



## Project Document Cover Sheet

Project Information			
<b>Project Acronym</b>	PIRUS2		
<b>Project Title</b>	Publisher and Institutional Repository Statistics 2		
<b>Start Date</b>	1st October 2009	<b>End Date</b>	31 <sup>st</sup> December 2009
<b>Lead Institution</b>	Mimas		
<b>Project Director</b>	Keith Cole, Mimas		
<b>Project Manager &amp; contact details</b>	Paul Needham, <a href="mailto:paul.needham11@btinternet.com">paul.needham11@btinternet.com</a>		
<b>Partner Institutions</b>	Mimas, COUNTER, Cranfield University, Oxford University Press and CrossRef		
<b>Project Web URL</b>	<a href="http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/">http://www.cranfieldlibrary.cranfield.ac.uk/pirus2/</a>		
<b>Programme Name (and number)</b>	<i>JISC Capital Programme</i>		
<b>Programme Manager</b>	Ben Wynne		

Document Name			
<b>Document Title</b>	Project Plan		
<b>Reporting Period</b>			
<b>Author(s) &amp; project role</b>	Paul Needham (Project Manager; WP2 & 4 leader), Peter Shepherd (WP3, 5 & 6 leader)		
<b>Date</b>	04 Feb 2010	<b>Filename</b>	PIRUS2ProjectPlanV1.3
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Document History		
Version	Date	Comments
1.0	12 Nov 2009	First draft for Project Management Board discussion
1.1	19 Nov 2009	Accepted version
1.2	29 Jan 2010	Updated version, incorporating additions to the Steering Committee
1.3	04 Feb 2010	Updated version, incorporating additions to the Steering Committee



## JISC Project Plan

### Overview of Project

#### 1 Background

1.1 The PIRUS project, funded by JISC, demonstrated that it is *technically* feasible to create, record and consolidate usage statistics for individual articles using data from repositories and publishers, despite the diversity of organizational and technical environments in which they operate. If this is to be translated into a new, implementable COUNTER standard and protocol, further research and development will be required, specifically in the following areas:

- Technical: further tests, with a wider range of repositories and a larger volume of data, will be required to ensure that the proposed protocols and tracker codes are scalable/extensible and work in the major repository environments.
- Organizational: the nature and mission of the central clearing house/houses proposed by PIRUS has to be developed, and candidate organizations identified and tested
- Economic: assess the costs for repositories and publishers of generating the required usage reports, as well as the costs of any central clearing house/houses; investigate how these costs could be allocated between stakeholders
- Political: the broad support of all the major stakeholder groups (repositories, publishers, authors) will be required. Subject repositories, such as PubMed Central, which have not been active participants at this stage in the project, will have to be brought on board. Intellectual property, privacy and financial issues will have to be addressed

1.2 The objective of PIRUS2 is to address these issues and by doing so specify standards, protocols, an infrastructure and an economic model for the recording, reporting and consolidation of online usage of individual articles hosted by repositories, publishers and other entities.

1.3 Until now the most granular level at which COUNTER requires reporting of usage is at the individual journal level. Demand for usage statistics at the individual article level from users has hitherto been low. This, combined with the unwieldiness of usage reports in an Excel environment, has meant that COUNTER has, until now, given a low priority to usage reports at the individual article level. A number of recent developments have, however, meant that it would now be appropriate to give a higher priority to developing a COUNTER standard for the recording, reporting and consolidation of usage statistics at the individual article level. Most important among these developments are:

- Growth in the number of journal articles hosted by institutional and other repositories, for which no widely accepted standards for usage statistics have been developed
- A Usage Statistics Review, sponsored by JISC under its Digital Repositories programme 2007-8, which, following a workshop in Berlin in July 2008, proposed an approach to providing item-level usage statistics for electronic documents held in digital repositories
- Emergence of online usage as an alternative, accepted measure of article and journal value and usage-based metrics being considered as a tool to be used in the UK Research Excellence Framework and elsewhere.
- Authors and funding agencies are increasingly interested in a reliable, global overview of usage of individual articles
- Implementation by COUNTER of XML-based usage reports makes more granular reporting of usage a practical proposition

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Contact: Paul A S Needham, [paul.needham11@btinternet.com](mailto:paul.needham11@btinternet.com)

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- Implementation by COUNTER of the SUSHI (3) protocol facilitates the automated consolidation of large volumes of usage data from different sources.
  - It should be noted that the outputs of PIRUS (the XML schema for the individual article usage reports, the tracker code and the associated protocols) are already being implemented by publishers and repositories (e.g. PLoS and SURF). It is important that these are fully tested and, if necessary, refined, before they are too widely adopted.
- 1.4 The PIRUS2 Project builds on the work undertaken by the JISC-funded PIRUS project, the JISC Usage Statistics Review and the Knowledge Exchange Institutional Repositories Workshop Strand on Usage Statistics.
- 1.5 The JISC Usage Statistics Review<sup>1</sup> “*aimed at formulating a fundamental scheme for repository log files and at proposing a standard for their aggregation to provide meaningful and comparable item-level usage statistics for electronic documents*”. The Review suggested that “*usage events should be exchanged in the form of OpenURL Context Objects using OAI*” and “*policies on statistics should be formulated for the repository community as well as the publishing community*”, and also noted that “*as an aggregator and an initiator of further development in Great Britain JISC is probably the most suitable actor*”.
- 1.6 The JISC Usage Statistics Portal. A prototype for this portal is currently being designed and it would be strategically beneficial if the prototype could take into account the results of PIRUS2 and have a capability to handle individual article usage statistics.
- 1.7 The Knowledge Exchange Institutional Repositories Workshop Strand on Usage Statistics<sup>2</sup> detailed steps needed to “*produce statistics that can be collected and compared transparently on a global scale*”. The Workshop made a number of recommendations for action, including: the need for an “*event-based web-log based format for sharing ‘usage events’ to deliver many profiles*” (OpenURL Context Objects). They also made a number of suggestions relating to COUNTER: add article level stats, investigate complex objects, set up COUNTER-IR to shadow the publisher group, and investigate aggregating COUNTER stats at consortium level.
- 1.8 The aim of the JISC PIRUS<sup>3</sup> Project was to develop and extend COUNTER-compliant standards and usage reports beyond the journal level to the individual article level. PIRUS devised a range of Scenarios for the creation, recording and consolidation of individual article usage statistics that would cover the majority of current repository installations. In keeping with the recommendations of the projects mentioned above, a key component in all the Scenarios was the generation of OpenURL Context Objects for the exchange of usage events (not for link resolving).
- 1.9 Prototype software was created and tested against DSpace and Eprints repositories which sent usage data as OpenURL Context Objects:
- **either** to an external party (who would be responsible for creating and consolidating the usage statistics and for forwarding them to the relevant publisher for consolidation)
  - **or** to the local repository server where usage data could be exposed via OAI-PMH or alternatively processed to produce reports locally, which could be exposed via SUSHI.
  - As an example, PIRUS developed a proof-of-concept COUNTER-compliant XML prototype for an individual article usage report (Article Report 1: Number of successful full-text article downloads), which could be used by repositories, publishers and other stakeholders.
- 1.10 Also, criteria were specified for a central facility (statistics aggregator) that could create the usage statistics where required (for some organizations) and collect and consolidate the usage statistics for others.

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<sup>1</sup> <http://www.jisc.ac.uk/whatwedo/programmes/digitalrepositories2007/usagestatisticsreview.aspx>

<sup>2</sup> <http://www.driver-repository.be/media/docs/KEIRstrandreportUsageStatisticsFINALFeb07.pdf>

<sup>3</sup> Further information on PIRUS may be found in the Final Report, published in February 2009

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1.11 Further research and development – technical, organizational, economic, and political - is now required to transform the prototype outputs and standards specified by PIRUS into implementable, widely accepted processes for journal articles.

1.12 Looking beyond journal articles, the rules for filtering of 'raw' usage data can be applied to logs and log entries, irrespective of the resource type(s) and repository software applications under consideration, to create COUNTER compliant usage data. It is, therefore, pertinent to ask: What can be done with these data? What should be done with these data? To answer these questions, further research is required to develop implementable, widely accepted usage statistics processes and services for all resource types.

## 2. Aims and Objectives

2.1 The aim of the PIRUS2 Project is to enhance the UK Information Environment by enabling publishers, repositories and other organizations to generate and share authoritative, trustworthy usage statistics for the individual articles and other items that they host.

2.2 In order to achieve this overall aim, the project will seek to meet the following main objectives:

- Develop a suite of free, open source programmes to support the generation and sharing of COUNTER compliant usage data and statistics that can be extended to cover any and all individual items in IRs and SRs.
- Develop a prototype article level Publisher/IR statistics service comprising a technical demonstrator and a set of business model recommendations
- Define a core set of standard useful statistical reports that repositories could/should produce for internal and external consumption

## 3. Overall Approach

3.1 The overall methodology will be similar to that which has been used, successfully, in previous JISC sponsored projects, including the original PIRUS project and the EThOSnet project. The work will be divided into six workpackages, each led by one partner institution. The primary partners, including workpackage leaders will form a Project Management Board that will work in close collaboration with the Project Manager (see Project Management). Additionally, there will be significant horizontal, cross-workpackage activity to ensure compatibility and consistency across a number of issues, including technical platforms and business requirements. It will be the role of the Project Manager to put both formal and informal mechanisms in place to ensure the integration of all the different strands of the project and the implementation of coherent solutions to project-wide issues.

3.2 Although the PIRUS2 project is UK-based, its work is international in scope - and builds upon international standards and policies. In order to ensure the development of acceptable and viable technical and business models, the project will need to undertake the following activities:

- Developing and implementing an advocacy and dissemination campaign to ensure that the proposed service receives a sufficient level of buy-in from stakeholders so that it can be financially viable in accordance with the business model developed by the PIRUS2 project;
- Developing a robust and scalable technical infrastructure in readiness for a successful move from demonstrator to 'live' service;
- Ensuring a distinction is made between the PIRUS2 project and the service under development, and how they relate to each other;
- Monitoring and testing, as appropriate, relevant technology trends with a view to improving the technical sustainability of the service being developed and facilitating its interaction with repositories, publishers and statistics aggregators – also taking into account the work being carried out in related areas;
- Making appropriate links with other projects and initiatives in the UK and in a wider, international context (e.g. OA-Statistics) where there is potential for synergy and sharing of experience and good practice;
- Ensuring that an appropriate governance structure is put in place for the proposed service

- Agreeing a set of metrics for the proposed service, and ensuring that the system is capable of providing them.

3.3 The critical success factors for a successful implementation of the PIRUS2 project are:

- Close cooperation between COUNTER, CrossRef, publishers, repository software developers, NISO and other interested parties in the UK, Europe and beyond.
- buy-in from a variety of stakeholder groups, in particular repository managers, publishers and potential statistics aggregators
- usability, interoperability and scalability of the demonstrator aggregated statistics service

## 4. Project Outputs

- 4.1 The main deliverables will be: (a) a fully tested aggregated statistics demonstrator service employing agreed first versions of Standards and Protocols; DSpace, Eprints & Fedora Software plug-ins; Software to process and filter OpenURL usage data according to COUNTER rules; (b) a set of reports on the business model for the aggregated statistics service, including a list of organizations that meet the required criteria for the central clearing house(s), an assessment of the costs for repositories and publishers and the running the central clearing house(s); proposals for dealing with legal issues, results of market research surveys; (c) development of advocacy strategy in line with the Business Model; (d) a report informing plans for sustainability of services into the future.
- 4.2 The knowledge and experience acquired in the course of the project will be shared and discussed within the stakeholder community through workshops and seminars as well as conference papers and articles. The project web site will provide access to information pertaining to PIRUS2, including dissemination events and progress reports.

## 5. Project Outcomes

- 5.1 The work of PIRUS2 will ensure that usage data are available for journal articles wherever held (publisher sites, repositories, aggregators), whilst going further than web analytics software and more able to meaningfully address the consistency of the usage data and the resultant quality of the reports.
- 5.2 Repositories will benefit from a technical point of view as most will have access to new functionality to produce standardised usage reports from their data.
- 5.3 Digital repositories systems will be more integral to research and closely aligned to research workflows and requirements, as the project addresses production of authoritative usage data.
- 5.4 The authoritative status of PIRUS 2 usage statistics will serve to enhance trust across UK repositories; furthermore, the data will provide a firm evidence base for repositories to take firm steps to defining clear policies to support their goals.
- 5.5 The COUNTER-compliant JISC Usage Statistics Portal will provide a source of consolidated usage statistics down to the individual journal level. PIRUS2 will give this portal the potential not only to be a source of COUNTER-compliant usage statistics down to the individual article level, but also to consolidate usage statistics from repositories as well as vendors.

## 6. Stakeholder Analysis

Stakeholder	Interest / stake	Importance
Research library directors	IRs usually fall within their area of responsibility and they are interested in how this major investment performs; reliable usage statistics will be an important measure of performance	High

Board of COUNTER	Further improvements in the COUNTER Code of Practice that ensure the compatibility of usage data from publishers and IRs	High
Higher Education Institutional Repository managers	support essential for project, as they will have to be actively involved in testing the new protocols/standards; will be affected by the outcome, as they would have to implement the new standards	High
Subject Repository managers	support essential for project, as they will have to be actively involved in proving feedback on the new protocols/standards; will be affected by the outcome, as they would have to implement the new standards	High
Publishers	support essential for project, as they will have to test the new protocols/standards on their articles; will be affected by the outcomes, as they would have to agree to implement the new standards	High
Repository software developers	Support essential for the project as they will be implementing changes to repository softwares enabling use of new protocols and standards	High
HE/FE research funding agencies	Research funding agencies are interested in measuring the value and impact of the research outputs that they fund. Reliable usage statistics at the article level are one such measure. This group will benefit from the availability of reliable, comparable usage reports for the individual researchers whom they fund. Their support is very important for the project, as they will have to be willing to use the outputs.	High
Individual authors/researchers and research managers	support not essential for the project to proceed, but their growing interest in monitoring the usage and impact of their research outputs means they will be interested in the outcomes. Their interest in individual article usage statistics will have a significant influence on publisher support for it.	Medium

## 7. Risk Analysis

Risk	Probability (1-5)	Severity (1-5)	Score (P x S)	Action to Prevent/Manage Risk
Lack of stakeholder acceptance / buy-in	2	5	10	Community endorsement of COUNTER is already strong and is growing. COUNTER will be a strong advocate for PIRUS 2. The wider benefits to publishers of implementing the proposed tracker code approach will be demonstrated. The technical underpinnings have already been accepted and adopted, e.g. Mesur <sup>4</sup> project used the OpenURL Context Object in relation to article level usage statistics; PLoS is providing article level usage data and Associated Press makes use of tracker code.

<sup>4</sup> <http://www.mesur.org/MESUR.html>

Could be perceived as a UK specific initiative	1	3	3	The consortium and its partners are truly international in scope and the proposed work has no UK constraints and builds upon international standards and policies.
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	Initial development based across a number of institutions; project and workpackage management structure embedded across institutions
Financial (risk to project partners and JISC)	1	4	4	Formal financial management is defined in WP1. Commitment from institutions' senior managers (see letters of support and partnership agreement at start of project);
External suppliers	1	4	4	DSpace, Eprints, Fedora all have active, responsive developer communities, and are known to or represented by partners
Technical	1	4	4	Open source software to be used, backup; Redundancy (eg RAID); institutional support; iterative development and regular release to test, continuous integration facilities, unit tests, development wiki
Software longevity	1	3	3	Established ,supported and widely adopted open source technology. Development of strategy for ongoing support.
Legal	1	4	4	Contractual obligations of partners;

## 8. Standards

The table below lists the standards it is anticipated that PIRUS2 will use.

Name of standard or specification	Version	Notes
OAI-PMH	2.0	Open Archives Initiative – Protocol for Metadata Harvesting
COUNTER SUSHI	3.0	
COUNTER Code of Practice for Journals and Databases	3	
OpenURL	1.0	
DOI		ISO: currently at DIS (Draft International Standard) stage

## 9. Technical Development

9.1 The project will employ 'agile' software development processes, built on the foundation of iterative and incremental development. An initial set of requirements – based on those identified

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by the original PIRUS project - will be refined and tested through close interaction and cooperation between programmers, project partners and stakeholders.

9.2 The project will adhere to the software requirements and advice stated in section 9.1 of the JISC Project Management Guidelines (May 2008).

## 10. Intellectual Property Rights

- 10.1 All the software and technologies developed by the project will be open-source. All the standards that will be used and developed by the project will be in the public domain.
- 10.2 Any modifications to the COUNTER Codes of Practice will rest with COUNTER Online Metrics. The COUNTER Codes of Practice are freely available on the COUNTER website at [www.projectcounter.org](http://www.projectcounter.org). The main objectives of COUNTER owning the Codes of Practice are to ensure their integrity and free availability.
- 10.3 IPR issues are formally addressed in the Project Consortium Agreement.

## Project Resources

### 11. Project Partners

The primary project partners and first point of contact are:

Primary partners	First point of contact
Mimas (lead)	Ross MacIntyre: <a href="mailto:Ross.Macintyre@manchester.ac.uk">Ross.Macintyre@manchester.ac.uk</a>
Cranfield University	Paul Needham: <a href="mailto:paul.needham11@btinternet.com">paul.needham11@btinternet.com</a>
COUNTER	Peter Shepherd: <a href="mailto:pt_shepherd@hotmail.com">pt_shepherd@hotmail.com</a>
Oxford University Press	Richard Gedye: <a href="mailto:richard.gedye@oxfordjournals.org">richard.gedye@oxfordjournals.org</a>
CrossRef	Ed Pentz: <a href="mailto:epentz@crossref.org">epentz@crossref.org</a>

The additional partners, software developers, secondary partners and advisory partners are:

Additional partners	Secondary partners	Advisory partners
Sally Rumsey, Oxford University	<i>Publishers:</i>	<ul style="list-style-type: none"> <li>• arXiv</li> <li>• MESUR</li> <li>• NISO/SUSHI</li> <li>• RCUK</li> <li>• Repositories Support Project<sup>5</sup></li> <li>• SHERPA<sup>6</sup></li> <li>• Social Science Research Network</li> <li>• Knowledge Exchange Usage Statistics Strand members including: JISC, SURF, DFG, DeFF</li> </ul>
<b>Software developers</b>	<ul style="list-style-type: none"> <li>• Bepress</li> <li>• Springer</li> <li>• OUP</li> <li>• PLoS</li> </ul>	
<ul style="list-style-type: none"> <li>• Tim Brody, IRStats, Southampton University (Eprints)</li> <li>• Ben O'Steen, Oxford University (Fedora)</li> <li>• @mire, Belgium (DSpace)</li> </ul>	<i>Repositories:</i>	
	<ul style="list-style-type: none"> <li>• Cranfield University (DSpace)</li> <li>• Harvard University (Dspace)</li> <li>• Oxford University (Fedora)</li> <li>• Others tbc</li> </ul>	

**Consortium agreement:** it our intention that this will be agreed, signed by partners and sent to the Programme Manager at JISC by the 26<sup>th</sup> February 2010.

## 12. Project Management

12.1 The project is managed by a **Project Manager, Paul Needham**, based at Cranfield University, following the same principles as the EThOSnet project (based on PRINCE2 project

<sup>5</sup> The Repositories Support Project is led by the University of Nottingham;

<sup>6</sup> SHERPA is led by the University of Nottingham.

management methodology). The Project Manager will have responsibility for the day-to-day management of the Project, working with a Project Management Board. The membership of this Project Management Board will include the WP leaders and the Project Manager, and will be chaired by the Senior Project Manager, Simon Bevan. Its role will include the oversight of the project, monitoring progress to ensure work is being delivered according to the plan. Decision making relating to the project will rest with the Project Management Board. A key role for the Project Manager will be to cross-manage all the WPs to ensure the cohesion of the overall project (see WP 2). Face-to-face meetings of the Project Management Board will be scheduled to take place to coincide with key milestones/deliverables, or at other times if required. These meetings will be supplemented by email or telephone interactions as and when necessary.

12.2 The Project Manager will be responsible to the Senior **Project Manager**.

12.3 The members of the Project Management Board are:

*Mimas*

Ross MacIntyre [Ross.Macintyre@manchester.ac.uk](mailto:Ross.Macintyre@manchester.ac.uk)

*Cranfield University*

Simon Bevan [s.bevan@cranfield.ac.uk](mailto:s.bevan@cranfield.ac.uk)

Paul Needham [paul.needham11@btinternet.com](mailto:paul.needham11@btinternet.com)

*COUNTER*

Peter Shepherd

*Oxford University Press*

Richard Gedye

*CrossRef*

Ed Pentz

12.4 A Steering Committee will be appointed to provide strategic oversight of the project. It will receive regular progress reports from the Project Management Board, advise on strategic and policy issues, and endorse any proposed major changes to the original work plan, (subject to approval by JISC). It will also have an advocacy role for the project, helping to maintain a high level of visibility of its work across the UK and abroad. Members will be drawn from key stakeholder groups, to ensure that the various interests are represented, and can help inform the strategic direction of the project. It will be chaired by Hazel Woodward. The Steering Committee may choose to take advice from third parties as is required. The Steering Committee will meet at times linked to key milestones/deliverables identified in the Project Plan. It is expected that there will be no more than four meetings during the life of the project.

12.5 The membership of the Steering Committee includes:  
Judith Barnsby (IOP Publishing, PALS3 Metadata and Interoperability Group)  
Simon Bevan, Senior Project Manager (Cranfield University)  
Tim Brody (Eprints , Southampton University)  
Richard Gedye (OUP)  
Bill Hubbard (RSP/SHERPA)  
Ross MacIntyre (Mimas)  
Daniel Metje (OA-Statistik)  
Paul Needham, Project Manager (Cranfield University)  
Balviar Notay, Programme Manager (JISC)  
Mark Patterson (PLoS)  
Ed Pentz (CrossRef)  
Sally Rumsey (Oxford University)  
Peter Shepherd (COUNTER)  
Syun Tutiya (Chiba University)  
Hazel Woodward, University Librarian, JISC Collections (Cranfield University)

12.6 Additional members of the Steering Committee may be identified or be considered, as appropriate.

### 13. Programme Support

13.1 The PIRUS2 partnership hopes to have assistance from the Repositories Support Project in brokering relationships with Institutional Repositories, and from relevant JISC services, to assist with communication with European and other international organisations working with scholarly statistics, and with its dissemination role.

### 14. Budget

	Oct 2009 - Mar 2010	Apr 2010 - Dec 2010	TOTAL £
Total Project Cost	£98,810	£141,240	£240,050
Amount Requested from JISC	£59,460	£89,190	£148,650
Institutional Contributions	£36,350	£55,050	£91,400

See Appendix A.

### *Detailed Project Planning*

### 15. Workpackages

Project start date: 1<sup>st</sup> October 2009

Project completion date: 31<sup>st</sup> December 2010

Duration: 15 months

In order to achieve its aims and objectives PIRUS2 will implement six workpackages:

Workpackages (WP)	WP Leaders	WP Officers	Duration
1 Consortium Administration	Ross MacIntyre (Mimas)	Neil Chetham (Mimas)	Oct 2009 – Dec 2010
2 Project management	Simon Bevan, Senior Project Manager (Cranfield University)	Paul Needham, Project Manager (Cranfield University)	Oct 2009 – Dec 2010
3 Dissemination and advocacy	Peter Shepherd (COUNTER)	Richard Gedye (OUP)	Oct 2009 – Dec 2010
4 Software, standards and protocols	Paul Needham, Project Manager (Cranfield University)		Nov 2009 – Sep 2010
5 Development of a prototype service for individual article statistics	Peter Shepherd (COUNTER)	Richard Gedye (OUP) Ed Pentz (CrossRef) Sally Rumsey (Oxford University)	Nov 2009 – Sep 2010
6 Evaluation and exit strategy	Peter Shepherd (COUNTER)	Sally Rumsey (Oxford University)	Oct 2010 – Dec 2010

Further details of each workpackage are given in Appendix B.

### 16. Evaluation Plan

Timing	Factor to Evaluate	Questions to Address	Method(s)	Measure of Success
Ongoing	Overall approach and direction of project	Are the project's aims reasonable and achievable? Do they	Review and input of the Project	Consensus that the project's approach is appropriate for its aims

		meet the needs of the stakeholder communities?	Management Board, Steering Committee and JISC	
Ongoing	Progress and outcomes of each workpackage	Have workpackages contributed to project aims and satisfied objectives?	Review and input of the Project Management Board, Steering Committee and JISC	Consensus that milestones have been achieved, objectives met.
WP6	Effectiveness of project	Has the project met its objectives?	Online surveys, discussion groups, internal evaluation	Establishment of functioning demonstrator service and business model; feedback from stakeholder communities

See WP6 for further details.

## 17. Quality Plan

<b>Output</b>	<b>Cross-management of workpackages</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Ongoing	Best practice for processes	Following tried and tested methodology to ensure products delivered to time, budget	Key milestones signed-off; Detailed workplan; Project meetings in place;	Project Manager	
<b>Output</b>	<b>Project plan</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Project start-up	Adherence to project plan guidelines; comprehensiveness	Peer review; review by JISC	Acceptance by JISC	Project Manager	
<b>Output</b>	<b>Public Progress report</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
April 2010	Adherence to report guidelines	Review by JISC	Acceptance by JISC	Project Manager, All	
<b>Output</b>	<b>Final report and recommendations</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>

					applicable)
Dec 2010	Adherence to report guidelines; comprehensiveness	Review by JISC	Acceptance by JISC	Project Manager, All	
<b>Output</b>	<b>Dissemination and advocacy</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Ongoing	Effectiveness	Review	Community understanding, support and involvement	WP3	
<b>Output</b>	<b>Software (aggregated statistics service demonstrator)</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Ongoing	Conformance with stakeholder requirements; adequate data, functioning interfaces, sufficient documentation	Internal and external testing	Successful testing; acceptance by stakeholders; validation	WP4	
<b>Output</b>	<b>Standards and protocols</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Ongoing	Fit for purpose	Peer review, review by COUNTER and NISO	Acceptance by COUNTER and NISO	WP4	
<b>Output</b>	<b>Develop business model for prototype service</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
Ongoing	Conformance with stakeholder requirements; sustainability	Surveys of stakeholder groups	Implementation by vendors, and repositories	WP5	Independent audit
<b>Output</b>	<b>Evaluation and exit strategy</b>				
<b>Timing</b>	<b>Quality criteria</b>	<b>QA method(s)</b>	<b>Evidence of compliance</b>	<b>Quality responsibilities</b>	<b>Quality tools (if applicable)</b>
WP6	Has project achieved aims?	Team review; survey; stakeholder feedback; end of project seminar	Acceptance by stakeholders, JISC	WP6	

## 18. Dissemination Plan

See WP3 for further details.

Timing	Dissemination Activity	Audience	Purpose	Key Message
Ongoing	Website/wiki	Stakeholder community (See section 6, above)	Awareness raising and keeping people informed of progress	Development of technical demonstrator and business model for an aggregated publisher and repositories article level statistics service
Ongoing	Presentations/workshops/posters at professional conferences	Stakeholder community	Awareness raising and keeping people informed of progress; Answering questions and providing clarification where needed	Explaining project background, aims and objectives, progress – technical and business model
Ongoing	Published articles	Stakeholder community; wider community of people involved with or interested in statistical issues	Awareness raising and keeping people informed of progress; Sharing experience and lessons learned	Development of demonstrator technical service and business model
End-of-project	Seminar	Stakeholder community	Publicity for project outputs and outcomes; demonstrate and promote the technical demonstrator service and business model	Project completed successfully; next steps

## 19. Exit and Sustainability Plans

See WP6 for further details.

Project Outputs	Action for Take-up & Embedding	Action for Exit
Prototype service(s) for individual article statistics comprising technical demonstrator and a set of business model recommendations	Specifications for the technical, organizational and business models to ensure the long-term sustainability of the proposed service(s)	
Project website/wiki		To be maintained by Cranfield University for 3 years after

Project Acronym: PIRUS2

Version: 1.3

Contact: Paul A S Needham, [paul.needham11@btinternet.com](mailto:paul.needham11@btinternet.com)

Date: 04 Feb 2010

		project ends
Greater shared understanding of issues relating to statistics	Achieved through advocacy and dissemination activities undertaken throughout the project	
End-of-project seminar	Will demonstrate and promote the business model and the demonstrator service(s)	

<b>Project Outputs</b>	<b>Why Sustainable</b>	<b>Scenarios for Taking Forward</b>	<b>Issues to Address</b>
Prototype service(s) for individual article statistics comprising technical demonstrator and a set of business model recommendations	service provider(s) to be identified during course of project	sufficient buy-in from stakeholders to provide income stream at a level that enables service to continue on a cost-recovery basis; transfer of service to long-term service provider	Business model will need to be sufficiently robust to be able to continue operating as a live service, and sufficiently attractive to stakeholders to ensure continued buy-in;
Standards and protocols	Will be endorsed and maintained by existing international agencies		

## ***Appendixes***

### **Appendix A. Project Budget**

### **Appendix B. Workpackages**



## JISC WORK PACKAGE

WORKPACKAGES	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1: Consortium Administration	1-15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2: Project management	1-15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3: Dissemination and advocacy	1-15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4: Software, standards and protocols	2-12			X	X	X	X	X	X	X	X	X	X			
5: Development of a prototype service for individual article statistics	2-12		X	X	X	X	X	X	X	X	X	X	X			
6: Evaluation and exit strategy	13-15													X	X	X

Project start date: October 2009

Project completion date: December 2010

Duration: 15 months

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
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<b>YEAR 1</b>					
<b>WORKPACKAGE 1: Consortium administration</b>					
<i><b>Objective:</b> to establish project consortium agreement and administer all financial aspects</i>					
1.1 Consortium agreement agreed and signed by all partners	01/10/09	18/12/09	<b>Signed consortium agreement</b>	<b>Yes</b>	Mimas
1.2 Administration of project financial arrangements	01/10/09	31/12/10			Mimas
1.3 Administration of post project financial arrangements	01/01/10	28/02/10			Mimas
<b>WORKPACKAGE 2: Project management</b>					
<i><b>Objective:</b> To ensure that all the Workpackages of the project are managed coherently and that all the project outputs are delivered within the agreed deadlines and budget</i>					
2.1. Set up website (project management section)	01/10/09	31/10/09	<b>PIRUS 2 website</b> , hosted by Cranfield University	<b>Yes</b>	P Needham P Shepherd
2.2. Produce project plan and detailed work plan	01/10/09	30/11/09	<b>Project plan and detailed work plan</b>	<b>Yes</b>	P Needham P Shepherd
2.3. Project management processes (meeting schedules, budget/payment arrangements, reporting arrangements and schedules)	01/10/09	31/12/10	Project management framework		P Needham P Shepherd Mimas
2.4. Prepare external Progress report	01/04/10	30/04/10	<b>Progress report</b>	<b>Yes</b>	P Needham P Shepherd Mimas

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
2.5. Prepare Final report	01/10/10	31/12/10	<b>Final report</b>	<b>Yes</b>	P Needham P Shepherd Mimas
<b>WORKPACKAGE 3: Dissemination and advocacy</b>					
<i><b>Objective:</b> to secure broad support and to inform all the major stakeholder groups (repositories, publishers, authors) to ensure the financial viability of a future statistics service.</i>					
3.1. Announce launch of PIRUS 2	01/10/09	31/10/09	<b>News Release</b>	<b>Yes</b>	P Shepherd
3.2. Set up website (dissemination & advocacy section)	01/10/09	31/10/09	<b>PIRUS 2 website</b> , hosted by Cranfield University	<b>Yes</b>	P Shepherd P Needham
3.3. Regular updates of information on website	31/10/09	31/12/10	Information on PIRUS 2 to be posted on the website at appropriate intervals		P Shepherd P Needham
3.4. Presentations and articles on PIRUS 2	14/10/09	31/12/10	<b>PowerPoint presentations and articles on PIRUS 2</b> at relevant conferences and in relevant publications		P Shepherd P Needham
3.5. Engagement with publishers on PIRUS 2	31/10/09	31/12/10	Meetings with individual publishers and groups of publishers to inform them of progress and the project and to obtain feedback		P Shepherd R Gedye

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
<p><b>WORKPACKAGE 4:</b></p> <p><b>Objective:</b> <i>to achieve a production-quality means of providing normalised COUNTER-compliant statistical data at the individual article level for the main institutional repository softwares; to build on work done between publishers and the JISC community to provide a reliable basis of exchange of usage data by adopting the emergent standardised methods and protocols throughout, particularly SUSHI, OAI-PMH and OpenURL context objects; to develop a prototype/demonstrator Article Level Usage Statistics Portal</i></p>					
<p>4.1. Development of Standards and Protocols - the OpenURL Context Object log format for usage data, in consultation with European partners; the COUNTER Full-text Article Downloads AR1 Report XML and XLS standards, in collaboration with COUNTER, NISO and European partners</p>	01/01/10	30/04/10	Agreed first versions of <b>Standards and Protocols</b>	Yes	P Needham
<p>4.2. Development of repository softwares plug-ins/extensions to output article level usage data</p>	01/01/10	31/05/10	<b>DSpace, Eprints &amp; Fedora Software plug-ins</b>	Yes	P Needham
<p>4.3. Processing and filtering OpenURL usage data according to COUNTER rules</p>	01/01/10	31/05/10	<b>Software to process and filter OpenURL usage data according to COUNTER rules</b>	Yes	P Needham
<p>4.4. Development of a Prototype Article Level Usage Statistics Portal</p>	01/1/10	31/09/10	<b>Prototype aggregated statistics service</b>	Yes	P Needham

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
<b>WORKPACKAGE 5: Development of a prototype service for individual article statistics</b>					
<i><b>Objective:</b> define issues relating to the business model(s) for an aggregated statistics service that will be trusted and supported by publishers; develop and test a prototype service for individual article level statistics and propose a business model to support this service.</i>					
5.1. Set up publisher forum to provide feedback on scenarios as they are developed	01/11/09	30/11/09	Publisher forum of 6-10 members, to meet regularly during the project	Yes	P Shepherd R Gedye
5.2. Develop appropriate organizational scenarios for the prototype service for discussion with publishers	31/11/09	30/09/10	A series of scenarios for discussion by publishers as part of an iterative process throughout the project	Yes	P Shepherd R Gedye
5.3. Identify candidate organizations that could fill the role of the proposed central clearing house(s)	31/11/09	30/09/10	<b>A list of organizations</b> that meet the required criteria for the central clearing house(s)	Yes	P Shepherd R Gedye
5.4. Develop appropriate economic scenarios for the prototype service for discussion with publishers, repositories and other stakeholder groups	31/03/10	30/09/10	<b>An assessment of the costs for repositories and publishers for generating the required usage reports;</b> estimate the costs of running the central clearing house(s); propose a model for the allocation of costs to stakeholders		
5.5. Identify and address intellectual property, privacy and other legal issues pertaining to the proposed central clearing house(s)	31/03/10	30/09/10	<b>A list of legal issues</b> with proposals for dealing with each one		P Shepherd R Gedye
5.6. Market research: carry out surveys among stakeholder groups to test the acceptability of proposed organizational/economic models	30/06/10	30/09/10	<b>A report that summarises the results of the surveys,</b> with recommendations based on the report	Yes	P Shepherd
5.7. Identify the factors that would motivate publishers to release article level usage statistics to be the basis for other services/metrics, as well as the obstacles	30/06/10	30/09/10	<b>A report that lists the factors</b> that would encourage or discourage publishers from supporting the envisaged central clearing house(s)	Yes	

Workpackage and activity	Earliest start date	Latest completion date	Outputs (clearly indicate deliverables & reports in bold)	Milestone	Responsibility
that would discourage them from doing so.					
<b>WORKPACKAGE 6: Evaluation and exit strategy</b>					
<b>Objective:</b> <i>To evaluate PIRUS2 from the perspective of stakeholders with a view to informing plans for sustainability of services into the future.</i>					
6.1. Test the outcomes of each workpackage with the relevant stakeholder groups ( authors, repositories, publishers, wider HE community)	31/12/09	31/10/10	Evaluate the outcomes of each WP in the most appropriate way (online survey, discussion group, etc.)		P Shepherd
6.2. Take into account the results of the feedback obtained when developing scenarios for recording and reporting usage statistics and for the central clearing house(s)	1/10/10	31/12/10			P Needham, R MacIntyre, S Rumsey
6.3. Prepare survey documentation	31/12/09	31/3/10	<b>Survey documentation package</b>	Yes	P Shepherd
6.4. Specifications for the technical, organizational and business models to ensure the long-term sustainability of the proposed services	31/10/10	31/12/10	<b>Document that summarises the relevant specifications</b>		R Gedye, P Shepherd
6.5. An end-of-project seminar; this will demonstrate and promote the prototype service(s) to a targeted audience of HE institutions, subject repositories, publishers and other interested parties outside the partnership	31/12/10	31/3/11	<b>Programme, timetable and location for the end-of-project seminar</b>	Yes	P. Needham, P Shepherd
6.6. Project team to review and discuss results	31/10/10	31/12/10			Project team
6.7. Proposed modifications to the COUNTER Code of Practice	31/10/10	31/12/10	List of modifications to the COUNTER Code of Practice specifying any <b>new usage report(s) and standards/ protocols for recording and reporting usage at individual article level</b>	Yes	P Shepherd