

# Discovery to Delivery

Guidance to Potential Bidders, Town Meeting, 11 Oct 2006

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## ■ Aims and Objectives

- Create technical conditions required for interoperability for resource discovery and access to resources held in repositories.

## ■ Projects funded in the April 2006 Call

- Defining Image Access (Oxford) – exploring data web technology specifically for images
- Semantic Tagging (Southampton) – producing a lightweight semantic tagging tool
- eBank Phase 3 (UKOLN) – Exploring the feasibility of a federation of crystallography repositories

- Work directly commissioned outside the call for proposals
  - Proposed Intute Repository Search Service
  - Dunlin Core Application Profile for ePrints
  - Application profile for Images, Time based Media and Geospatial data
  - Scoping study for learning materials within a distributed network of Repositories
  - Scoping study for the requirements for scientific data within distributed network of Repositories

### ■ Areas within the September 2006 Call

- Version Identification
- Persistent Identifiers
- Federated Access Management
- Semantic Interoperability

### ■ Funding

- Total Funding for this area is £440,000
- Funding of up to £110,000 is available for each project

### ■ Duration of projects

- Between 10 months and 1 year

### ■ Starting Date

- February/March 2007

## ■ Version Identification Framework

- Project must create a Version Identification Framework
- Build on the River Project and the Versions Project recommendations
- Rigorous requirements exercise needed before a framework is developed to enable users to consistently identify version of digital objects within digital repositories, bearing in mind the diversity of content types that repositories might hold.
- An understanding of social interoperability is critical to technical interoperability
- Build on straw man framework from the River Project
- Take into consideration NISO/ALPSP work in this area
- Collaborate with the proposed Intute Repositories Search Project

## ■ Persistent Identifier Interoperability Demonstrator

- A variety of identifier schemas are adopted across digital repositories and in order for a network of repositories to flourish interoperability across these schemas will be required
- Create use cases that encompasses workflow, repository management, discovery of item via the URI etc
- Build a demonstrator to test interoperability across the different schemas
- Work with the projects developing Application Profiles for e-Prints, Images, Time based media and Geospatial data
- Take into consideration the Persistent Identifier and linking Infrastructure Project (PILIN) and RAMP project  
<http://www.melcoe.mq.edu.au/projects/RAMP/index.htm> funded by DEST in Australia

## ■ Federated Access Management

- Address the issues of federated access management for the repository environment (different users and content with different permissions)
- Managing user identities, enabling repositories to act as service providers to manage authorised user actions, attributes and roles for typical workflows in the use of institutional repositories, and linking this to externalised authorisation.
- Build on tools from the JISC Core Middleware Technology and Development Programme, including the JISC ShibboLEAP project
- Consider the RAMP project (DEST)  
<http://www.melcoe.mq.edu.au/projects/RAMP/index.htm> which has built an instance of Fedora using XACML which links authentication and authorisation to the resource

## ■ Semantic Interoperability Demonstrator

- Test the combination of and comparison of controlled and folksonomy approaches to semantic interoperability within the repository environment
- Examine the usefulness of approaches and evaluate the cost benefits
  - how it might enhance resource discovery
- Identify and test use cases
- Terminologies Services and Technology Report should be the starting point for the project which looks at various terminologies services and technologies within the semantic space
- Reference and where possible work in collaboration with the Semantic Tagging Project and the Data Webs Project which has been funded from April 06 Call
- Reference the e-Infrastructure call on knowledge organisations and semantic services.

## ■ Projects need to (General):

- Clearly articulate the particular interoperability issue being tackled, and the progress that the project intends to make toward addressing it
- Review previous and current work in the domain, (UK and more widely) and engage with active standards communities
- Work within the context of the JISC Information Environment and the e-Framework

## ■ Projects need to (General):

- Evaluate existing solutions that may address the identified interoperability issue
- Identify a candidate solution
- If necessary, work with the relevant communities to adapt existing solutions to provide the required functionality and interoperability

### ■ Projects need to (General):

- Work with Repositories Support Project
- Work with the Proposed Intute Repository Search service to develop realistic plans for the take-up and embedding of their recommendations in institutions

- Projects need to:
  - Create any tools, guidelines that may be required to implement these plans
  - Where appropriate work with suppliers of repository software to ensure that such software supports the proposed solution
  - Consider issues of long term maintenance and to devise plans for this as far as possible

### ■ Expected outcomes

- Tools, Frameworks/models and guidelines for using technology and applying standards
- To be used in a broad context (departmental, institutional, regional, national and trans-national levels).
- Recommendations for the future

### ■ Expected benefits

- Better understanding and practice relating to rich search and discovery of content in a repository
- Enhanced access for proposed Intute search service project (across UK repositories)