



Project Plan: BRII (Building the Research Information Infrastructure)

Note: the abbreviation RII (Research Information Infrastructure) has been used in this plan to indicate the resulting infrastructure that is produced as a result of this work.

Overview of Project

1. Background

We define research information as the metadata around research activity – descriptions of projects, their funding, outputs, dates; profiles of researchers, their interests, backgrounds and collaborations.

The day to day activities of 'doing' research impinge on many groups and individuals within and without a higher education institution (HEI). All those involved need access to research management data and all create such data. However, most current initiatives to collect research information within Oxford have their own aims and business processes at the forefront, and, where a particular business need is pressing, making the data collected available for other purposes is of secondary consideration or altogether out-of-scope.

2. Aims and Objectives

Aim

The aim of the project is to enable efficient sharing of research management data (ie data *about* research at the University of Oxford) from a selection of existing data stores and to create exemplar services that disseminate and re-use that data using a lightweight solution based on semantic web technologies

Objectives

1. Negotiate stakeholder input, collaboration and buy-in from a small number of internal data providers/creators, a selection of end-users and management and other stakeholders
2. Identify data sources and content for inclusion and re-use within the research information infrastructure (RII)
3. Build RII infrastructure comprising combine Harvester technology, instance of Fedora and web services and semantic web services
4. Provide RDF ontologies and taxonomies to define and categorise research data
5. Provide a selection of web-based applications to disseminate the research data
6. Create a University *Blue Pages* as an example of a web-based application that re-uses the data
7. Demonstrate embedding and future sustainability by data providers/creators, end users and key stakeholders

3. Overall Approach

Our proposed technical infrastructure will harvest research information directly from existing data stores within the University, without impacting significantly on their business processes. By using RDF ontologies and taxonomies to define and categorize the data objects we are gathering, we can forge connections between researchers, grants, projects and publications – information currently held in process-led silos. In the first instance we will target data from a number of bio-medical departments in the Medical Sciences Division (MSD) and the Oxford University Research Archive (ORA).

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Version: 5
Contact: Sally Rumsey sally.rumsey@ouls.ox.ac.uk
Date: Nov 2008

The ORA will provide a technical and advocacy template for this project. On the technical side, our aim is to build upon existing semantic web technologies and projects under development within the University. A new constellation of web-services will be based on the architectural components already in use as part of ORA (and the underlying Digital Asset Management System (DAMS)). The JISC BID (Bridging the Interoperability Divide) Project will provide the technical basis for the data harvesting functions of this project and the findings of the JISC PRESERV2 project will be incorporated as a mechanism for exposing the aggregated data for re-use in Web applications. We will also draw upon the MSD experience in piloting a researcher profiling system based on FOAF (Friend Of A Friend vocabulary specification – <http://xmlns.com/foaf/spec/>) as part of their Research Discovery Service (RDS).

The advocacy strand of our project is of equal importance. Our stakeholders will be placed at the centre of the project, first through the encouragement of user buy-in, via the stakeholder and user-needs analysis, then through a core iterative process using an Agile development method. Communication and feedback (from the system, stakeholders and the development team) will be enhanced by this process. User buy-in will be maximised and the stakeholder domain broadened – from researchers within the Medical Sciences Division to other parts of the University - as the project proceeds, by the ability to demonstrate clearly the benefits of each previous iteration. This will include negotiations to incorporate information from Research Services, the University's REF data-gathering exercise, and other emerging projects (such as the JISC EREWHON project).

The project aims to harvest from data already published or appropriate for open publication. The infrastructure will be able to handle access controlled information, but this is outside the project scope.

4. Project Outputs

Deliverables

- Collection of ontologies and taxonomies
- University *Blue Pages* of research management information
- Example use of API e.g. integrating with a themed website like Cancer
- Oxford Research Information infrastructure

Reports and Analyses

- BRII website
- Stakeholder analysis, domain maps and use cases document
- Formal progress reports & final report
- User needs analysis to be used by technical developers
- Documented details of future extension and continuation of RII
- Reports, papers, presentations, etc
- Internal and external formative and summative evaluation reports
- Service Usage Models (SUMS)

5. Project Outcomes

- Changed internal practice for sharing and re-use of research management data
- Oxford Research Information Infrastructure

The proposed changes in internal practice and adoption of Oxford Research Information Infrastructure have the potential to make a considerable impact on research management practice across the collegiate University. They will increase the efficiencies in the creation and use of research management data as well as reliability of that data. The infrastructure will support management of research across the University for administrative and academic departments and groups, senior members of the University and also at individual level making it easier to discover and re-use research management data. Knock-on effects might include support and enhancement for multi- and cross- disciplinary research and better collaboration with funding agencies.

6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance
PIs and Researchers	Both owners and users of data; RII provides presence, opportunities to form communities; identify areas of collaboration	High
Senior Managers, research strategists	Co-ordinators of research management data collection; RII provides overview of output, identifies opportunities for cross-disciplinary funding bids	High
Research Services	Data providers and research management data collection, RII adds value to existing data	High
Research Management Data collection processes – internal and external (REF; PinFox; MRC). All those using research management data: Central University administration; Faculties; Researchers and research groups; senior University staff	Reuse of data; making data available for aggregation	High
Department & Unit Administrators	Data providers and owners; RII provides overview of output	Medium
Humanities Virtual Research Environment	RII fits with findings of requirements analysis	Medium
Graduate Recruitment	RII showcases research; attracting high-quality graduate students	Medium
Fundraising and Development: The Collegiate University	RII improves access to research information; showcasing research.	Medium
Graduate Students	RII identifies opportunities for research; enhances collaboration	Medium
External funding bodies	RII provides overview of output with potential to enhance external data	Medium
Research Dataset Curation processes: Those with responsibility for creating and maintaining research datasets: researchers; IT; Departments; groups currently being identified (work in progress at Oxford).	RII provides enhanced metadata for datasets	Medium

7. Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Staff recruitment	3	3	9	Attractive salary and wide advertising. In case of failure, second staff from internal sources whilst re-advertising.
Staff retention/resignation	1	4	4	Depending on the stage of the project, either second staff from internal sources or new recruitment. Technical development is likely to be spread across more than one developer.
Lack of groups that contribute data	1	5	5	Identifying more groups than are required for the project across a number of disciplines.
Difficulties with user engagement and ownership	2	4	8	Mitigated by using Agile Development and the advocacy activities
Unrealistic expectations	1	3	3	Avoid raising unrealistic expectations by providing clear documentation and explanations and by listening and responding carefully to needs and concerns
Problems with the quality and quantity of existing data making it unsuitable for use	2	3	6	Identify problem at the earliest opportunity and agree alternative actions (such as recreating data or finding an alternative source).
Problems with rights and permissions for use of data	2	4	8	Identify more data sources than are actually required for the scope of this project and being flexible with the types of data
Technical infrastructure problems	1	5	5	The architecture of the infrastructure means that there are few technical risks.
Hardware failure	1	5	5	The planned enterprise grade ESX VMWare failover system guards against hardware failure. In the event that this system is not ready in time for the project, it will continue by using the existing GSX system
RDF triple store failure	1	3	3	The project is not limited to using a single RDF triple store and the use of multiple triple stores will mitigate the risk of scalability problems.
Problems with external suppliers or consultants	1	2	2	Find alternative suppliers or arrange for in-house support

8. Standards

Name of standard or specification	Version	Notes
OAI-PMH	2.0	http://www.openarchives.org/OAI/openarchiv.esprotocol.html
RDF	1.0	http://www.w3.org/1999/02/22-rdf-syntax-ns
RDFS	1.0	http://www.w3.org/TR/rdf-schema/
RDFa	1.0	http://www.w3.org/TR/rdfa-syntax/
Dublin Core (Simple)	1.1	http://purl.org/dc/elements/1.1
Dublin Core Terms	1.0	http://dublincore.org/documents/dcmi-terms/
FoaF (Friend of a Friend)	0.91	http://xmlns.com/foaf/spec/
SKOS (Simple Knowledge Organisation System)	Working draft	http://www.w3.org/TR/2008/WD-skos-reference-20080829/
AIISO (Academic Institution Internal Structure Ontology)	Working draft	http://vocab.org/aiiso/schema-20080514
AIISO-Roles	Working draft	http://vocab.org/aiiso-roles/schema-20080925.html
Participation	Working draft	http://vocab.org/participation/schema-20080925.html (The participation ontology is a simple model for describing the roles that people play within groups.)
XML	1.0	http://www.w3.org/TR/xml/
Researcher	Working draft	http://www.medsci.ox.ac.uk/vocab/researcher/0.1/researchers-20070903

9. Technical Development

The project will develop a new constellation of web-services based on the architectural components already in use as part of Oxford University Research Archive (ORA) (and the underlying Digital Asset Management System (DAMS)). These will be hosted on the same VMWare infrastructure as ORA/DAMS to take advantage of the fault tolerance that the environment provides but also the load balancing possibilities. It is anticipated that Web applications will make use of both the dedicated semantic resources made available as a result of this project and also the inherited resources from existing semantically-aware systems. All the development makes use of open source projects and will be made available under appropriate matching terms

Software will be created in an iterative Agile development environment that emphasises open communication. A range of tools will be used to coordinate a distributed group of developers in creating open source code: a project wiki for technical documentation; a mailing list for frequent communication; messenger software for group discussion; bug/feature tracking for rapid small scale enhancement and test case tracking; Google Code for code distribution.

10. Intellectual Property Rights

Under the University of Oxford's policy on intellectual property (which covers all University employees and students), the University claims ownership of a range of intellectual property rights with commercial potential. The University does not assert any claim to the ownership of copyright in artistic works, books, articles or lectures, apart from those specifically commissioned by the University. Results arising from projects funded by the JISC at Oxford would therefore usually be owned in the first instance by the University as the employing institution. The University seeks to maximize the commercial potential of its intellectual property through its wholly-owned technology transfer company, ISIS Innovation Ltd. In accordance with the desires of the Repositories Enhancement Programme, however, it is proposed to release project deliverables under either a Creative Commons license or, in the case of software, under an open source software license to maximize the benefit for the wider community.

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Project Resources

11. Project Partners

BRIL is based wholly at the University of Oxford.
Main contact Sally Rumsey (sally.rumsey@ouls.ox.ac.uk)

12. Project Management

The BRIL Project Board is responsible for overseeing the JISC-funded "Building the Research Information Infrastructure" (BRIL) project. Chaired by the Director for IT, the Project Board is responsible for ensuring that the project meets its aims and objectives and the requirements of the JISC, and that milestones are satisfactorily achieved. It should also ensure satisfactory consultation with stakeholders to inform the infrastructure development. Membership will include representatives from academic divisions, central administration and the project champions.

The BRIL Project Board will review the recommendations and actions of the Project Team, challenge these requirements if/when appropriate and be responsible for all major decisions made with respect to the project. The nature of the project is to use iterative development cycles: the Project Board will ensure that this process runs in such a way to complete the project successfully. It will commission a BRIL Project Action Group which is responsible for undertaking the project work and for making recommendations for progressing the project and will provide leadership, momentum and support for the Group. The Board will communicate the progress of the project to the Oxford University Digital Repositories Group (<http://www.ict.ox.ac.uk/repositories/>) and PRAC (Planning and Resource Allocation Committee) ICT Sub-committee (<http://www.admin.ox.ac.uk/pict/>).

The BRIL Project Action Group, comprising those actively regularly working on the project is responsible for undertaking the project work and for making recommendations for progressing the project.

Project Action Group

Sally Rumsey	Principal Investigator and Project Manager (0.2 FTE)	sally.rumsey@ouls.ox.ac.uk Tel: 01865 283860
Anne Bowtell	Medical Sciences Project Manager	anne.bowtell@medsci.ox.ac.uk Tel: 01865 228925
Neil Jefferies	DAMS manager	neil.jefferies@sers.ox.ac.uk Tel: 01865 2-80588
Ben O'Steen	Project system architect	Benjamin.OSteen@sers.ox.ac.uk Tel: 01865 283864
To be appointed	Project Analyst	
Donald MacKay	Advocacy for the Medical Sciences Division	Attendance as required
Tijtske Kamphuis	Medical Sciences web designer	Attendance as required
To be appointed	Project software developer	Attendance as required

Training needs

No training needs have been identified

13. Programme Support

There are no specific areas where we foresee the need for additional support beyond what would normally be expected. If any arise we shall contact the Programme Manager.

14. Budget

See Appendix A

Changes from original proposal

Late notification of the success of the bid resulted in the recruitment process being delayed. The anticipated amount not now required for the staff costs will be spent on an external evaluator, additional travel and expenses (particularly for JISC programme activities now they are more clear) and web development. This change in budget will enable the project to undertake more ambitious dissemination and web development activities. Staff costs have been updated with the most recent salary agreements. All directly allocated and indirect costs have been updated.

Detailed Project Planning

15. Workpackages

See Appendix B

16. Evaluation Plan

The evaluation will fit with the development cycles. Four formal evaluation strands will be undertaken, 3 (B, C and D) by an external evaluator (Neil Beagrie of Charles Beagrie Ltd.):

- A. Iterative development (throughout project)
- B. Formative – mid-way (after first iteration c. summer 2009)
- C. Summative – towards end of project (c. January 2010)
- D. Project Management, lessons learnt – towards end of project (c. January 2010)

Each round will result in a report.

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success
A. Throughout as part of iterative development (undertaken by Project Action Group)	1. Meeting the requirements of groups of end users	Do the Rll controlled terms meet the group's requirements	Interviews and close collaboration with end users throughout the process	Compare user needs as identified in requirements to outcome
B. Formative mid-way (after first iteration c. early summer 2009). Self-evaluation with external review and report)	2. Meeting aims and objectives	Has the project progressed adequately towards meeting its aims and objectives as would be expected at this stage?	Review (read & analyse) documentation (inc progress report) and questionnaire for self-evaluation by project staff to provide evidence	Meeting milestones and comparing progress to completed workpackage tasks
	3. First user needs analysis	Has the first user needs analysis been successfully completed?	Review (read & analyse) documentation	Have all relevant stakeholders been questioned and results recorded?
	4. Controlled terms for first iteration	Has a suitable vocabulary (taxonomy and controlled terms) & any mapping to existing taxonomies if relevant been achieved?	Review vocabularies and compare with documented user feedback	Outcome matches or exceeds user requirements

	5. Data harvesting	Is the data being successfully harvested from the first data source?	Focus group (project team)	Relevant data has been harvested completely and without corruption
	6. Method for core iterative process	Has the first implementation been successful?	Compare outcome with initial user needs	Outcome matches or exceeds initial user requirements
	7. Progress so far	Has the work so far been successful?	Project team focus group with report	Provide evidence
C. Summative towards end of project (c. Jan 2010).	8. Aims and objectives	Has the project achieved its aims and objectives?	Compare outputs and outcomes (read & analyse) with aims and objectives	Outputs and outcomes matches or exceed aims and objectives
	9. User satisfaction	Are users satisfied with the project outputs and outcomes?	Review user feedback (focus groups)	80% of user groups indicate satisfaction with the outputs and outcomes
	10. Infrastructure benefits	Are the project outputs and outcomes of benefit to end users and stakeholders?	User questionnaire or interview (asking about benefits eg Multi- and cross-disciplinary information discovery, easier research management, Easier research information discovery, Time saving, increased efficiency)	80% of end users and stakeholders agree that the project outputs and outcomes are of benefit to them
	11. Embedding	Will the outputs of the project continue to be used post-project?	Focus group or questionnaire	80% of users say they will continue to use the service
	12. Institutional innovation	Are there indications of institutional change as a result of this project?	Focus group or questionnaire with senior stakeholders	90% of senior stakeholders indicate that the work should be expanded and continued
D. Additional Summative question (Project Manager)	13. Project management	What lessons have been learnt about the successful execution of a project such as BRII?	Interview with Project Manager and other staff	Lessons learned about project execution have been documented

17. Quality Plan

Output Timing	Quality criteria	QA method(s)	Evidence of compliance	Quality responsibilities	Quality tools (if applicable)
Smooth and successful running of project	Success of project viewed internally and externally	Evaluation process; timely delivery of outputs	Evaluation report; progress reports and project website	Project Manager; Project Board; Project Action Group	
Definition and engagement of stakeholders: data sources identified	Fitness for purpose; clear definition of stakeholder and data groups; demonstration of commitment	Evaluation process	Evaluation report; memorandum of understanding with stakeholder groups and data owners	Project Analyst; Project Board	
Ontologies and taxonomies; API for web services; Blue Pages	Fitness for purpose; pilot status scaleable to production; open standards	Unit and integration testing; user testing; issue ticketing; agile development practices	Feedback from open source communities and users; analysis of user logs; documentation of source code; documentation of development history via Subversion or code repository	DAMS Manager; Project System Architect; Project Developer	Validation tools where appropriate
Embedding and plans for future extension	Clearly written documentation incorporating policies and ongoing project plans	Evaluation process; feedback from users and data owner	Evaluation report; meeting and progress reports	Project Action Group; Project Board	
Dissemination	Well-written dissemination materials, adapted to intended audience	Peer review and feedback	Take up and use of dissemination materials; analysis of user logs	Project Analyst; Project Manager; Project Action Group	

18. Dissemination Plan

Project dissemination will comprise multiple parallel strands:

Timing	Dissemination Activity	Audience	Purpose	Key Message
By month 3	Dissemination watch: record of potential dissemination media	Project team	Managing and monitoring opportunities	Alerting and managing
By month 3	Project website	Any interested parties	Up to date information about BRll and links to related items	Purpose, plans and progress of the project
As opportunities arise	Relevant conferences and other events, and papers, presentation and/or posters submitted as appropriate.	Research, HE, information management, library/repository communities	Sharing project experiences, expertise and outcomes	Achievements and experiences
As opportunities arise	Publications such as articles in appropriate journals.	Research, HE, information management, library/repository communities	Sharing project experiences, expertise and outcomes	Achievements and experiences
As soon as possible after creation	Materials will be open access (in accordance with publishers' policies) via deposit in the University's institutional repository, Oxford University Research Archive (ORA) at http://ora.ouls.ox.ac.uk	Any interested parties	Preservation, visibility and dissemination of project outputs	Achievements and experiences
Throughout the project	Communication with others working in related areas (may include discussion lists, blogs, Twitter and other networks) and sharing technical developments in open source fora (generating comment and further developments). (eg www.oxfordrepo.blogspot.com)	Developers and other interested parties	Sharing project experiences, expertise and outcomes and re-using external developments where possible	Sharing achievements and experiences with the wider community
Throughout the project	Internal dissemination to aid embedding including institutional publications, regular newsletters. Senior staff affected by the work (both during the project and for future activities) will be kept closely informed of progress. Internal events will take place	Academic, administrative and technical staff. Senior University staff and committees.	Keeping relevant parties informed of activities and progress. Alerting others to the project.	Alerting, purpose, plans and progress of the project. Achievements including embedding.
Throughout the project	Liaison, collaboration and sharing of dissemination with EREWHON and BVREH projects	Academic, administrative and technical staff. Senior University staff and committees.	Sharing efforts and ensuring a joined-up approach from the perspective of projects and end-users	Alerting, purpose, plans and progress of the projects. Achievements including embedding.
As necessary	Involvement in JISC programme events	Other JISC projects	Sharing experience and expertise	Sharing knowledge
As necessary	Any other opportunities to disseminate the work that arise during and beyond the project	Dependent on opportunities	Dependent on opportunities	Dependent on opportunities

19a. Exit Plan

Project Outputs & Outcomes	Action for Take-up & Embedding	Action for Exit
BRIL website	Negotiate links to website from other key University web pages and within University documents	Ensure editorial, hosting and maintenance responsibilities
Stakeholder analysis, domain maps and use cases document	Continue to add new information as more groups take-up the RIL. Deposit a copy in ORA	Clear responsibilities for continued editing and additional entries to document. Ongoing preservation and maintenance for ORA
Formal progress reports & final report	Deliver to appropriate individuals. Deposit copies in ORA	Ongoing preservation and maintenance for ORA
User needs analysis to be used by technical developers	Continue to add new information as more groups take-up the RIL. Deposit a copy in ORA	Clear responsibilities for continued editing and additional entries to document. Ongoing preservation and maintenance for ORA
Collection of ontologies and taxonomies	Store at vocab.ox.ac.uk. Continue to add new entries as more groups take-up the RIL.	Clear responsibilities for continued editing and additional entries to document. Ongoing maintenance for vocab.ox.ac.uk
University Blue Pages of research management information	Continue to add new information as more groups take-up the RIL. High level publicity for this resource	Clear responsibilities for continued editing and additional entries to document. Ongoing maintenance for its storage and access points. Plan and execute publicity.
Example use of API e.g. integrating with a themed website like Cancer.	Investigate additional uses of APIs and publicise benefits to other potential users.	Continued work with additional potential users.
Documented details of future extension and continuation of RIL	Continue to edit and update as required. Deposit a copy in ORA	Clear responsibilities for continued editing and additional entries to document. Ongoing preservation and maintenance for ORA
Reports, papers, presentations, etc	Deposit copies in ORA	Ongoing preservation and maintenance for ORA
Internal and external formative and summative evaluation reports	Deposit copies in ORA	Ongoing preservation and maintenance for ORA
Service Usage Models (SUMS)	Contribute to e-Framework	Contribute to e-Framework
Changed internal practice for sharing and re-use of research management data	Continue advocacy campaign and recruiting new contributors and users.	Responsibilities and maintenance for advocacy. Support and maintenance of ongoing service.
Oxford Research Information Infrastructure	Continue to expand and develop including external users	Responsibilities and maintenance for advocacy. Support and maintenance of ongoing service.

19b. Sustainability Plan

Project Outputs	Why Sustainable	Scenarios for Taking Forward	Issues to Address
Ontologies and taxonomies	Where possible we will use existing ontologies and taxonomies. However it will be necessary to develop some new ones. Other institutions may find these useful either as they stand or adapted.	The Oxford created ontologies etc could be further developed and re-used by other HE institutions, bodies such as funding agencies, semantic web groups such as Talis and so on.	Maintaining content and availability
University Blue Pages of research management information	The data contained in the Blue pages will be relevant not only internally but to external groups such as funding agencies and other institutions (eg collaborative work).	Work would need to be carried out with the support of Oxford University and those involved in creating and using similar data at the interested external institutions and groups.	Support, maintenance and responsibilities
Example use of API e.g. integrating with a themed website like Cancer.	APIs produced as part of this project could be used by others creating a similar infrastructure. We would welcome use by others.	Software developed as part of the project will be made freely available via GoogleCode or available on CMS website under GPL.	Compliance with standards and quality assurance
Oxford Research Information Infrastructure	The infrastructure is of strategic importance for Oxford University. The architecture may be of interest to other institutions to create a similar infrastructure.	Continued work within Oxford such as collaboration with BVREH project (and its successors) and advocacy work at all levels. There are no confirmed external partners as yet. Future JISC projects will increase the likelihood of additional partners. Dissemination of the BRIL project may generate interest in other institutions and we would encourage any collaborative work to further this infrastructure.	Support, maintenance and responsibilities. Wide dissemination of the project.

Appendix A: BRll Budget

Directly Incurred Staff	Apr 08 - Mar 09	Apr 09 – Mar 10	TOTAL £
Project Analyst (Grade 7, 1.0 FTE)			
Development Post (Grade 7, 1.0 FTE)			
Total Directly Incurred Staff (A)			
Non-Staff			
Travel and expenses	£3,090	£5,750	£8,840
Consultancy (Katie Portwin)			
Web systems integration	£4,863	£12,935	£17,798
Dissemination	£773	£2,326	£3,099
Evaluation (Charles Beagrie Ltd)	0		
Total Directly Incurred Non-Staff (B)	£12,589	£32,675	£45,264
Directly Incurred Total (A+B=C) (C)			
	£31,153	£109,571	£140,724
Directly Allocated			
Sally Rumsey (Principal Investigator, 0.2 FTE)			
Paul Jeffreys (Project Champion – 4 days)			
Richard Ovenden (Project Champion – 4 days)			
Anne Bowtell (MSD Manager, 0.1 FTE)			
Neil Jefferies (DAMS Manager, 0.05 FTE)			
Ben O'Steen (System Architect, 0.1 FTE)			
Tjitske Kamphuis (Web Designer, 0.1 FTE)			
Estates			
Directly Allocated Total (D)	£18,097	£42,965	£61,062
Indirect Costs (E)			
	£35,494	£126,152	£161,646
Total Project Cost (C+D+E)			
	£86,762	£278,688	£365,450
Amount Requested from JISC	£49,250	£152,536	£201,786
Institutional Contributions	£37,512	£126,152	£163,664
Percentage Contributions over the life of the project			
	JISC 55 %	Oxford 45 %	Total 100%

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Appendix B: BRII WORK PACKAGES

WORKPACKAGES	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
		O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
		Year 1 (Oct 08 - Mar 09)						Year 2 (Apr 2009 - Mar 2010)											
1: Project management																			
2: Stakeholder analysis																			
3: Core iterative process																			
4: Embedding & sustainability																			
5: Dissemination, quality and evaluation																			

Project start date: 13th October 2008

Project completion date: end March 2010

Duration: 17.5 months

Members of Project Team:

- SR Sally Rumsey
- AB Anne Bowtell
- DM Donald MacKay
- TK Tjitske Kamphuis
- NJ Neil Jefferies
- BO Ben O'Steen
- [PA] Project Analyst (to be appointed)
- [SD] Project software developer (to be appointed)

Project Champions

- PJ Paul Jeffreys
- RO Richard Ovenden

				Milestone	Responsibility
WORKPACKAGE 1: Project management	Month 1	Month 18			
<u>Objective:</u> To manage the project in such a way to ensure its smooth and successful running					
1. Project start-up	Month 1	Month 1	University fund code and other administrative procedures in place		SR
2. Write and submit Project Plan	Month 1	Month 2	Project plan	X	SR
3. Appointment of staff		Month 3	Staff in post		NJ (tech) SR (analyst)
4. BRII website creation and maintenance	Month 2	Month 18 (and beyond)	BRII website	X	AB & TK (creation) PA (maintenance)
5. Appointment of Project Board, Terms of Reference and meeting schedule	Month 1	Month 18	TOR, Minutes and instructions to Project Action Group		PJ
6. Set up meeting schedule for Project Action Group and meet regularly	Month 1	Month 18	Notes of meetings and documentation of actions		SR
7. Managing project budget	Month 1	Month 18	Budget plan (as part of Project Plan)	X	SR
8. JISC website creation and maintenance	Month 1	Month 1 (and beyond)	JISC BRII website - details sent to JISC	X	SR (JISC)
9. Contributions to e-framework (2 days)	Month 12	Month 17	Domain maps and use cases for each of the data provider/user groups		SR
10. Progress report 1 for JISC	Month 6	Month 7	Progress report 1		SR
11. Progress report 2 for JISC	Month 12	Month 13	Progress report 2		SR
12. Final report (draft plus final version)	Month 17	Month 18	Final report		SR

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<p>WORKPACKAGE 2: Stakeholder analysis</p> <p><u>Objective:</u></p> <p>Identify relevant stakeholders and document the applicability and impact of the project on their work. Identify and negotiate use of data sources.</p> <p><i>Project objectives 1 & 2</i></p> <ul style="list-style-type: none"> <i>Negotiate stakeholder input, collaboration and buy-in from a small number of internal data providers/creators, a selection of end-users and management and other stakeholders</i> <i>Identify data sources and content for inclusion and re-use within the research information infrastructure</i> 	Month 3	Month 7 (and beyond)			
13. Compile details of stakeholders and document the applicability and impact of the project on their work	Month 3	Month 7 (and beyond)	Stakeholder analysis, domain maps and use cases document	X	PA (and/or SR/AB)
14. Identify groups who will commit to actively collaborating with the project by supplying and sharing data and providing feedback	Month 3	Month 7 (and beyond)	List of participating groups	X	PA
15. Identify individuals and groups who will commit to actively taking part in the project by testing re-use of data (may be identical to 9 above)	Month 3	Month 7 (and beyond)	List of participating groups		PA
16. Compile details of data sources to be included in the project	Month 3	Month 7 (and beyond)	Documented details of data sources to be included in the project		PA

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Contact: Sally Rumsey sally.rumsey@ouls.ox.ac.uk

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<p>WORKPACKAGE 3: Core iterative process</p> <p><u>Objective:</u> <i>Working one group at a time, identify user needs, collect research management data and create ontologies and taxonomies suitable for that group. Create web-based services to enable dissemination of the data and include the data in the emerging Blue Pages.</i> <i>Project objectives 3, 4 & 5</i></p> <ol style="list-style-type: none"> 3. Provide RDF ontologies and taxonomies to define and categorise research data 4. Provide a selection of web-based services to disseminate the research data 5. Create a University <i>Blue Pages</i> as an example of a web-based application that re-uses the data 	Month 4	Month 16	<i>DEPENDENT ON 14</i>		
17. Investigate the user requirements of data source providers and end-users	Month 4	Month 16	User needs analysis which can be used by technical developers		PA/
18. Audit data and data processes for contributing groups	Month 4	Month 16	Documented data and processes audit		PA and SD
19. Harvest research management data	Month 4	Month 16	Store of data		BO
20. Create ontologies and taxonomies using existing schemes if appropriate	Month 4	Month 16	Collection of ontologies and taxonomies stored at vocab.ox.ac.uk		AB/BO/TK
21. Create web-based services	Month 4	Month 16	Web-based services		NJ/BO
22. <i>Blue Pages</i> technical infrastructure	Month 4	Month 16	Infrastructure		NJ/AB
23. Include data in emerging <i>Blue Pages</i>	Month 4	Month 16	University <i>Blue Pages</i> of research management information	X	AB/BO

WORKPACKAGE 4: Embedding & sustainability	Month 12	Month 17			
<u>Objective:</u> To identify future participants and obtain support for the continuation and expansion of the RII <i>Project objective 6: Demonstrate embedding and future sustainability by data providers/creators, end users and key stakeholders</i>					
24. Compile documentation providing evidence of the benefits of the RII to project participants (interviews etc) and other stakeholders	Month 12	Month 17	Documented evidence of the benefits of the RII to project participants and other stakeholders		PA
25. Identify additional interested groups who would wish to be included in future iterations	Month 14	Month 17	Documented details of interested groups		SR/PA
26. Discuss extension and continuation of RII with senior management and other stakeholders. To include support (financial, hardware etc), maintenance and staffing.	Month 15	Month 17	Documented details of future extension and continuation of RII	X	SR/PA
WORKPACKAGE 5: Dissemination, quality and evaluation	Month 1	Month 18			
<u>Objective:</u> <i>To disseminate the project widely, to assess the quality of project outputs, and to undertake evaluation of the project</i>					
27. Wide dissemination of the project work both internally and externally as detailed in the project dissemination plan	Month 1	Month 18 (and beyond)	Reports, papers, presentations, etc		All
28. To assess and document the match between outputs and original quality criteria	Month 12	Month 17	Documented quality outcome		NJ
29. Write Service Usage Models (SUMS) and contribute to e-Framework	Month 17	Month 18	Service Usage Models (SUMS) contributed to e-Framework		NJ
30. Undertake formative and summative evaluation activities as detailed in the evaluation plan	Month 8	Month 17	Internal and external formative and summative evaluation reports	X	SR