

SEE-GRID-SCI project

SEE-GRID-SCI (SEE-GRID infrastructure for regional eScience) is a 2 year project co-funded by the European Commission, starting on 01/05/2008. Infrastructure in Europe has reached a mature state where the GÉANT network forms a communications backbone on top of which a distributed computing infrastructure – the Grid – provides processing and storage services for eScience research. The South-East European infrastructure initiatives are committed to ensuring equal participation of the less-resourced countries of the region in European trends. SEEREN initiative has established a regional network and its GÉANT connection and the SEE-GRID initiative the regional Grid.

SEE-GRID-SCI leverages the SEE infrastructure to enable new scientific collaborations among user communities. SEE-GRID-SCI stimulates widespread infrastructure uptake by new user groups extending over the region, fostering collaboration and providing advanced capabilities to more researchers, with an emphasis on strategic groups in seismology, meteorology and environmental protection. The initiative thus aims to have a catalytic and structuring effect on target user communities that currently do not directly benefit from the available infrastructures. In parallel, it aims to enlarge the regional infrastructure to cater for demands of the communities by increasing the computing and storage resources and involving new partner countries in the region. Finally, SEE-GRID-SCI targets to help mature and stabilize the National Grid Initiatives in the region, allowing them to join the new era of longer-term sustainable Grid infrastructure in Europe. In longer term, SEE-GRID-SCI aspires to contribute to the stabilization and development of South-East Europe, by easing the digital divide and stimulating infrastructure development and adoption by new user communities, thus enabling collaborative high-quality research across target scientific fields.

Project Participants from Moldova. Moldova participates in the project as MD-Grid JRU Consortium with RENAM as Contractor and following third parties - JRU members: FRT-TUM - Faculty of Radioelectronics and Telecommunications of Technical University of Moldova IGS ASM - Institute of Geology and Seismology of the Academy of Sciences of Moldova SHMS State Hydrometeorological Service of Moldova. RENAM is responsible for NGI development and its sustainable operation, extension of the National Grid infrastructure by installation of new clusters and their inclusion into common Grid segment of Moldova and into the SEE-GRID infrastructure. RENAM assures operation of four Grid sites, support of development and functioning of applications in the fields of seismology, climate modeling, ecology and mathematics. RENAM is responsible for users and Grid sites engineers training and take part in dissemination and public relations activities. FRT-TUM cooperates with a significant number of universities and centres from different countries, participate in SEE-GRID-2 project as third party behind RENAM Association. The grid node installed at the faculty together with its grid infrastructure and specialists participate in SEE-GRID-SCI project offering resources for weather environment and earthquake monitoring applications development and use support in collaboration with regional neighbors from Romania, Bulgaria and Turkey. IGS ASM provides contributions on real-time monitoring of earthquakes and development of regional monitoring capacities, implementation of real-time seismic data processing and real-time data exchange at regional and international level. Despite the territory having high earthquake hazard and risk, its seismic activity remains poorly monitored. Moreover, cross-border data exchange and regional applications for data accumulating and processing, which are essential for good quality monitoring, are very limited. As a consequence, it is constraining ability to cooperate with the international research and engineering community. SHMS contributes to the environmental VO by testing and deployment of a pilot application. The service infrastructure and specialists are involved into MD-Grid JRU scientific research and production grid activities in requirements definition, input data provision and interpretation of results on national, regional and international levels. More details on the SEE-GRID-SCI project Meteo VO support Seismology VO support Environmental VO support