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|---|---|
| **Cover Sheet for Proposals**<br>*(All sections must be completed)* | **JISC** *Rapid Innovation*<br>**Programme** |

| | |
|---|---|
| **Name of JISC Initiative:**<br>**JISC Rapid Innovation**<br>**Grants** | |

| | |
|---|---|
| **Name of Lead Institution:** | Leeds Metropolitan University |
| **Name of Proposed Project:** | Bibliosight |
| **Name(s) of Project Partner(s):** | **Intrallect** |

**Full Contact Details for Primary Contact:**

**Name: Wendy Luker**

**Position: Service Manager, Academic Support and E-Services**

**Email: w.luker@leedsmet.ac.uk**

**Tel: 0113 8123613**

**Fax:**

**Address: The Headingley Library, James Graham Building, Leeds Metropolitan University, Headingley Campus, LEEDS LS6**

| | | | |
|---|---|---|---|
| **Length of Project:** | **6 months** | | |
| **Project Start Date:** | 1st June 2009 | **Project End Date:** | 30th November 2009 |

| | |
|---|---|
| **Total Funding Requested from JISC:** | £17,500 |

**Funding Broken Down over Academic Years (Aug-July):**

| **Aug08 – July09** | **Aug09 – July10** |
|---|---|
| £6000 | £11,500 |

| | |
|---|---|
| **Total Institutional Contributions:** | £14,276.42 |

**Outline Project Description:**

**The project will aim to exploit the Web of Science Web Services API that uses standard transport protocols, such as HTTP, and message formats, such as SOAP and XML, to facilitate the exchange of data between Web of Knowledge and a custom application. It will build on work undertaken by the JISC funded**

**SUE project, Implementing an Institutional Repository for Leeds Metropolitan University to integrate bibliographic information from Web of Science into the Leeds Met Open Access repository of research; this will facilitate automatic update when a published article appears in Web of Science.  The aim is to integrate the technology into an efficient workflow to populate the repository with citation information / full text; we will also build on work undertaken by the JISC funded PERSoNA project and aim to develop a 'widget' that can easily be added to a personal environment like iGoogle or personal/communal environment like netvibes and that will extract bibliographic information - and potentially also bibliometrics - for authenticated Leeds Met staff in line with Web of Science licensing.**

**List of priority areas, highlight each that applies:**
Mashups of open data
Aggregating tags and feeds
Semantic web/ linked data
Data search
Visualising Data
Personalisation
Mobile Technologies
Lightweight Shared Infrastructure Service
User Interface Design

| | | |
|---|---|---|
| **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 Funding Grant 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, or if we are successful in our bid for funding and our project proposal is made available on JISC's website.

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 |
|---|---|---|
| | | |
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| | | |
| | | |

Please see http://www.ico.gov.uk for further information on the Freedom of Information Act and the exemptions to disclosure it contains

# 1 Appropriateness and Fit to Programme Objectives and Overall Value to the JISC Community

## 1.1 Background; Populating Open Access repositories of research

One of the outputs of the recently completed JISC funded repository start-up project, *Implementing an Institutional Repository for Leeds Metropolitan University*[1] was the implementation of an Open Access repository of research that is also being used as a citation database of institutional research output. This project enjoys the support of several groups of stakeholders including the University Research Sub-Committee; The University Research Office (URO) and the wider faculty research community. Recent discussions with these stakeholders have emphasised the importance of ready access to bibliographic information and/or citation metrics. Web of Science (WoS) allows users to search several citation indices, including one for conference proceedings and requires an institutional login, via Athens for example. WoS represents a sophisticated tool that requires time and training to learn how to use properly; while it necessarily falls within the remit of research administrators or research oriented librarians, research staff themselves who require quick access to bibliographic information/citation data for their own publications are less likely to possess the skills or have the time to fully exploit the resource.

In addition, the problems associated with populating Open Access repositories of research with appropriate full text versions of published research articles are well documented[2]; it was in recognition of these problems that we chose to adopt a fully mediated approach to deposit and to include citation data with a view to procuring full text wherever possible. Efficient workflows are still evolving and we have been exploring ways for an individual researcher or their faculty to provide information to the repository team / University Research Office at the point of publication / acceptance for publication. As a minimum this might be full Harvard reference / abstract but ideally would also include an author produced version of the full text. A problem with this approach is the potential for individual publications to 'slip through the net'. The following potential use cases have emerged:

- The repository team/URO are automatically notified when bibliographic information about an article associated with Leeds Met is available in Web of Science. Such a facility can be incorporated into the workflow to ensure citation data is up to date in the repository.

- Researchers have expressed the wish for targeted communications regarding their outputs which would encourage them to deposit an appropriate author produced version of a recently published / cited article. A link to Web of Science could therefore produce an automated communication which would alert them to the presence of their citation on Web of Science, and request an author version for the repository. This would be much more useful to them than a regular, generic reminder to deposit their publications, and the timeliness of it would make deposit a more likely outcome. It would have the potential to contribute to advocacy of the repository service by providing evidence of the putative link between Open Access and increased citation rate.

- The Research Excellence Framework (REF) that will replace the Research Assessment Exercise (RAE) in 2010 is yet to be finalised; it is likely to make greater use of quantitative measures of assessment, such as bibliometrics. The need exists, therefore, to implement technologies that facilitate the extraction and collation of relevant data for use by institutions, individual academics and HEFCE. It is also important to develop use-cases that inform the evolving process of the REF. The project proposed has the potential to provide proof of concept re citation linking; this is a developing field where there are potential licensing issues associated with Web of Science, a commercial product.

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[1] Final report submitted March 2009
[2] See *Implementing an Institutional Repository for Leeds Metropolitan University* final report (2009)

### 1.2    Extraction of bibliographic information using the Web of Science API

The Web of Science Web Services API uses standard transport protocols, such as HTTP, and message formats, such as SOAP and XML, to facilitate the exchange of data between Web of Knowledge and a custom application.  Using the API, therefore, it should be possible to formulate a query or queries to extract bibliographic information either directly into intraLibrary itself, or a separate database, and process the resulting data in order to automatically notify repository staff / research administrators when new research associated with Leeds Met has appeared in Web of Science.  Potentially the technology could also be implemented to provide academic authors with citation information on their published articles.

During the JISC funded PERSoNA[3] project, rather than building a monolithic web-service and expecting people to modify the way they work around it, an important ethos that developed was the importance of developing a flexible infrastructure to fit in with existing workflows.  The project has contributed to a potential repository infrastructure that is modular and adaptable; central to this vision are 'widgets' - portable chunks of code that can be installed and executed within a HTML-based web page; they enable applications to be developed that are portable and can be redeployed in a variety of environments and individually manipulated to personalise one's own work space and work flow.  The current project will develop a 'widget' to extract bibliographic data and explore the feasibility of direct linkage to bibliometrics for authenticated Leeds Met staff in line with Web of Science licensing and that can easily be added to a personal information environment like iGoogle or netvibes.

### 1.3    Value to the community

The value of this project to wider community will be as an exemplar of the ways in which data from Web of Science can be exploited within the Repository – this may be specific to intralibrary, but is actually more likely to be widely applicable to other platforms.  The workflows and resulting practice will certainly be widely applicable.  A distinct widget utilising Web of Science API will be available to the community on an open source basis.  There will be a number of use cases for the community around populating repositories with both citation information and full text, and also use cases to inform the Research Excellence Framework, which will be of value across the community, including the feasibility of collecting bibliometrics using the WoS API.

## 2    Quality of Proposal and Robustness of Workplan

### 2.1    Project plan

The project methodology will be based on an iterative cycle of specification / development / acceptance, which will run in roughly monthly patterns, allowing a month at either end of the project for start up activities and reporting on deliverables and proofs of concept achieved.  This will allow for a minimum four complete cycles of development, testing and acceptance.  Details of workpackages are given below.

| Workpackage | Start and finish dates | Outputs / Milestones | Responsibility |
|---|---|---|---|
| **Workpackage 1: Technical development** | | | |
| Full technical review of Web of Science Web Services API / technical developments required to appropriately integrate API into repository | June-July 2009 | Technical specs of API/implications for deliverables/Document technical developments required | Nick Sheppard, Mike Taylor, Intrallect |
| Integrate Web of Science Web Services API into repository | June-August 2009 | API integrated with repository | Mike Taylor, Intrallect |
| Technical developments required to develop widget based on API | August-September 2009 | Document technical developments required | Nick Sheppard, Mike Taylor |
| Develop widget based on the API | August- | Functioning widget | Mike Taylor |

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[3] See PERSoNA final report (2009)

| | September 2009 | | |
|---|---|---|---|
| **Workpackage 2: User testing / engagement** | | | |
| Liaise with Research Sub-Committee/URO/identify user requirements/use case scenarios | June-November 2009 | User requirements fully documented throughout /Use case specification | Project team URO |
| **Workpackage 3: Workflow / process development** | | | |
| Test and document appropriate workflow, using use case scenarios developed under workpackage 2 | August-October 2009 | Documented workflows | Project team URO |
| Assess impact for research community; outline potential training issues, to support staff development | August-October 2009 | Documented training issues | Project team URO |
| **Workpackage 4: Evaluation** | | | |
| Interim evaluation | September 2009 | Evaluation report | Nick Sheppard |
| Final evaluation | November 2009 | Evaluation report | Nick Sheppard |
| **Workpackage 6: Dissemination activity** | | | |
| JISC programme events | JISC schedule | Participation | Project team |
| Project website and blog, Presentations / Use cases | June-November 2009 | Blog/presentations to institutional and wider community | Nick Sheppard |

### 2.2 Project deliverables and success criteria

The project will deliver appropriate integration of the Web of Science API to the Leeds Met repository and develop use cases for the community around populating repositories with citation/full text from a citation database.  It will develop use cases to inform the REF including the feasibility of collecting comprehensive bibliometrics.  Stand alone software to include a widget using the Web of Science API.

### 2.3 IPR

The project team will ensure tools and systems used in the project are used with the agreement of their creators and third parties whose permission are required for their use in this context.  Outputs will be made available to the community for re-use, for software an OSI approved licence will be used and we will consult with OSS watch to identify an appropriate licence model.

### 2.4 Risk register

| Risk | Probability | Impact | Action to Prevent/Manage Risk |
|---|---|---|---|
| API unsuitable for project deliverables | Low | High | Feedback from Thomas Reuters indicates proposal technically feasible |
| Permission to include WoS citation metrics within repository not granted | Medium | Medium | Feedback indicates permission for bibliographic data free and 'times cited' will require no extra charge. |
| Failure to retain key project staff during the lifetime of the project | Low | High | Proposed project team all in post and can give the proscribed time to project |
| Lack of support of key stakeholders | Low | High | Stakeholder engagement already well established; need for metrics driven by URO / Research Sub-Committee |
| Unable to work with intended user groups | Medium | Medium | Established engagement of research community and recognition of value of citation metrics |

### 2.5 Engagement with the community

The project is driven by the needs of the local research community and a group of stakeholders from the Carnegie Research Institute will convene on a monthly basis in line with SCRUM methodology. As well as attending relevant JISC programme meetings and regular blog posts the project will liaise with OSS Watch to ensure that software developed is in accordance with appropriate guidelines; we recognise the importance of engaging in 'open development' by addressing IPR management, community engagement, project governance and exploitation options and have established preliminary contact with OSS Watch project support. We have also sought advice from IE-demonstrator project who have advised us would like to capture and share both the eventual output of our project as well as interim outputs in the form of deployed prototypes / screen shots / paper prototypes / documentation relating to the development process and roadmaps for future development. We will also commit to contributing to the developing wiki for the ie-demonstrator project and we anticipate that this will be the most appropriate mechanism to ensure source code/project history are made available and preserved from the very beginning of the project.

### 2.6 Project management arrangements

The project will be managed by Wendy Luker, who is well positioned to ensure the engagement of the research community in the project. Project consultant will be Arthur Sargeant, who heads up the Technologies for Learning Team in Libraries and Learning Innovation. The project will be run with the support of Intrallect as Project Partners, and Peter Douglas will represent the company on the project and will be run on the basis of monthly meetings of a consultancy group of key stakeholders according either to the SCRUM or a similar methodology.

# 3 Budget

The budget costings are based on the following parameters:

- Peter Douglas attending each of the 6 project team meetings, at a 40% discount on normal Intrallect day rares, plus expenses
- The project meetings will include two senior researchers plus an administrator from the University Research Office; their time is costed for six 3 hour meetings

| Directly Incurred Staff | August 08– July 09 | August 09– July 10 | TOTAL £ |
|---|---|---|---|
| Project Manager Wendy Luker 0.1 FTE Grade 8 | £1084.07 | £2168.14 | £3252.21 |
| Project Developer Mike Taylor O.4 FTE Grade 6 | £1908.67 | £3817.35 | £5726.02 |
| Repository Development Officer, Nick Sheppard O.2 FTE Grade 4 | £959.23 | £1918.46 | £2877.70 |
| Project Consultant, Peter Douglas (Intrallect), commercial partner (day rate) | £1200 | £2400 | £3600 |
| **Total Directly Incurred Staff (A)** | **£5151.97** | **£10303.95** | **£15455.93** |
|  |  |  |  |
| **Non-Staff** | **August 08– July 09** | **August 09– July 10** | **TOTAL £** |
| Travel and expenses | £400 | £700 | £1100 |
| Dissemination | £ | £200 | £200 |
| Evaluation | £ | £150 | £150 |
| **Total Directly Incurred Non-Staff (B)** | **£400** | **£1050** | **£1450** |

| | | | |
|---|---|---|---|
| | | | |
| **Directly Incurred Total (C)**<br>**(A+B=C)** | **£5551.97** | **£11353.95** | **£16,905.93** |
| | | | |
| **Directly Allocated** | **August 08– July 09** | **August 09– July 10** | **TOTAL £** |
| Staff<br>Project group meetings costs | £408 | £816 | £1224 |
| Estates | £514.85 | £1029.70 | £1544.55 |
| Other | £ | £ | £ |
| **Directly Allocated Total (D)** | **£922.85** | **£1845.70** | **£2,768.55** |
| | | | |
| **Indirect Costs (E)** | **£4033.98** | **£8067.97** | **£12101.95** |
| | | | |
| **Total Project Cost (C+D+E)** | **£10,508.80** | **£21,267.62** | **£31,776.43** |
| **Amount Requested from JISC** | **£6000** | **£11,500** | **£17,500** |
| **Institutional Contributions** | **£4,508.8** | **£9,767.62** | **£14,276.42** |
| | | | |
| **Percentage Contributions over the life of the project** | **JISC**<br>**55%** | **Partners**<br>**45%** | **Total**<br>**100%** |
| | | | |
| **No. FTEs used to calculate indirect and estates charges, and staff included** | **No FTEs**<br>**0.7** | **Which Staff: Wendy Luker, Nick Sheppard Mike Taylor** | |

# 4  Previous Experience of the Project Team

**Project Director:** Wendy Luker is Service Manager for Academic Support and E-Services within Libraries and Learning Innovation at Leeds Metropolitan University.  In her career in academic libraries she has led a number of large scale projects.  She has been project managed two previous JISC funded projects: An Institutional Repository for Leeds Metropolitan University and PERSoNA.

**Web Developer:** Mike Taylor is Senior Web Developer within Libraries and Learning Innovation at Leeds Metropolitan University.  He has experience in developing web applications using a range of techonologies including PHP, ASP and ASP.NET on the server-side and JavaScript (including AJAX, JSON and the popular jQuery Library) on the client-size. He has in-depth knowledge of markup languages such as HTML, XHTML and XML (with some experience using XSLT) and of Cascading StyleSheets (CSS)

**Repository Development Officer:** Nick Sheppard is currently the Repository Development Officer and has a wide range of expertise in repository development comprising a sound technical knowledge base, he has a proven track record in appropriate communication to raise awareness and effect cultural change around repository use.

**Peter Douglas** is Director of Operations at Intrallect and has direct responsibility for implementing large-scale projects involving repositories.  Peter is a co-founder of Intrallect and has been involved with a number of JISC projects. He was the technical advisor for the JISC-funded project X4L Healthier Nation, created the X4L Staff Development Resources Website and was a partner in JISC CD-LOR.

Appendix A:

Letters of support from:      Sally Brown, Pro Vice Chancellor for ALT
                               Peter Doglas, Intrallect

JISC
Northavon House
Coldharbour Lane
BRISTOL
BS16 1QD

20 April 2009

Dear Sirs

**JISC Circular 03/09, Rapid Innovation Grants: BiblioSight Project**

As you know, a considerable number of Leeds Met staff are active in communities fostered by JISC. In addition, the University has successfully completed several JISC-funded projects and is currently involved in others. Amongst the successful projects are *Implementing an Institutional Repository for Leeds Metropolitan University* and *PERSoNA*.

The BiblioSight project is a natural, well-considered extension of both these projects. It would enable researchers across disciplines to be better informed about the citation data relating to their publications. It would promote the addition of full-text content to the repository. The widget which would be created is likely to be of use to many higher education institutions, not just Leeds Met, in supporting work towards the Research Excellence Framework.

The BiblioSight team is strong, well-established and able to start work immediately. It is led by Wendy Luker, our Service Manager for Academic Support and E-Services, who has extensive previous experience with JISC, having managed the two projects mentioned above, and contributed to others. It is also worth noting that the project team continues the partnership between the University and Intrallect, the company which developed Intralibrary, the software used by our institutional repository and JISC-funded JorumOpen.

This bid has the University's full support. The budget makes clear that Leeds Met is making a significant institutional contribution. I am confident that, if BiblioSight is funded, we will carry out the proposed activities conscientiously and effectively, delivering the declared outcomes and ensuring, where appropriate, that they are fully embedded in our future developments.

I look forward to hearing the result of this application in due course.

Yours faithfully

Professor Sally Brown
Provost and Pro-Vice-Chancellor (Assessment, Learning and Teaching)
Leeds Metropolitan University

To the JISC Executive

21 April 2009

**JISC Grant Funding Call 03/09: Rapid Innovation Grants: BiblioSight**

Intrallect is very pleased to be able to participate in the BiblioSight project. We believe that Intrallect has very relevant expertise for this project and we can help bring it to a successful conclusion through our independent and professional levels of work.

Intrallect is committed to always using open international standards and is happy to commit to making outputs from this project available as open source.

As a measure of our commitment to this work Intrallect has discounted our normal day rates by 40%.

Yours faithfully

Peter Douglas
Director of Operations