



omii europe
open middleware infrastructure institute



EU project: RI1031844-OMII-Europe

Project no: **RI031844-OMII-Europe**

Project acronym: **OMII-Europe**

Project title: **Open Middleware Infrastructure Institute for Europe**

Instrument: **Integrated Infrastructure Initiative**

Thematic Priority: **Communication network development**

D:NA2.5 Project Presentation for OMII-Europe

Due date of deliverable: 31 July 2006
Actual submission date: 3 August 2006

Start date of project: **1 May 2006**

Duration: **2 years**

Organisation name of lead contractor for this deliverable: **University of Southampton**

Revision [Final]

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	Public
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Short overview of D:NA2.5¹

This is the optional deliverable requested of all I3 projects as specified in the Negotiation guidance notes for coordinators. This deliverable will be published on the website and will also be available in printed form.

Description of D:NA2.5

This deliverable follows D:NA2.3 (the double sided flyer produced for the project) and is a public presentation of the project. The intention of this deliverable is to provide speaker's assistance material to present an initial overview of the project that could accompany the flyer already available.

The presentation can be delivered in 20 minutes. The target audience would be people involved directly with either using, developing, or implementing e-infrastructures or grid technology. A certain level of understanding of grid software distributions, e-infrastructures and standards bodies is assumed. The talk does not present any results or technical details of work carried out under OMII-Europe.

The intention of providing this information is to increase awareness of the OMII-Europe project and, in particular, to encourage others involved in Grid technology to become involved with the project and so ultimately to increase the number of potential users of the project outputs.

This presentation will evolve over time and hence will be updated during the course of the project. The appendix contains the presentation although an electronic version is available on the website.

Distribution

This is a public talk that has been given on a number of occasions already. This includes a variation given to the Viola workshop in Germany (another EU funded project), and more recently given at the first OMII-Europe training event in Edinburgh. This presentation is available on the public website (www.omii-europe.org).

¹ As taken from the Annex I, version 1.0, page 18 approved by the EC.

Appendix – PowerPoint Presentation



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Project Overview

Professor Peter Henderson and Dr Alistair Dunlop
University of Southampton

What is OMII-Europe?

- **EU funded FP6 project (RI)**
 - Starting May 2006, initial 2 year duration
 - 16 partners (8 European, 4 USA, 4 Chinese)
- **Open Middleware Infrastructure Institute for Europe**
 - Complimentary to existing national programmes (OMII-UK, NMI, C-OMEGA, OMII-China...)
- **Goal is to provide key software components for building e-infrastructures**
- **Project will demonstrate “proof of concept” with expectation for a follow-on project in FP7**

What will OMII-Europe do?

- **Initial focus on providing common interfaces and integration of major Grid software infrastructures**
- **Common interoperable services:**
 - Database Access, Virtual Organisation Management, Portal, Accounting, Job Submission and Job Monitoring
 - Capability to add additional services
- **Infrastructure integration**
 - Initial EGEE/UNICORE/Globus **interoperability**
 - **Interoperable** security framework

OMII-Europe guiding principles

- **Committed to standards process**
 - Implementing agreed open standards and working with standards process (GGF/Oasis)
- **Quality Assurance**
 - Published methodology and compliance test
 - All software components have public QA process and audit trail
 - Working with similar projects and organisations to agree policies
- **Impartiality**
 - OMII-Europe is “honest broker” providing impartial advice/information on e-infrastructures

What will OMII-Europe deliver?

- **Repository of open-source, quality assured software services for EGEE, Globus, UNICORE and CROWNgrid**
 - Some services bundled with major grid distributions
 - Initial integration work with EGEE, UNICORE and Globus
- **Public reports on grid infrastructures**
 - Initial benchmark results
 - Impartial advice and information
- **Evaluation infrastructure to “test” services**
 - User support and training for services

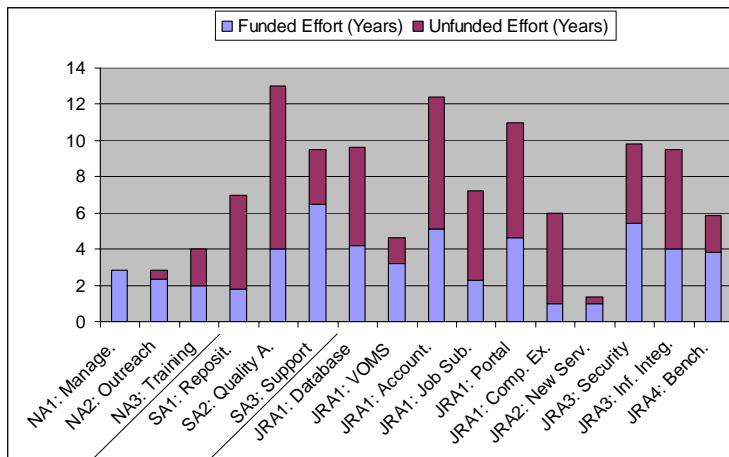
Who benefits from OMII-Europe?

- **E-infrastructure providers**
 - Choice of grid software to deploy can be determined by selecting the most appropriate system to manage resources.
 - Achieved through common interfaces and interoperability of grid systems
 - **Decisions not constrained by membership of a particular VO**
 - **Not required to deploy and manage multiple grid distributions**
- **E-science users**
 - Access to resources beyond the immediate e-infrastructure running a specific grid distribution
 - Achieved through low level interoperability of Grid distributions
 - **Users not restricted to a specific, fixed set of resources**
- **E-science application developers**
 - Applications can be deployed and run on multiple grid environments through adherence to common services
 - **Not required to develop different solutions for different grids**

Project Structure and Effort Allocation

- **Networking activities**
 - Management, Outreach, Training
 - 8% Person Effort
- **Service Activities**
 - Repository, QA, Support
 - 25% Person Effort
- **Joint Research Activities**
 - Re-engineering, new services, integration, benchmarking
 - 67% Person Effort

Effort (Person Years) per Activity



OMII-Europe JRA1 re-engineering activities

	OGSA DAI	BES	VOMS	RUS	Grid Sphere	Etc. Identified Components
EGEE (GLite)			↓			
UNICORE			↓			
Globus	↑		↑			
Etc. OMII-UK, USA, China		↑		↑	↑	↑

OMII-Europe Project Partners

114 person years over 2 years, 5 million Euro, 4 major Grid infrastructures

University of Southampton UK (coordinator)	University of Chicago USA
Fujitsu Laboratories Europe UK	NCSA, University of Illinois USA
Forschungszentrum Juelich Germany	University of Southern California Los Angeles USA
Kungl Tekniska Högskolan Sweden	University of Wisconsin-Madison USA
Istituto Nazionale di Fisica Nucleare Italy	Beihang University China
Poznan Supercomputing & Networking Center Poland	China Institute of Computing Technology Beijing China
University of Edinburgh UK	Computer Network Information Centre Beijing China
CERN, European Organisation for Nuclear Research Switzerland	Tsinghua University China

OMII-Europe Vision

To demonstrate that interoperable Grids can be built from standards-compliant Web Services and to deliver a set of quality-assured services, sourced from open source repositories, able to be used on the principal Grid infrastructures in use in Europe today.