

INFORMATION ENVIRONMENT DEVELOPMENT PROGRAMME

PROJECT PLAN

Project Title	Information Environment Service Registry
Start Date	1 January 2004
End Date	28 February 2005
Lead Institution	University of Manchester
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Document History

Version	Date	Comments
1.0	19 Dec 2003	
2.0	12 Jan 2004	Incorporating comments & suggestions from IESR team
3.0	29 Jan 2004	Further changes in response to comments from IESR team

1. Introduction

The JISC funded the pilot IESR project as part of its Shared Services Programme, to investigate the feasibility of providing a machine-readable directory of quality-assured electronic resources within the Information Environment. There was a perceived need to improve awareness of existing resources and to promote their use. The aim of the Service Registry is to enable portals, virtual learning environments and other services to automatically obtain information about available electronic resources and, where possible, to access those resources directly through machine-to-machine transactions.

In the first phase of the project, metadata formats for agents, collection and service descriptions were devised and published. Data creation guidelines have been written and data has been received from six service providers: AHDS, EDINA, MIMAS, RDN, UK Data Archive and the UK Mirror Service. A prototype database has been built, with Z39.50 and web interfaces. The latter is available from the page at <http://www.mimas.ac.uk/iesr/iesr/> (Z39.50 connection details can also be found here).

Interaction with project stakeholders has been an important element of the IESR project, with interviews and meetings being held during the course of the first phase. Stakeholders include portal developers, representatives from content providers and commercial publishing organisations.

2. Aims and Objectives

The next phase of the IESR will have a number of areas of further development, the overall aim being to bring the prototype Service Registry up to a level of robustness and functionality that will be suitable for a service of production quality. The areas of work for the next phase fall into the following categories:

- a) Software and metadata development
- b) Expansion of content
- c) Evaluation
- d) Promotion and dissemination

3. Overall Approach

The project team will build on the work undertaken during Phase I.

- a) Software and metadata development

The metadata will be reviewed early in the project, in the light of the stakeholder requirements that were identified during the first phase. The functionality of the prototype Service Registry will be extended to support new methods of access to the Registry's own data. Interfaces for the creation and update of IESR metadata records will be developed.

A research work package, led by UKOLN, will investigate whether IESR metadata should be made available using a UDDI registry. This research package will also look at alternative models for the delivery of the Registry, including RDF and related semantic web initiatives such as DAML-S and OWL.

Development work at the University of Liverpool will focus on implementing the capability of automatically checking the availability of IESR resources and recording their status. Documentation of the Cheshire system will also be a priority.

b) Content expansion

The pilot phase of the IESR has involved the creation of metadata about services provided by the AHDS (Arts and Humanities Data Service), EDINA, MIMAS, RDN (Resource Discovery Network), UK Data Archive and the UK Mirror Service. It is proposed that this coverage would be expanded in the next year of the project to include as many as possible of the resources listed in the JISC Resource Guides.

c) Evaluation

Evaluation activities have been an integral part of the pilot IESR project. It is proposed that UKOLN will continue to conduct evaluations during the course of the next phase.

d) Promotion and dissemination

As the IESR moves into a production system, advocacy within the community of potential users of the service will be essential to encourage portals and other elements of the Information Environment to make use of the information within the Service Registry. The project team will also need to provide technical support to end users of the Registry.

A final project report will summarise the findings of the project and provide recommendations on how to take the Service Registry forward.

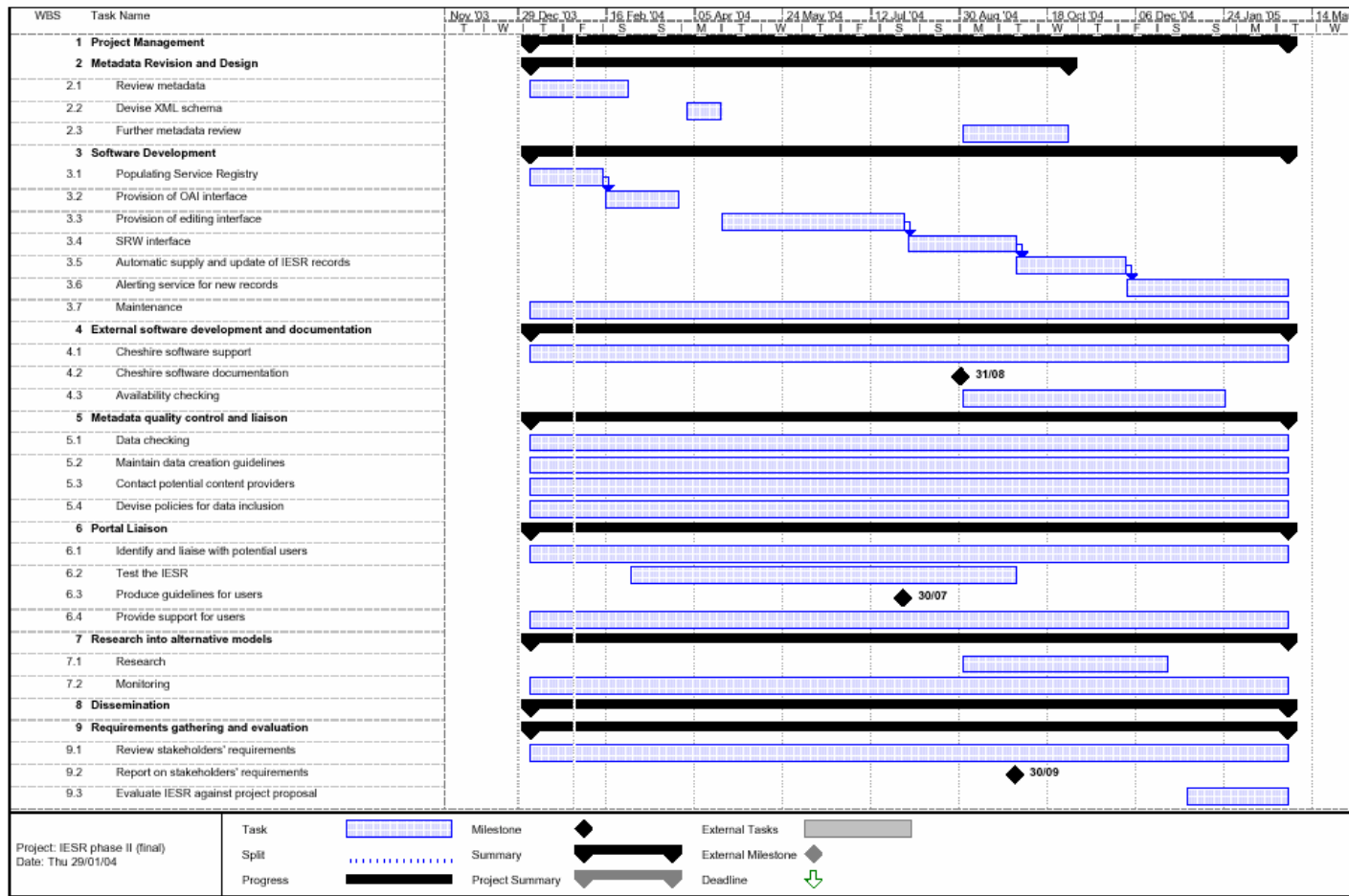
4. Project Consortium

The project partners are MIMAS at the University of Manchester, the Cheshire Development Team at the University of Liverpool and UKOLN at the University of Bath. The team at MIMAS is responsible for project management (Amanda Hill), registry design (Ann Apps) and liaison with users and content providers (Leigh Morris). The Cheshire team, led by Paul Watry, is responsible for Cheshire software developments and documentation. The UKOLN team, led by Rachel Heery, is responsible for analysing the requirements of users and stakeholders and for the evaluation of the project. UKOLN will also undertake the research package. All partners provide input to the technical specification of the Registry data.

5. Project Management

MIMAS will manage the project by maintaining the project work plan and co-ordinating the activities of the project partners. JISCmail lists have been established to aid communication between the project partners and also with the project's stakeholders. Project team meetings are held every three months.

6. Overall Project Structure (Summary)



7. Detailed Project Plan

Work package Number: 1
Work package Title: Project Management
Partner Responsible: MIMAS
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To ensure timely performance of the project activities

Brief Description of Work: Ensuring good communication and liaison between the project partners; monitoring project progress; reporting on the progress of the project; liaising with other related projects

Outputs including reports:

1. Project plan
2. Biennial project progress reports
3. Final report on the findings of the project, with recommendations on how to take the Service Registry forward

Task Descriptions

Task	Title	Partners	Description
1.1	Formulate project work plan	MIMAS Liverpool UKOLN	Devise and agree detailed work plan for the project. January 2004
1.2	Manage and co-ordinate project activities	MIMAS	Duration of the project
1.3	Monitor progress	MIMAS	Monitoring progress against the project plan and identifying corrective actions in case of deviations. Duration of the project
1.4	Reporting	MIMAS	Report on project progress. July 2004, January 2005
1.5	Liaise with Shared Services and content providers	MIMAS	Liaise with other Shared Services and with content providers. Duration of the project
1.6	Final report and recommendations	MIMAS	January – February 2005

Work package Number: 2
Work package Title: Metadata revision and design
Partner Responsible: MIMAS and UKOLN
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To revise the IESR metadata in the light of stakeholder requirements work and to develop an XML schema for the metadata

Brief Description of Work: Reviewing and updating the format of the IESR metadata in response to the needs of stakeholders and the actual use of the Registry.

Outputs including reports:

1. Report on changes to the metadata and updated documentation, February 2004
2. An XML Schema for IESR metadata
3. Further updates to definitions in response to needs of stakeholders, as required.

Task Descriptions

Task	Title	Partners	Description
2.1	Review metadata	MIMAS UKOLN	Review metadata, in light of comments from content providers, make necessary changes and update definitions. February-March 2004
2.2	XML Schema	MIMAS	Devise XML schema for IESR metadata. April 2004
2.3	Further metadata review	MIMAS UKOLN	Revisit metadata, with input from stakeholders and experience of use of the service registry. Make any changes. September-October 2004

Work package Number: 3
Work package Title: Software development
Partner Responsible: MIMAS
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To develop the functionality of the IESR in order to bring it up to production quality.

Brief Description of Work: To develop the service registry in line with the requirements of stakeholders.

Outputs including reports:

1. New interfaces to IESR data (OAI-PMH and SRW)
2. Improved methods for the supply of IESR records
3. Maintenance of registry software, including timely responses to error reports and update requests, updating software

Task Descriptions

Task	Title	Partners	Description
3.1	Populating registry	MIMAS	Populating the registry with data provided during the first phase of the project. January – February 2004
3.2	OAI-PMH interface	MIMAS	Provide OAI-PMH interface to the IESR metadata. February – March 2004
3.3	Editing interface	MIMAS	Implement a web interface for creation of IESR metadata. April – July 2004
3.4	SRW interface	MIMAS	Provide SRW interface to IESR metadata. August – September 2004
3.5	Automatic supply and update of IESR XML records	MIMAS	Design a process to enable contributors to automate the supply of data to the IESR. October – November 2004
3.6	Alerting service for new records	MIMAS	Providing an alerting service when new records are added to the IESR. December 2004 – February 2005
3.7	Maintenance	MIMAS	Update registry in response to metadata updates, error reports and changes to the operating environment. Duration of the project

Work package Number: 4
Work package Title: External software development and documentation
Partner Responsible: Liverpool
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To support the underlying registry software, and to enhance the registry functionality externally.

Outputs including reports:

1. Full documentation of the Cheshire software
2. External enhancements to IESR functionality, such as providing automatic checking of availability of services

Task Descriptions

Task	Title	Partners	Description
4.1	Support	Liverpool	Provide support for Cheshire software Duration of the project
4.2	Documentation	Liverpool	Provide documentation for the Cheshire software August 2004
4.3	Provision of automatic checking for availability of resources	Liverpool	Provide automatic checking of availability of services. August–December 2004

Work package Number: 5
Work package Title: Metadata quality control and liaison
Partner Responsible: MIMAS and JISC
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To ensure that the IESR contains useful, high-quality data.

Brief Description of Work: Identifying potential contributors, liaising with creators of IESR metadata, checking and editing data submissions, developing guidelines and policies for the inclusion of resources.

Outputs including reports:

1. Consistent, high-quality metadata in the IESR
2. Up-to-date data creation guidelines
3. Policies for data inclusion

Task Descriptions

Task	Title	Partners	Description
5.1	Data checking	MIMAS	Check the consistency of data submissions, implement quality assurance procedures and liaise with data contributors to ensure data quality. Duration of the project
5.2	Maintain and update data creation guidelines	MIMAS	Make changes to guidelines as required. Duration of the project
5.3	Contacting contributors	MIMAS JISC	Contacting potential content providers and encouraging the creation of metadata for appropriate services. Duration of the project
5.4	Devise policies for data inclusion	JISC MIMAS	Provide guidance for potential contributors and develop policies for data inclusion. July 2004-February 2005

Work package Number: 6
Work package Title: Portal liaison
Partner Responsible: MIMAS, UKOLN and JISC
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To encourage portals and other services to make use of the information and interfaces provided by the IESR.

Brief Description of Work: Raising awareness of the IESR, liaising with potential users, testing the registry, providing technical assistance for users.

Outputs including reports:

1. Identifying potential users
2. Comprehensive testing of the Service Registry
3. Guidelines and support for external services making use of the Service Registry

Task Descriptions

Task	Title	Partners	Description
6.1	Identify potential users	MIMAS UKOLN JISC	Contacting portal projects and obtaining their agreement to take part in the project. January – February 2004
6.2	Test the IESR	MIMAS UKOLN	Specifying the requirements and procedure for testing the portals' use of the IESR, and documenting the testing process. The OAI and Z39.50 interfaces will be tested from April. The SRW and editing input interfaces will also be tested at the appropriate times. The results will feed into the metadata review (task 2.3) in work package 2. March – September 2004
6.3	Produce guidelines for users	MIMAS	Writing guidelines for portals and other users of the registry. July 2004
6.4	Provide support for users	MIMAS	Assisting staff of portals and other users of the IESR. Duration of the project

Work package Number: 7
Work package Title: Research into alternative models
Partner Responsible: UKOLN
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To investigate the use of UDDI and other methods of delivering the information held within the Service Registry.

Brief Description of Work: This work package will investigate whether it will be desirable to provide IESR data in UDDI (Universal Description, Discovery and Integration) or other similar registry formats. It will also investigate alternative models for the implementation of the registry, e.g. RDF and related semantic web initiatives. Monitoring developments in the Grid and e-learning arenas will also form part of this package.

Outputs including reports:

1. Report investigating alternative formats

Task Descriptions

Task	Title	Partners	Description
7.1	Research	UKOLN MIMAS	Research into alternative formats and models. September – December 2004
7.2	Monitoring	UKOLN	Keeping in touch with Grid and e-learning developments that relate to the IESR. Duration of the project

Work package Number: 8
Work package Title: Dissemination
Partner Responsible: MIMAS, Liverpool and UKOLN
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To raise awareness of the Service Registry and to promote its use.

Brief Description of Work: This work package will focus on raising awareness of the Service Registry through articles, conference papers, workshops and the project's website.

Outputs including reports:

1. Current website
2. Articles
3. Presentations at events
4. Workshops

Task Descriptions

Task	Title	Partners	Description
8.1	Maintain website	MIMAS	Keep the IESR website up to date. Duration of the project
8.2	Write articles	MIMAS Liverpool UKOLN	Write articles explaining the work of the IESR. Duration of the project
8.3	Presentations	MIMAS Liverpool UKOLN	Duration of the project
8.4	Run workshops	MIMAS Liverpool UKOLN	Workshops (for the stakeholders and users of the IESR) will be held during the course of the project.

Work package Number: 9
Work package Title: Requirements gathering and evaluation
Partner Responsible: UKOLN
Other Partners Involved:
Start Date: 1 January 2004
End Date: 28 February 2005

Objectives: To assess the impact and effectiveness of the IESR and to report on requirements for a service.

Brief Description of Work: To review the development of the IESR in the light of the requirements gathered from stakeholders during 2003 and to continue to work with stakeholders to discover any new requirements, feeding into work packages 2 and 3.

Outputs including reports:

1. Further assessment of stakeholders' requirements
2. Evaluation report

Task Descriptions

Task	Title	Partners	Description
9.1	Stakeholders' requirements	UKOLN	Review stakeholders' requirements (ongoing) Duration of the project
9.2	Report	UKOLN	Produce report on stakeholders' requirements September 2004
9.3	Evaluate IESR	UKOLN	Evaluate phase II of IESR January - February 2005

8. Dissemination

The project team will take part in JISC Shared Services and other events in order to share information about its progress and achievements. Information will also be disseminated through the medium of the project website, through mailing lists and articles.

9. Project Meetings

Full meetings of the project team will take place every three months during the course of the pilot. The JISC Development Team will be invited to attend these meetings.

10. Quality Assurance and Evaluation

Evaluation of the project will be undertaken by UKOLN in the manner described in work package 8 above.