

DORII+

Development of Remote Instrumentation e-Infrastructure

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Current project



Call

- **INFRA 2010-1.2.1: Distributed computing infrastructure (DCI)**
- **1.2.1.5 Extension of DCI platforms**
Extend existing DCIs to incorporate remote operation of scientific instruments like already existing research facilities of European interest and emerging ones (e.g. ESFRI roadmapprojects).

Motivations

- Extend existing DCIs with full schema of inclusion of the scientific instruments that enables remote operation
- filling gaps in current implementations
- **User-friendly environments mapping the different steps of a scientific process to the appropriate e-Infrastructure services**
- Enrich existing DCIs with novel paradigms
- following recommendations of e-IRG, OGF Research Groups...

Main objectives

- Virtual Research Environment - development of virtual environment which suites exactly user requirements
- Building a testbed installation demonstrating the usefulness of developed architecture
- Addressing ESFRI project requirements
- Extending DCI platforms by integrating heterogeneous computing infrastructure, data repositories with instrument infrastructure
- Service oriented instrumentation - remote access to physical instruments as a service
- Working out standards

Activities

WP2 - Dissemination and Knowledge Transfer

WP3 - Standardisation of Remote Instrumentation Services

WP4 - Deployment and management of production e-Infrastructure

WP5 - Deployment of Applications use cases over production e-Infrastructure

WP6 - Development of Service Oriented Instrumentation Middleware

Partners

Participant No.	Participant organisation name	Part. short name	Country
1 (coordinator)	Poznań Supercomputing and Networkng Center	PSNC	
2	Sincrotrone Trieste SCpA	ELETTRA	
3	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – OGS	OGS	
4	Consorzio Nazionale Interuniversitario per le Telecomunicazioni	CNIT	
5	Universität Stuttgart	USTUTT-HRLS	
6	Ludwig -Maximilians-Universitaet Muenchen	LMU	
7	Karlsruhe Institute of Technology	KIT	
8	Consejo Superior de Investigaciones Cientificas	CSIC	
9	Greek Research and Technology Network S.A	GRNET	

Additional information

- 2-3 years project
- Budget: 3+ Meuro
- Plans to work out standards of accessing remote instrumentation
- Support for existing and new equipments and sensors via a general framework allowing fast prototyping