UCISA Conference and the JISC Annual Conference.

3.3.3 Through euroCRIS events, we will engage with the wider CERIF community.

3.3.4 We will prepare a publication describing the results for the wider community.

3.3.5 We will participate in RIM programme events organised by JISC.

4. Budget / Value for Money

Directly Incurred **Staff**	**Aug 11 – Jul 12**	**Aug 12 – Jul 13**	**TOTAL £**

4.1 It was confirmed by the JISC Programme Manager that the figure of £100,000 for the feasibility study was for guidance only and can be exceeded with appropriate justification. In our view, the feasibility study is a substantial piece of work that is critical to overall success.

4.2 The BL does not follow the university grading structure, so no grades are given. BL staff costs are provided on the basis of a daily rate. CL and EC costs are provided at a daily rate. ED are an unfunded partner and do not occur in the project costings.

4.3 £2000 has been allocated to AMRC to cover travel costs for steering board attendance plus small honorarium, and low level admin costs to research and source charities that we would interview.

4.4 The Travel and Expenses budget of £10,000 covers the travel costs of partners, as well as costs of running the requirements study including arranging workshops and participant travel costs. Hardware costs are included for the setting up of a development server.

5. Previous Experience of Project Team

5.1 Staff at King's College London (KCL):

5.1.1 ***Dr Simon Waddington***, PI and Project Manager. Simon is Software Development Manager at the Centre for e-Research and project manager of the JISC funded Kindura project. He manages a development team involved in JISC funded projects including R4R and CLIF.

5.1.2 ***Richard Gartner***, Information and Knowledge Specialist. Richard is a metadata expert with over twenty years' experience. He was project manager of the R4R and MICE projects. He has worked extensively with CERIF and for which he wrote the CERIF4REF schema.

5.1.3 ***Gareth Knight***, Digital Curation Specialist. Gareth is involved in active research on topics related to data management. He has experience on requirements gathering and analysis on a number of JISC projects including Kindura and PEKin.

5.1.4 ***Dr Jun Zhang***, Software Developer. Jun is currently working as a developer on the JISC funded Kindura project that is piloting repositories based on hybrid cloud storage.

5.2 Staff at British Library (BL):

5.2.1 ***Dr Allan Sudlow***, STM Relationships Manager, has a background in scientific research and strategy, including leading on the MRC data sharing initiative. He oversees STM researcher engagement activities, which include requirements gathering, information behaviour studies and liaison with UK Pubmed Central partners and funders.

5.2.2 ***Dr Karen Walshe***, Research Officer in Biosciences engages with the biomedical community to inform a range of BL projects. Having led on a previous RIM project, and JISC funded Patients Participate project for the BL has practical experience of research information requirements capture techniques.

5.3 Staff at Brunel University (BU):

5.3.1 ***Dr Rosa Scoble***, Deputy Director Planning (Research and Resources). Rosa was responsible for the delivery of the RAE2008 returns (submission to 24 UoAs) and the planning and implementation of all associated processes.

5.3.2 ***Lorna Mitchell***, Assistant Director (Academic Support). Lorna is responsible for the strategic leadership of the Library's Academic Support team, including support for research. Lorna was previously PI of the JISC BRUCE project.

5.4 Staff at Cottage Labs (CL):

5.4.1 ***Richard Jones***, Founder, Cottage Labs, has been working in and around HE since 2001 with Digital Repositories and Research Information Systems. He has extensive experience in building and deploying systems, open source development and low-level integration.

5.5 Staff at euroCRIS (EC)

5.5.1 ***Prof. Keith Jeffery***, Director International Relations at STFC (Science and Technology Facilities Council). Keith is President of euroCRIS and ERCIM. Keith is co-author of the CERIF2000 standard.

5.5.2 ***Brigitte Jörg*** is the leader of the CERIF Task Group of euroCRIS and a well-known information scientist currently working at DFKI, the German Centre for Artificial Intelligence in Berlin.

Both Keith and Brigitte have participated in many JISC-funded RIM projects.

5.6 Staff at University of Exeter (EX):

5.6.1 ***Dr Stephen Trowell*** is the Research Systems Project Manager at Exeter with responsibility for the development of Exeter's system infrastructure, including deployment of RMAS elements. Stephen is a core member of the RMAS technical team.

5.6.2 ***Simon Foster*** is the RMAS Project Manager, based in Exeter. Simon is responsible for the overall coordination of RMAS and as such brings a breadth of knowledge on all aspects of the project generated from all RMAS Pathfinder HEI's, JISC Advance and SSPS. He will be involved in an unfunded advisory role.

5.6.3 **Steve Parkinson**, technical lead on research related IT systems from pre-award costing all the way through to publication.

5.6.4 **Steve Hustwayte**, RMAS project technical lead for University of Exeter and expert in data integration and middleware solutions.

5.6.5 **Tom Gardner**, provides technical support on all aspects of research systems with particular expertise in reporting and data optimisation.