

EU-IndiaGrid2 Sustainable e-Infrastructures across Europe and India

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EU-IndiaGrid2 - Sustainable e-infrastructures across Europe and India capitalises on the achievements of the FP6 EU-IndiaGrid project and huge infrastructural developments in India. EU-IndiaGrid2 will act as a bridge across European and Indian e-Infrastructures, leveraging on the expertise obtained by partners during the EU-IndiaGrid project. EU-IndiaGrid2 will further the continuous e-Infrastructure evolution in Europe and India, to ensure sustainable scientific, educational and technological collaboration across the two continents. EU-IndiaGrid2 will leverage on the EU-IndiaGrid project achievements and the strong cooperation links established with the foremost European and Indian e-Infrastructure initiatives paving the way for successful sustainable cooperation across European and Indian e-Infrastructures.

EU-IndiaGrid2 aims to achieve sustainable EU-Indian e-Infrastructure cooperation by supporting a set of relevant applications, promoting their results, as well as the benefits and impacts of e-Infrastructures for Euro-Indian collaboration. In particular EU-IndiaGrid2 will address relevant Institutions and policy makers relying on the leading role of its partners in e-Infrastructure activities both in Europe and India

Objectives:

- O1) Consolidate & enhance cooperation between European and Indian e- Infrastructures for the benefit of EU-Indian collaboration in e-Science
- O2) Support specific user communities in the exploitation of grid infrastructure in areas strategic for EU-Indian collaboration
- O3) Ensure a sustainable approach to e-Infrastructures across Europe and India through dissemination actions, meetings & workshops
- O4) Foster and enhance cooperation with other European Initiatives in the Asian region and worldwide

Support activities: The project activities are organised within four main work packages. Liaison with other Projects & Organisations (WP2) will pursue cooperation activities with the most relevant e-Infrastructure initiatives and Institutions both in Europe and India, capitalising on the leading role of its partners in the most relevant European & Indian e-Infrastructures projects and on the close links already established with projects and relevant actors by the EU-IndiaGrid project. WP3, Operational infrastructure and interoperability support, will deliver support to the Interconnection and Interoperation of e-Infrastructures across Europe (EGEE-EGI) and India (WLCCG, GARUDA and National Knowledge Network (NKN)). WP4, User communities' support, will sustain a set of applications within user communities strategic for EU-Indian collaboration fostering the benefits of technology achievements on scientific collaborations. Close cooperation with WP2, WP3, WP5 will contribute to identifying and performing the necessary actions to favour optimal resources exploited by such user communities. WP5, Communication and Awareness raising will reinforce the global relevance and impact of the results achieved by the project and will contribute to increasing awareness and use of joint e-Infrastructures, identifying engaging and supporting a Euro-Indian e-infrastructure community.

User communities: EU-IndiaGrid2 targets a number of user communities in the project: Climate change is a worldwide concern and climate change studies are among the priorities in European and Indian research programs. In particular climate change is one of the flagship activities within the NKN program. EU-IndiaGrid2 aims to support climate change modelling studies on European and Indian e-Infrastructures thanks to the involvement of premier research groups with leading international reputations and a solid collaboration basis enhanced and strengthened in the course of EU-IndiaGrid.

High Energy Physics through the Large Hadron Collider (LHC) program represents one of the unique science and research facilities to share between India and Europe in the field of Scientific Research in general and in the ICT domain in particular. The Indian partners in the project represent both the ALICE and the CMS communities actively engaged in the LHC program. The role of the EU-IndiaGrid project in this specific activity has been widely recognized within the European Commission and the Indian Government and EU-IndiaGrid2 will continue its action in sustaining this community.

Biology and Material Science: these broad areas require computational tools and techniques spawning different disciplines: they will challenge the

project in setting up and providing cross disciplinary research services. The successful work of its predecessor EU-IndiaGrid, performed in these areas, allowed the establishment and the reinforcement of relevant EU-Indian collaborations supported by premier Institutions within the Consortium.

The project, approved within the call FP7-INFRASTRUCTURES-2009-1, started on January 2010 with a duration of 24 months. The Project Launch and Kick-off Event happened in conjunction with the EU-India Workshop on Research Infrastructures where the interesting perspectives for the project activity were enhanced. In addition the recent announcement of the approval by Government of India of the multi-Gb high speed National Knowledge Network and the availability in the next future of 2.5 Gb link from Europe to India and from India to Singapore in the context of the TEIN3 project set the conditions for extremely interesting opportunities for cooperation between Europe, India and the Asia-Pacific area in the e-infrastructures domain.