

# CENTRE FOR PARALLEL COMPUTING RESEARCH PROJECTS

## DEGISCO: DESKTOP GRIDS FOR INTERNATIONAL SCIENTIFIC COLLABORATION

Funding Body: EU Programme: Framework Programme 7  
Start Date: 01/06/2010 End Date: 31/05/2012

### Partners

- Laboratory of the Parallel and Distributed Systems in the Computer and Automation Research Institute of the Hungarian Academy of Sciences (MTA-SZTAKI), Hungary (Coordinator)
- Centre National de la Recherche Scientifique (CNRS), France
- University of Zaragoza – Instituto de Biocomputación y Física de Sistemas Complejos, Spain
- Stichting AlmereGrid, The Netherlands
- Centre for Parallel Computing, University of Westminster, UK
- Academia Sinica Grid Computing, Taiwan
- Institute for Systems Analysis – Russian Academy of Sciences, Russia
- G.V. Kurdyumov Institute for Metal Physics, Ukraine
- JSC Kazakh-British Technical University, Kazakhstan
- Universidade Federal de Campina Grande, Brazil
- School of Computer, Huazhong University of Science and Technology, China
- Atos Origin S.A. Origin, Spain
- Platform Computing GmbH, Germany.

### Website

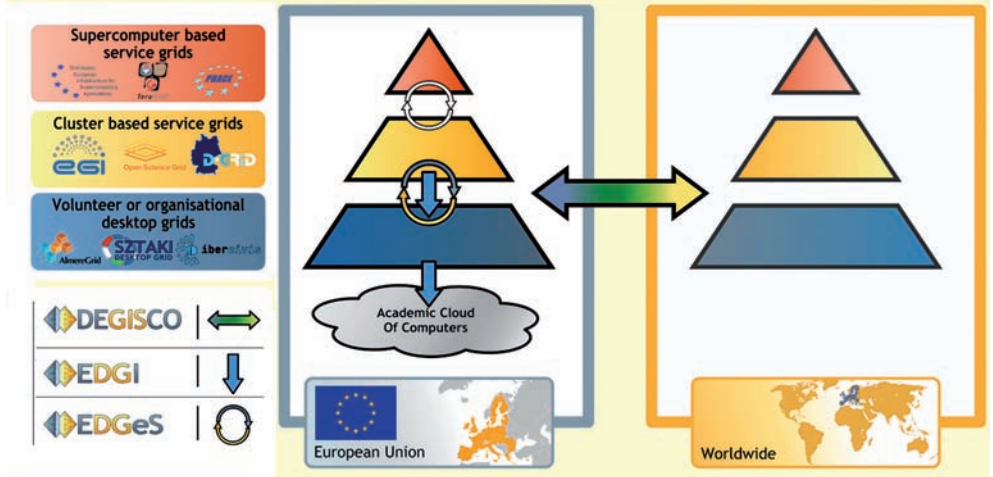
<http://degisco.eu/>



### Synopsis

The FP7 EDGeS project has successfully set up a production-level distributed computing infrastructure (DCI) consisting of more than 100,000 PCs from several volunteer and low-cost Desktop Grids, which have been connected to existing Service Grids (including EGEE, SEE-GRID, etc. with about 150,000 processors) based on the new 3G Bridge technology and application development methodology. The main aim of the DEGISCO project is the further extension of the European DCI infrastructure that is already interconnected by EDGeS to International Cooperation Partner Countries (ICPC) in strong collaboration with on the one hand local partners in ICPC countries and on the other hand European e-Infrastructure experts (including 3G Bridge know-how) and thus, reinforce the global relevance and impact of European distributed infrastructures. The project will support the creation of new Desktop Grids in ICPC countries and

## DEGISCO, EDGI & EDGeS



the connection of these Grids to European DCIs and existing Service Grids in ICPC countries by employing 3G Bridge technology. Moreover, building on the solid expertise of the DEGISCO partners, the project will provide recommendations on best practices and define joint roadmaps for ICPC countries and Europe. The application support activities of DEGISCO support the use of the already two dozen ported applications on new connected DCI's in ICPC countries and support new applications. The dissemination and training activities will promote via various channels such interoperation between Desktop Grid and Service Grid infrastructures on a global scale, which leads to more awareness under the general public of computational science

and distributed computing co-funded by the EC. As a result more citizens, students, and companies are expected to donate resources to scientific purposes. As part of these activities an International Desktop Grid Federation will be operated allowing for effective exchange of information through participation.

### Brief USP

Further extending the interconnected system of desktop grids built in EDGeS beyond the EU borders to include desktop grids in ICPC countries.

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