

Repositories and Preservation Proposal Cover Sheet

Cover Sheet for Proposals (All sections must be completed)		JISC Capital Programme
Name of Capital Programme: Repositories and Preservation Programme		
Bid for Call Area : (Please tick ONE BOX ONLY, as appropriate)		
Tools and Innovation (Strand B)		
<input type="checkbox"/>	Call Area I – Tools and Innovation Projects	Please specify area of proposed project e.g. 'metadata generation and validation'
Discovery to Delivery (Strand C)		
<input type="checkbox"/>	Call Area II – Discovery to Delivery Projects	<input type="checkbox"/> a) Version identification framework <input type="checkbox"/> b) Persistent identifier interoperability demonstrator <input type="checkbox"/> c) Federated access management and repositories <input type="checkbox"/> d) Semantic interoperability demonstrator
Repository Start-Up and Enhancement (Strand D)		
<input type="checkbox"/>	Call Area III – Repository Start-Up and Enhancement Projects	<input type="checkbox"/> a) Repository start-up projects <input checked="" type="checkbox"/> b) Repository enhancement projects
Digital Preservation and Records Management (Strand H)		
<input type="checkbox"/>	Call Area IV – Digital Preservation and Records Management Projects	<input type="checkbox"/> a) Digital preservation across the lifecycle <input type="checkbox"/> b) Models and implementation of preservation services <input type="checkbox"/> c) Preservation tools development
Shared Infrastructure Services (Strand I)		
<input type="checkbox"/>	Call Area V – Shared Infrastructure Services Projects	<input type="checkbox"/> a) Pilot implementation of licence registry <input type="checkbox"/> b) Pilot national name and factual authority service <input type="checkbox"/> c) Scoping an architecture to support digital policy management <input type="checkbox"/> d) Scoping a terminology registry
Name of Lead Institution: Cranfield University		
Name of Proposed Project: Embed		
Name(s) of Project Partner(s):		
<ul style="list-style-type: none"> Primary Partners: Cranfield University; Cranfield School of Management; The Robert Gordon University (RGU); Key Perspectives (KPL) 		

Full Contact Details for Primary Contact:**Name:** John Harrington**Position:** Information Services Manager**Email:** j.harrington@cranfield.ac.uk**Address:**Kings Norton Library
Cranfield University
Cranfield
Bedfordshire MK43 0AL**Tel:** +44 (0)1234 754451**Fax:** +44 (0)1234 752391**Length of Project:** 2 years**Project Start Date:** March 2007 **Project End Date:** February 2009**Total Funding Requested from JISC:** £128,015**Funding Broken Down over Financial Years (April – March):**

Apr06 – Mar07	Apr07 – Mar08	Apr08 – Mar09
£9,976	£69,143	£48,896

Total Institutional Contributions: £135,361

Percentage Contributions over the Life of the Project:	JISC	PARTNERS
	48.6%	51.4%

Outline Project Description

To investigate and test a prototype service model for the accelerated development of Institutional Repositories (IR). A study will be carried out to design and cost an “optimised” service which embeds the IR function within researchers’ normal workflow routines. The study will examine what academic staff and researchers will require from the service and will assess the service implications for Libraries in terms of human and technical resources. At the same time a prototype service will be developed to determine what is required to provide such a service using current capabilities. The project will report on the perceived gap between the prototype and optimised services, and will make recommendations on how libraries could work towards the provision of a service that ideally meets the requirements of its target community.

I have looked at the example FOI form at Appendix A and included an FOI form in the attached bid (Tick Box)	YES ✓	NO
--	-----------------	-----------

I have read the Circular and associated Terms and Conditions of Grant at Appendix B (Tick Box)	YES ✓	NO
---	-----------------	-----------

FOI Withheld Information Form

We would like JISC to consider withholding the following sections or paragraphs from disclosure should the contents of this proposal be requested under the Freedom of Information Act.

We acknowledge that the FOI Withheld Information Form is of indicative value only and that JISC may nevertheless be obliged to disclose this information in accordance with the requirements of the Act. We acknowledge that the final decision on disclosure rests with JISC.

Section / Paragraph No.	Relevant exemption from disclosure under FOI	Justification
3. Budget	s40	Contains salary information which, if disclosed could contravene the Data Protection Act (1988)

1.1 Executive summary

- The project will investigate, create and test a service model designed to:
 - Speed up the development and widespread acceptance of institutional repositories
 - Discover how best to embed institutional repositories into researchers' workflow processes and institutions' infrastructure
- An integral part of the work will be to investigate ways to add value to institutional repositories, making them more attractive and acceptable to the research community.
- The project is designed such that the results will be scaleable and amenable to being adopted as "best practice" across the UK's higher education institutes and beyond.

1.2 Introduction

1.2.1 The aim of this project is to investigate and test a prototype service model for the accelerated development of Institutional Repositories (IR) and to see how far the concept of an IR can be embedded into institutional infrastructures. It will seek to show that researchers are much more willing to deposit their research output within an IR if the repository is placed within a service which is firmly embedded within the research, publication and dissemination process. Indeed it is the central contention of this proposal that failure to achieve this is the most significant barrier to the growth of IR content in academic institutions around the world. The project will look at the applicability of the model at two institutions which have repositories at different stages of development.

1.2.2 Cranfield University's QUEprints repository is designed to widen access to research outputs including post-prints, working papers and theses. Although it is currently amongst the most successful UK HE institutional repositories in terms of the amount of content, in common with others, its rate of growth is still relatively slow. Retrospective digitisation and bulk-loading of research collections has expanded the content but arguably this has not helped embed the repository more firmly within the research process at Cranfield.

1.2.3 The Library Service has tried a variety of advocacy and awareness raising strategies including presentations to School Research Committees, reports to Faculty Boards, articles in University and Library Service Newsletters and has even obtained the support of some School and Departmental heads to mandate submission amongst their colleagues. However the evidence suggests that many academics are still not aware of the repository, and even those that are, remain detached from the service. One important outcome of the project will therefore be a measure of the increase in repository awareness achieved by placing QUEprints in a service which is much more closely positioned to the needs of academics and researchers.

1.2.4 The Robert Gordon University launched its Open Access Institutional Repository ("OpenAIR@RGU") in November 2006. The development of OpenAIR@RGU has received the full support of RGU senior management and an innovative approach towards encouraging the deposit of relevant datasets etc., is being encouraged. It is hoped that the 'optimised' service offered as part of this project will result in the speedier accumulation of content for this repository than has been the case for some others within the HE sector.

1.2.5 In order to investigate a more effective method of embedding an IR into the research culture of an HE institution, a study will be carried out to design and test an "optimised" service which places an IR within the context of a wider publications support service. This service will address the needs of researchers in the research publication lifecycle from manuscript preparation through to dissemination via conferences and journals. The project will examine whether drawing authors and their papers into a service at an early stage results in them being more likely to see the repository as a natural component of the research and dissemination process and to regard the service as the natural locus for work-in-progress. It will also show whether such use of the IR by academics raises the profile of the repository within the range of administrative support services provided by the university.

1.2.6 The project will begin with a study to determine the needs of the academic community in terms of the support they require before and after publication. The study will examine what academic staff and researchers will require from an optimised service and will focus on the wider issues which influence their decisions on where to publish and affect their willingness to submit their research output into institutional repositories. The study will inform the development of a prototype service which will offer researchers a range of benefits and will seek to add value to their publishing activity. In order to develop and test the service, staff involved in the development of Cranfield QUEprints and with OpenAIR@RGU will work closely with members of selected academic and support teams within the two universities.

1.2.7 In tracing the publication cycle, the model will enable researchers to draw on a wide selection of support services offered collaboratively, which have never previously been so closely integrated into the publication process.

1.2.8 Through a collaborative and integrated process, a model will be devised and tested which enables researchers to draw on a wide selection of support services which were not previously available. An initial range of manuscript preparation services will be provided in order to identify new research output and engage authors. These will include proof-reading, checking and formatting of references, plagiarism checks, and providing assistance relating to the checking and clearing of third party copyright. Academic staff will also be offered advice and information support to assist them to target their dissemination and publication activity more effectively. These activities will have the effect of drawing in papers that are at an early stage of preparation, removing the problem of having to work back from the final published paper in order to identify a previous version to comply with publisher copyright restrictions.

1.2.9 Additional ways of engaging authors with the service will be tested through the provision of a tailored set of added value options. These will focus on the integration of individual research outputs through the creation of, and links to, existing supporting information resources (including multi-media presentations, datasets, etc), and other associated resources provided by the School (for example departmental web pages, related short courses, consultancy etc). A key component will be the availability of information about individual authors, which will both raise individual researcher visibility, and assist communication between researchers.

1.2.10 Currently there are many challenges associated with access to, and the maintenance of full researcher biographies. Such information tends to be spread across University, School, Department and personal web-sites. It tends to vary in the level of detail provided and is likely to give only a snapshot of part of the researcher's career. Given that research often involves collaboration between researchers from different institutions, a sector-wide solution is needed to facilitate easy access to this biographical information to address these issues. The project will investigate the feasibility of developing a transferable institutional researcher identifier, allowing resolution of author information in a similar manner to OpenURL.

1.2.11 Authors need to see that there are benefits from continuing to engage with the service even after their papers have been accepted for publication and have been added to the repository. The optimised service will therefore continue to support the author beyond initial publication or conference presentation through the provision of alerts to peer group communities and the provision of detailed usage and citation figures, etc. The project will demonstrate the importance of providing academic IR contributors with tailored and timely evidence of the levels of use of their papers to support the claims made by many advocates of Open Access that research publications included in IRs achieve higher citation rates and associated benefits.

1.2.12 The service will be developed in collaboration with specific research groups within Cranfield University and RGU and, after a period of pilot testing, it will be rolled out to other groups in order to confirm the transferability of the model. A key output of this project will be the definition of how the results are applicable to other institutions.

1.2.13 The final phase of the project will involve a comprehensive period of testing as part of an evaluative study. The aim of this evaluation will be to assess the effectiveness of the service model in the light of the preceding requirements study. A critical component of this study will be to establish the level of receptivity of researchers for the service and to examine to what extent it has helped to embed the concept of using a repository as an integral part of the research process and culture. The understanding of author attitudes gained here will significantly increase the willingness of the research community to provide content for the IR

1.3 Background

1.3.1 The concept of Institutional Repositories is still relatively new and almost all the repositories established to date in Higher Educational Institutions are struggling to achieve a critical mass of content. Currently there are two models (not mutually exclusive) for increasing content: through self-archiving or via a mediated service (often provided by the Library). Advocates of self-archiving argue that this is the best way of achieving the necessary buy-in to ensure that repositories are embedded in research, teaching and learning processes. However, in contrast to the use of departmental or personal pages, self-archiving at the end of the article-preparation process is perceived as adding to the workload of researchers and/or their administrative nominees, and this could be one of a number of disincentives which are slowing the growth of repository content.

1.3.2 So far, the current mediated-deposit service at Cranfield and RGU involves Library staff in requesting full text, the creation of metadata, and adding links. However this process is not embedded into the research process and recent work undertaken at Cranfield as part of an unpublished MA study shows evidence that academic staff are still detached from the IR: basic awareness-raising is a challenge and getting buy-in in the form of voluntary, timely deposition of articles remains extremely difficult. Cranfield is no exception here. Other institutions have also met with the twin challenges of author awareness and author indifference with

regard to repositories. Partial solutions have been found with increased advocacy effort within the author community and mediated deposit. Most successful of all is when a mandate is imposed¹. The former two, however, require new and additional resources and the latter needs top-level commitment to the repository and policy involvement, neither of which are easy to obtain.

1.3.3 The solution proposed by the Embed project is to develop a fully functional managed service in which the central focus is on the process that academic authors have to undertake in order to produce papers for publication and / or presentation. The focus of the project is on the researcher and the process rather than on the repository itself: that becomes simply one element in the workflow that takes a manuscript from preparation to publication and beyond. The project will also identify existing local level services that enhance the usage and usefulness of repositories which could be scaled up to national-level services. In addition, the project will test the perception that where a repository lies outside the administrative infrastructure (ie. RAE submission and associated research management systems, University content management systems, School web pages, researcher biography pages etc.), it is less likely to be embedded in the academic research process. The project will also investigate further integration of the IR with all of these areas.

1.3.4 In order to ensure the transferability of the model and/or individual service components, the project will adhere to and complement the integration and interoperability requirements as expressed in the JISC Information Environment and the e-Framework. In addition this project builds upon and complements:

- The work of the JISC-funded TARDIS project at Southampton, which identified that different disciplines have different needs with respect to research outputs within a repository
- The work done by Susan Gibbons & Nancy Foster at Rochester University, NY, which has identified ways of working with the author community that enhances their acceptance and use of the institutional repository
- The work done by William Nixon and Morag Greig at Glasgow University, where the value of, and issues involved in, mediated deposit have been closely studied
- Work carried out by various projects under the auspices of the JISC Digital Repositories Programme
- Work at BUFVC, TASI, HEDS on use of film and video
- Work carried out in the EThOS project and the work of 'GUIDE' (the European e-theses working group)

1.4 Length of the Project

The project will be undertaken over a period of 2 years commencing in Mar 2007 and finishing in Feb 2009

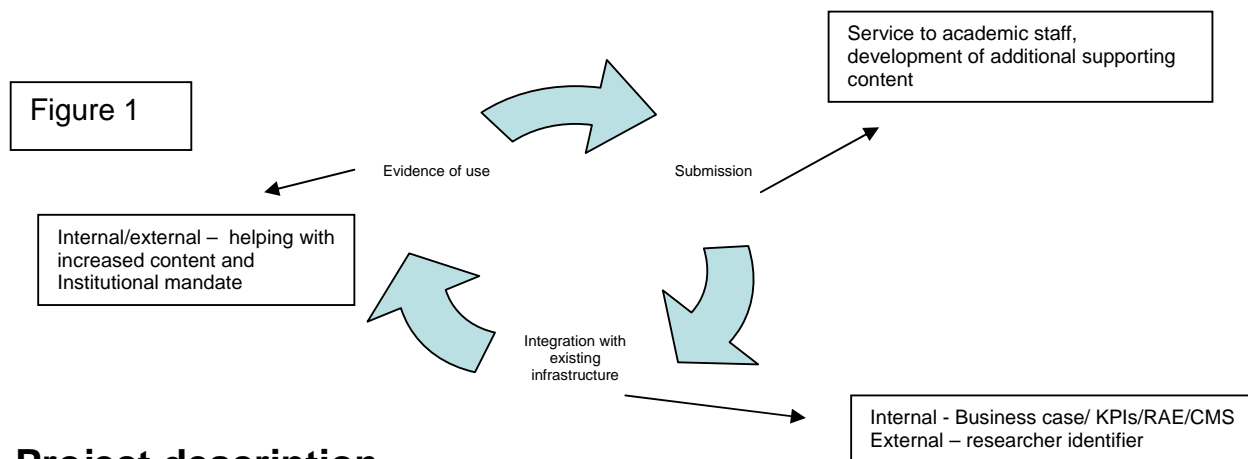
1.5 Summary of Project contribution to the repositories and preservation programme

1.5.1 The project will contribute to the overall programme by developing and piloting an innovative fully managed service model. Key outcomes of the project will be:

- To provide a greatly increased understanding of how repositories can be used and embedded to support research and learning and become fully integrated into key academic processes
- An assessment of the current capabilities and future requirements in terms of human and technical resources within the institution for the provision of a fully developed service with the IR is an integral part
- Identifying what services might be better provided for on behalf of the entire HE community by the Repositories Support Project (RSP) (eg, author identifier)
- A demonstration of how the provision of such a service will impact on existing job roles within the Library
- Provision of valuable insights into how current skill sets within institutions for servicing repositories can be enhanced and new capabilities developed.
- Demonstration of how new, local publication services can benefit local and wider research communities by increasing accessibility to research output through an increase in the content available through IRs
- Investigation into the integration of the service with University systems (ie. Finance, Human resources, RAE systems, Content Management Systems, School web pages, e-thesis submission systems etc.)

Figure 1 below shows the proposed model for sustaining an increase in IR content

¹ Sale, A (2006) Comparison of IR content policies in Australia. *First Monday* 11(4).
<http://eprints.comp.utas.edu.au:81/archive/00000264/>



2. Project description

2.1 Workplan

The work will be managed in four phases as follows:

2.1.1 Research Community Requirements Study (Work Package 1)

The purposes of this phase of the study are to:

- Examine and catalogue current practices for supporting and populating repositories in institutions
- Examine in detail how the research, publication and dissemination processes currently operate and the contemporary attitudes of authors towards these processes
- Assess how well self-archiving and mediated repository services satisfy the needs of researchers within the current process
- Inform the development of a fully managed and optimised service which is capable of being embedded within the academic community more effectively

2.1.2 The first part of this work package will take the form of an HE/FE community-wide study and will employ a mixture of desk research and interviews to investigate or document the following issues:

- Detailed current policies and procedures to support and populate repositories. These policies and procedures include mandating submissions, retrospective digitisation and bulk loading self-archiving, mediated services and combinations of these. Information will be collected by means of desk research and by consultation with the expert panel
- Factors that determine article deposition rates by academic communities within institutions

2.1.3 The remaining part of the work package will use focus groups and interviews with the target author populations to:

- Identify the processes that academic authors have to undertake to get published, and what the problem areas are in terms staff time, quality, etc
- Identify what authors want ideally from the new service and what will persuade them to use the service
- Understand authors' attitudes to "quality control" and how this affects their willingness to expose pre-published papers to internal / external peer groups
- Determine how receptive academic authors are to the idea of mandatory policies on depositing their work in institutional repositories. We know that 85% would (and do) comply with a mandate², but involving carrots as well as sticks may pay off positively, too: the University of Minho in Portugal, for example, has successfully used small payments to reward authors who obey the self-archiving mandate. The project will investigate to what degree authors can be "incentivised" and what impact, if any, is the introduction of goal setting & performance review are likely to have on the publishing culture within HEIs.
- The views of researchers on the design of the interface to the service
- The views of researchers on the development and creation of new and associated material that links with the research (linking of data sets, creation of multi-media material etc)
- Attitudes of researchers to usage data – what feedback would be most helpful?
- Attitudes to worthiness of using multi-media content both to encourage content submission and whether this would be useful to researchers outside the two partner institutions.
- Test the receptivity of academic staff to the JISC Model Copyright Agreement for journals

² Swan and Brown (2005) Open Access self-archiving: pp1-104. An author study.
http://www.jisc.ac.uk/uploaded_documents/Open%20Access%20Self%20Archiving-an%20author%20study.pdf

2.1.4 The main test group of researchers will be the Economics Group in the School of Management at Cranfield University, whose commitment to the study has been secured. A research centre within the newly formed Department of Natural Resources, part of Cranfield's School of Applied Sciences, will be involved as the secondary test group. We have selected this group because its output differs from that of the economists, consisting almost entirely of journal articles and the datasets that accompany them. For purposes of comparison, a test group of researchers at RGU will also engage in a similar process.

2.1.5 This phase of the work will begin with an online seminar with a panel of experts consisting of individuals who have managed or studied mediated repository issues – Jessie Hey (Southampton), William Nixon (Glasgow), Susan Gibbons (Rochester, NY), Paula Callan (Queensland University of Technology) and representation from the Repository Support Project. These individuals will also act as an expert panel for occasional consultation and feedback throughout the study, particularly on the applicability of the findings to other institutions. This work will be complemented by desk research, drawing out the main lessons from published studies, and by consultation with further individuals who have experience in this area.

2.1.6 Focus group sessions and interviews with researchers in the study populations at Cranfield and RGU will enable us to ascertain the answers to the questions above regarding publishing practices and needs. Sessions will be held with members of both target populations. We will also identify any collaborations between Cranfield/RGU researchers and people elsewhere so that we can incorporate such individuals in the study. This provides additional perspective from institutions outside Cranfield/RGU and enhances our ability to deduce generally applicable conclusions from the work.

2.1.7 The results and conclusions of this part of the study will inform the development of the managed publication service in work package 2.

2.1.8 Service scoping, design and implementation with pilot group (Work Package 2)

The purpose of this task is to integrate and test the components of an optimised managed publications service and to pilot this with researchers based within the Economics Group of the Cranfield School of Management and RGU.

2.1.9 The development of the service consists of a number of sub-tasks

2.1.10 Sub-task 1 Design of the Web Portal and project web-site

The purpose of this sub-task is to investigate, develop and test the portal which will be the primary means through which the members of the Economics Group at Cranfield will interact with the service. A separate web-site will be developed for dissemination purposes.

2.1.11 The actual design and functionality of the portal will be informed by the outcomes of work package 1 and by the findings of relevant projects working under the auspices of the JISC Digital Repositories Programme. Nevertheless it is clear that what is required is not a 'monolithic' portal, but rather a family of open source and open standards compliant interoperating components that provide researchers with personal and collaborative spaces, and access to tools, guidance and mediated services. A key element will be the ability to tailor the environment to the needs of the individual researcher. To meet these needs for a personalised and interactive environment, we will investigate and test the possibilities of bringing together and using 'Web 2.0' components such as web service APIs, blogs, wikis and RSS.

2.1.12 Essential in the design of the portal will be the need to investigate issues around the integration with other university systems and portals, such as University and departmental web pages, databases of expertise and Virtual Learning Environments. Advice will be sought from University Computing staff on the development of Shibboleth in relation to the proposed Embed portal. This investigation will also consider other generic integration issues that may be applicable across the sector, such as the application of standard subject headings across internal information systems and services.

2.1.13 Sub-task 2 Enhancing existing research publications with additional multimedia content and linking to related author / corporate resources.

The purpose of this sub-task is to investigate and test the potential methods of adding value to existing research publications. It has 2 strands a) to look at the challenges concerning the integration of biographical data within an institution and b) to look at the feasibility of integrating such data across different institutions by investigating the concept of an author Digital Object Identifier (DOI). This would provide the groundwork for a possible follow-up study to create an author Registry for UK HE.

2.1.14 A test set of existing and under development research publications produced by the authors within the Economics Group will be

identified. These will be enhanced by the addition of a combination of text-based and multimedia sources including:

- An abstract/executive summary of the research work
- webcast and podcast featuring the authors discussing their research and highlighting the main findings
- Extra information excluded from final published version (authors notes, advice to readers, supporting data such as Powerpoint slides)
- RAE esteem indicators and 50/100 word article descriptions
- Links to resources used such as datasets & documents

Examples of the types of enhanced outputs originating from a sample paper are shown in Figure 2 (see right).

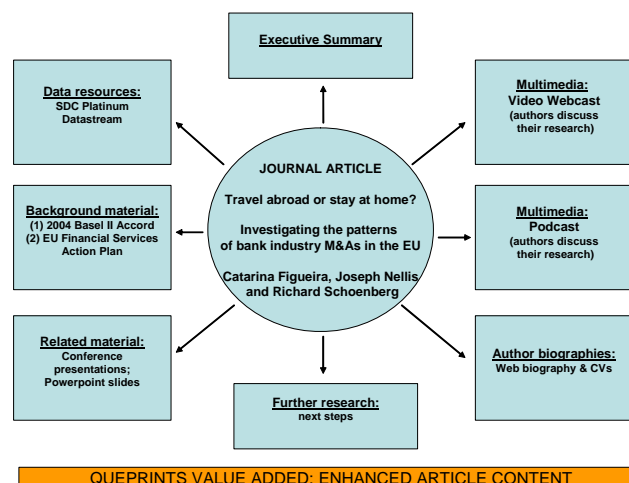


Fig 2

2.1.15 Papers will also be cross-linked by means of a mapping exercise to related author and corporate resources including:

- Individual researcher pages
- School and Group web pages, other academic portals (VLEs and Executive Programme)
- Where papers are written by co-authors from other institutions, forge links with other repositories – widening the web
- Cross-reference links to other documents within the Cranfield QUEPrints
- Researcher identifier concept

2.1.16 Sub-task 3 Development and testing of services intended to assist manuscript preparation

The purpose of this task is to encourage authors to interact with the service, including the repository at a far earlier stage than has been customary up till now.

2.1.17 A package of support services will be developed and tested including:

- Proof reading provided by a team of staff based in the Libraries at Cranfield and RGU
- Checking and reformatting of references
- Plagiarism checks
- Checking and providing guidance about clearing third party copyright (especially for theses)
- Consideration of internal and/or external peer review

2.1.18 In addition to the above “core” elements a number of other possible service options will be investigated, all of which relate to the provision of advice and guidance on publishing outlets and opportunities including:

- The provision of information on journals, by title, subject, impact factor, impact factor trends, hot journals
- The provision of information on publisher / journal advice notes to authors, copyright policies, (highlight publishers who allow / do not allow publication in Institutional Repository)
- The provision of information on conferences by subject

2.1.19 Sub-task 4 – Extending the service beyond publication and dissemination

The purpose of this sub-task is to develop and test a range of added value services that can be offered to authors beyond the intended dissemination activity for which research papers are originally prepared.

2.1.20 A package of support services will be developed and tested including:

- Alerts to peer group communities
- The provision of regular usage figures (eg. customisable report generator, provision of COUNTER compliant usage data, detailed breakdowns of location of users, use of article DOIs within the repository [this information might also usefully be presented to publishers, especially those who are currently still not allowing papers from their journals to be added to IRs]),
- The provision of regular citation figures, citation alerting and tracking reporting
- Notification of publication
- DOI linking to Researcher Page and other web pages

2.1.21 Service testing and extension beyond the initial pilot group (Work Package 3)

The purpose of this task is to test the service against a defined set of quality standards and to demonstrate the validity of the model with research groups in different subject disciplines.

2.1.22 Subtask 1 – Testing and embedding within Cranfield School of Management and RGU

It is envisaged that the Economics group will continue to test, develop and use the service model and will showcase their work via a series of presentations to the rest of the School. Following these, it is hoped to formally incorporate the system into School publishing recommendations. In year 1 of the project there will be an academic coordinator whose primary function will help to manage the process of cultural change within the target community. It is envisaged that in year 2 of the project this role will be taken over by the project manager who will coordinate these issues with all of the test groups.

2.1.23 Subtask 2 – Extending the service to the second test group

Once the initial testing has been undertaken by the first partner user groups, the optimised service will be further evaluated for applicability and transferability of the model in a research centre within the School of Applied Sciences. A presentation to the School of Applied Sciences Research Committee will be used to initiate the embedding of the service more widely into the School. A similar process, aimed at extending the service beyond the initial test group, will be undertaken at RGU.

2.1.24 Evaluative study (Work Package 4)

The final phase of the work involves an evaluation of the prototype service. An interim analysis phase to be carried out 6 months after the service is rolled out will include the following:

- Log analysis to determine overall usage levels for pilot service
- User satisfaction with service
- Gap analysis to determine differences between an ideal service and the service delivered

2.1.25 What is learned in this phase will inform the final stage of service development. User satisfaction with the final form of the service will be assessed in the last three months of the project:

2.1.26 The other issues to be assessed in this work package are:

- Skills and competencies required to support the service
- Identification of a permanent member of staff to take on responsibility of the project manager
- Costs of the pilot service and extrapolation to estimate the costs for a full service
- Consideration of the business model(s) that might be appropriate
- Applicability to other institutions
- Optimal use of technologies to integrate service elements
- Comparison of a fully-mediated service versus simple author self-archiving and the scope each model has for accelerating the development of institutional repositories

This work package will culminate in a seminar to be run in conjunction with Repository Support Project.

2.2 Project Timescales

	2007			2007/08			2008/09	
	Mar-May	Jun-Aug	Sep-Nov	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Dec-Feb
Work package1								
Work package2								
Work package3								
Work package4								
Quarterly reviews	x	x	x	x	x	x	x	x

2.3 Deliverables (D)

2.3.1 WorkPackage 1: User requirements study

D 1: report on current procedures / policies with case studies to illustrate success stories.

D 2: report on views within pilot groups & comparison with evidence of researchers from HE/FE Community

2.3.2 Work Package 2 Service scoping, design and implementation with pilot group

D 1: the demonstrator service for use by pilot group

2.3.3 Work Package 3 Service testing and roll-out to wider community within Cranfield School of Management

D 1: set of service performance standards checked against requirements identified in WP1 and WP2 applicable to both test communities

2.3.4 Work Package 4: Evaluative study

D 1: interim recommendations for tweaking the service in test

D 2: evaluative report on user test phase with recommendations and conclusions

D 3: Project seminar and presentation materials including supporting multi-media

D 4: Final project report

2.4 Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Lack of content	1	5	5	Already significant content available. Added content created as integral part of project.
Lack of academic acceptance / buy-in	2	5	10	Model to be developed, then rolled out to other groups. Significant input from other institutions experts. Two institutions involved
Staffing	1	3	3	Team work structure across partners; most staff already in place; Project management expertise; Open source software – no dependence on specific technical individuals
Organisational	1	3	3	Partners have successfully worked together before
Financial (risk to partners and JISC)	1	4	4	Commitment from institutions' senior managers (see letters of support and partnership agreement at start of project);
Technical	1	4	4	Open source software to be used, backup, patching routines established; Redundancy (eg RAID); institutional support;
Software longevity	1	3	3	Established and supported open source technology.
Legal	1	4	4	Contractual obligations of partners; If publisher policies on IRs change, project will be using material from multiple publishers.

2.5 IPR statement

E-prints generated by the pilot groups will be incorporated into the service subject to the copyright permissions of the respective publishers. Partners will retain the copyright in all added value materials (such as associated multi-media content) although these materials will be openly accessible via partner IRs. The intellectual property residing in the service model and reports (the deliverables) remain the property of JISC and will be made available to the UK HE/FE community at the discretion of JISC.

2.6 Sustainability statement.

2.6.1 The project is a definitive and self-contained piece of work, the primary output from which will be a service model rather than an actual service which needs to be sustained. It is hoped that the inclusion of more than one institution will prove that the service model will be transferable to other HE/FE institutions but implementation of the model will depend on the availability of funding and institutional commitment. Part of the challenge is to try and ensure that the new service is embedded within the partner institutions. This will involve passing on expertise and knowledge learnt during the project. There will therefore be an overlap period where the project officer will hand the role over to a nominated member of permanent staff transferring experience on issues of cultural change partly via the analysis of the results of the research.

2.7 Dissemination statement

2.7.1 A Project web-site will be developed within the first month and regularly updated. Project reports (and associated, newly created multi-media materials) will be made openly accessible via QUEprints and where appropriate, OpenAIR@RGU. An online seminar will be held at the beginning of the project involving a panel of experts and this will be recorded and made available on the project web-site. An end of project seminar will be held in order to present the service model and results of the supporting research. It is envisaged that the project papers will themselves be the subject of the methodologies and techniques developed in the project and will be made available as outputs via Cranfield QUEprints and OpenAIR@RGU and it is hoped, the RSP.

2.8. Project Management

2.8.1 A project officer will be appointed and will report to the project board consisting of representatives from Cranfield University Library, Key Perspectives, RGU, the Cranfield School of Management and the School of Applied Sciences. Advice will also be obtained from an expert committee as previously described (see 2.1 above). Quarterly review assessments will be undertaken by the Project Officer, and key personnel within the pilot groups to ensure the service elements are working satisfactorily and that the service is meeting user needs.

3. Budget

DIRECTLY INCURRED	Mar-07	Apr07-Mar08	Apr 08-Mar09	JISC Total	Partners Total	TOTAL
Staff						
████████████████████	████	████	████	████		████
████████████████████	████	████	████	████		████
Non-Staff						
████████████████████	████			████		████
Travel and expenses						
Hardware / software**	250	1,750	2,000	4,000		4,000
Dissemination/Advocacy (external)	3,255			3,255		3,255
Dissemination/Advocacy/training (internal)		1,200	1,500	2,700		2,700
					2,000	2,000
Total Directly Incurred Non-Staff (B)	5,505	2,950	3,500	11,955	2,000	13,955
DIRECTLY INCURRED TOTAL (A+B=C)	7,819	28,010	26,868	62,697	2,000	64,697
Directly Allocated	Mar-07	Apr07-Mar08	Apr 08-Mar09	JISC Total	Partners	TOTAL
████						
████████████████████					████	████
████████████████████					████	████
████████████████████		████		████		████
████████████████████		████	████	████	████	████
████████████████████	████	████	████	████		████
████████████████████	████	████	████	████		████
████████████████████	████	████	████	████		████
████████████████████	████	████	████	████	████	████
DIRECTLY ALLOCATES TOTAL (D)	2,157	41,133	22,028	65,318	115,782	181,100
INDIRECT COSTS**** (E)					17,579	17,579
TOTAL PROJECT COST (C+D+E)	9,976	69,143	48,896	128,015	135,361	263,376
JISC / PARTNERS CONTRIBUTIONS IN %				48.6%	51.4%	

*Project Officer two thirds FTE

**VAT included

***FEC/TRAC

****Indirect/Estates

Institutional commitment also includes the availability of the partner IRs and web hosting and maintenance of the Embed project website (not included in table above)

4. Partner roles and key personnel

4.1 Partner roles (see Appendix A for full details)

This proposal is led by a team based at Cranfield University comprising staff from Cranfield University's Kings Norton Library (KNL) (Dr Hazel Woodward, John Harrington, Simon Bevan, Paul Needham). The project partners The Robert Gordon University (Dr Susan Copeland, Lorraine Illingworth, Simon Burnett), Cranfield School of Management (Andrew Kirchner, Catarina Figueira, Steve Macauley), Cranfield IT Dept – MIS/RAE (Lynne Hewings) and Key Perspectives Limited (KPL) (Alma Swann, Sheridan Brown).

Library and Information Services on the Cranfield campus will lead Work Packages 2 and 3 (scoping, design, development, testing and implementation of the service model). The team consists of **Dr Hazel Woodward, John Harrington, Simon Bevan** and **Paul Needham**. This team brings together proven research experience on many JISC and other externally funded projects including EThOS, JISC/FAIR, delivery, management and access model for Eprints and Open Access Journals within FE and HE, the e-Books Metadata and Interoperability Test Bed, NESLi2 usage study. The main role of this team will be to provide project management and technical expertise. This team will be augmented by the appointment of a research officer who will be responsible for liaison, content mapping, multi-media creation and advocacy. Paul Needham, John Harrington and Simon Bevan will be primarily responsible for the development of the web portal. **Lynne Hewings**, Management Information Services (MIS). Lynne has work in the central MIS office at Cranfield since September 2003. She will be the prime contact and coordinator between the project officer and business areas where systems integration can enhance the project deliverables. Lynne will also provide support for the content management systems aspects of the project.

Cranfield School of Management is one of the leading Business Schools in Europe. The Economics Group is part of the Policy, Strategy and Performance Community within the School. The group will be the focus of the initial pilot study and will have a critical role in the definition of user needs and the development of service standards. The group is research active and includes two professors: Joseph Nellis, Pro-Vice Chancellor of Cranfield University and Professor of International Management Economics and David Parker, Research Professor of Privatisation and Regulation and also member of the UK Competition Commission. The group's contribution will be led by **Catarina Figueira, Andrew Kirchner** and **Steve Macaulay**. Catarina has been a Research Fellow in Economics at Cranfield School of Management since September 2001. She will be the prime contact and coordinator between the project officer and research group. Catarina has published in leading international journals and is a frequent contributor to a wide range of international conferences. She has advised the OECD on regulation in transition economies and a number of financial institutions on the UK housing market. She will be supported by Andrew Kirchner, Research Information Executive, who works with the Centre for Customised Executive Development to facilitate the dissemination and promotion of faculty research to the School's executive development clients. He has responsibility for the School's database of staff publications and provides a research funding service covering grant applications to research councils, charities, UK government departments and the European Union. Andrew will also provide support for the multi-media aspects of the project. Steve Macaulay will also provide expertise in the organizational implementation aspects of the project. He has experience of organizational consulting and has held senior human resources positions in computer software, engineering, telecommunications and the media.

Dr Susan Copeland was Project Director of the JISC-funded 'Electronic Theses' project, which was part of the 'FAIR' Programme from 2002- 2004. In the following years she was the leader of the EThOS project workpackage that created the EThOS Toolkit and was a member of the EThOS Project Board. Susan is a member of the Board of Directors of the Networked Digital Library of Theses and Dissertations (NDLTD) and she was responsible for establishing the Open Access Institutional Repository at The Robert Gordon University ('OpenAIR@'RGU'). **Lorraine Illingworth**, Research Assistant. A graduate in Business Studies from Stirling University, Lorraine completed an MSc in Information and Library Studies at The Robert Gordon University, before joining the Department of Information Management as a Research Assistant in May 2001. Research to date includes: gender issues in the creative industries; the impact of gender issues on knowledge sharing; information skills and competencies in the knowledge economy; information and advice needs of citizens in the local area; and knowledge mapping and auditing in a large multinational oil company. **Simon Burnett**. Having studied at the Robert Gordon University School of Information and Media at both undergraduate and postgraduate level, Simon worked in a number of research related organisations in the oil and gas industry developing information and knowledge based processes and systems. Simon joined the Centre for Knowledge Management as Director in 2001. He is currently completing a PhD on knowledge transfer support systems in the oil and gas industry.

Key Perspectives' contribution to the project will be led by **Alma Swan** and **Sheridan Brown**, the company's directors. Key Perspectives is one of a small number of consultancy companies specifically serving the scholarly communications industry. Now in its tenth successful year of trading, Key Perspectives is recognised not only for its quality of service but also its expertise and experience in relation to the development of institutional repositories. Key Perspectives has conducted a number of studies for the JISC in this field, the latest of which has just been published and is entitled *Linking UK Repositories: Technical and organisational models to support user-oriented services across institutional and other digital repositories*. Key Perspectives is particularly well known for its studies among authors and researchers which leverage the company's long experience of market research in the scholarly communications arena.

Appendix A

Covering letter (see attached page)

Appendix B

Letters of institutional commitment (see attached pages)

Cranfield Library and Information Service
Kings Norton Library

Cranfield
UNIVERSITY

Cranfield University
Cranfield
Bedfordshire MK43 0AL
England
Tel +44 (0) 1234 750111
Fax +44 (0) 1234 752391

16th November 2006

Dear Sir/Madam

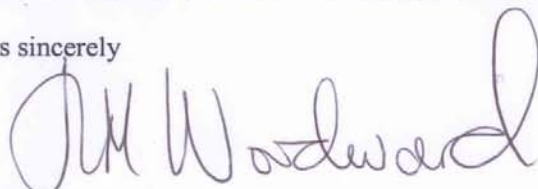
**re: JISC Capital Programme – Repositories and Preservation,
Embed Project Proposal**

I am pleased to enclose our digital submission for the JISC Capital programme – Repositories and Preservation call (JISC 04/06). Please find the main proposal documents and letters as requested.

The Embed project will develop and demonstrate a new service model which will accelerate growth of Institutional repositories by placing them more effectively within the research publication and dissemination culture. A prototype service will be tested in close collaboration within active research communities at two universities. A series of research studies will evaluate the effectiveness of the model and its transferability to other UK HE/FE institutions.

I look forward to hearing from you. Please do not hesitate to contact me by e-mail or telephone for more information if I can help further.

Yours sincerely



Hazel M Woodward (Dr)
University Librarian



THE QUEEN'S
ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2005

Professor Clifford M Friend
Deputy Vice-Chancellor

Cranfield
UNIVERSITY

Cranfield University
Cranfield, Bedfordshire
MK43 0AL England
Tel +44 (0) 1234 754000
Fax +44 (0) 1234 751637
Email: clifford.friend@cranfield.ac.uk
www.cranfield.ac.uk

Ref cmf/dc
16th November 2006

Nike Holmes
JISC Executive
Northavon House
Coldharbour Lane
Bristol
BS16 1QD

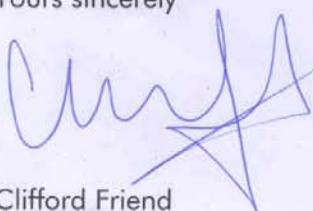
Dear Ms Holmes

JISC Circular 04/06 – Repositories and Preservation Programme - The Embed Project

Cranfield University is pleased to be associated as the lead partner in the EMBED Project. I welcome the proposal as it is very much in keeping with the University's commitment to the development of our QUEPrints Institutional Repository. In designing and testing a service model which places the repository firmly within the research and dissemination activities of our academic community, the project is also very timely in terms of our RAE 2008 strategy. Cranfield provides an ideal environment for testing such a service model, but the project will also examine the implications for the wider HE/FE community and will show how the ideas, knowledge, methodologies and skills developed can be applied in all UK academic institutions that already have or are planning to set up an Institutional Repository.

I can confirm that the proposal has the full support of Cranfield University's senior management and that we agree to make institutional contributions to the project as documented in the proposal.

Yours sincerely



Clifford Friend

21 November 2006

Nike Holmes
JISC Executive
Northavon House
Coldharbour Lane
BRISTOL
BS16 1QD

Dear Ms Holmes

**JISC Circular 4/06 Repositories & Preservation Programme. Strand D – b)
Repository Enhancement Projects**

The Economics faculty at Cranfield School of Management is pleased to be associated as a partner in the *Embed* Project, along with Cranfield University Library & Information Service, Robert Gordon University and Key Perspectives Ltd (KPL). I welcome the proposal as it is very much in keeping with the School's commitment to increasing the visibility of its research outputs and using innovation to enhance its core business activities. The project is very timely in terms of the School's evolving RAE 2008 strategy.

I can confirm that the proposal has my support as the Head of Economics at Cranfield School of Management. We agree to make our partner contribution to the project as documented in the proposal.

Yours sincerely



Professor Joe Nellis



**THE
ROBERT GORDON
UNIVERSITY**
ABERDEEN

RESEARCH AND COMMERCIALISATION

The Robert Gordon University
Scott Sutherland Building
Garthdee Road
Aberdeen
AB10 7QB
United Kingdom
Tel: 01224 263750
Fax: 01224 263757
www.rgu.ac.uk

Ms Amber Thomas
Programme Manager, Information Environment
JISC Executive
University of Bristol
3rd Floor, Beacon House
Queens Road
BS8 1QU

14 November 2006

Dear Ms Thomas

**Re. JISC Capital Programme – Circular 04/06: Repositories and
Preservation Programme, Strand D (b): Repository Enhancement
Projects**

The Robert Gordon University is pleased to be associated as a partner in the 'Embed' Project which is being led by Cranfield University Library.

I confirm that the proposal has the full support of The Robert Gordon University's senior management and that we agree to make appropriate institutional contributions to the project as documented in the proposal document.

Yours sincerely

Peter Robertson
Vice-Principal and Pro Vice-Chancellor
(Research and Commercialisation)



INVESTOR IN PEOPLE

Vice-Principal and Pro Vice-Chancellor
(Research and Commercialisation)
Professor Peter Robertson
BSc(Hons) DPhil CSci CChem FRSC CEng FEI FICI

KPL

Key Perspectives Limited
48 Old Coach Road
Playing Place
TRURO
TR3 6ET, UK

JISC Executive
Northavon House
Coldharbour Lane
BRISTOL
BS16 1QD

+44 (0) 1392 879702
aswan@keyperspectives.co.uk
+44 (0) 1872 870464
sbrown@keyperspectives.co.uk
www.keyperspectives.co.uk

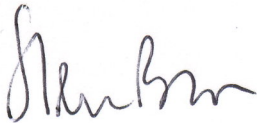
17th November 2006

Dear Sir,

Embed Project

We are very pleased to be involved with the Embed project. We are confident that this team and this project will make a significant contribution to the JISC's work in relation to institutional repositories.

Yours sincerely,



Sheridan Brown
Director