Brief summary of the open e-IRG Workshop on e-Infrastructure

Paris, 21-22 October 2008

Close to 100 participants attended the e-Infrastructure Reflection Group (e-IRG) workshop in Paris on the 21st and 22nd of October 2008. National e-IRG delegates, and representatives from the European attended the event, together with representatives of the European Strategy Forum on Research Infrastructures-Preparatory Phase (ESFRI-PP) projects, and European Commission funded e-Infrastructure projects. The workshop aimed to reinforce the interaction and dialogue between the ESFRI-PP projects and the main e-Infrastructure actors in Europe.

A recognised key enabling service in the European research infrastructure landscape is the e-Infrastructure. It stimulates scientific discovery by easing remote access to facilities, supporting massive research data exchange across Europe and the world, and creates a complete eco-system with nearly unlimited capacities for high performance computing, storage, data preservation and interoperability. New research infrastructures (RIs) are being conceived today and are in the process of integrating their facilities into the European framework. Once operational, the e-Infrastructure requirements of these new endeavours will raise challenges comparable to those the High Energy Physics collaborations posed some years ago. These challenges are not only related to the massive amount of data to be processed, maintained and stored, but also to the complexity of the processes and the interactions between organisations conducting the research work. Addressing these research and data processing challenges will be a key issue for the European Research Area (ERA) and is a prerequisite for realising the socioeconomic impact of the research investments.

The main objective of the e-IRG workshop was to strengthen the dialogue between the representatives of the planned major preparatory phase RIs and the major European projects that provide them with e-Infrastructure services. The focus was on identifying specific common fields of interest and on actions where significant improvements in the progress and efficiency of the research work of ESFRI projects would be realised – both during the construction and operation phases. To benefit from the common e-Infrastructure, challenges like efficient handling and storage of massive and complex data sets, operation and remote access to RIs need to be addressed. Collaboration between RIs and e-Infrastructures has already been shown to be crucial for the development of science and industry in Europe. Successful expansion of the scope of the e-Infrastructure collaboration into fields such as environment, humanities, biomedical and life sciences, material sciences and engineering can only be achieved through a continued exchange of information.

Some of the 35 ESFRI Roadmap 2006 projects presented their e-Infrastructure needs. It was widely concluded that the workshop represented an important step forward in strengthening the cooperation between the e-IRG and ESFRI communities. There was a broad consensus that the dialogue between user communities and the e-Infrastructure service providers is very important for both communities. Of special interest were the multifaceted data-related issues and the new landscapes of opportunities emerging as a result of extensive utilisation of e-Infrastructures in research. The challenge for the future is to manage the complexity of the data-related approaches with different types of stakeholders and requirements, and the numerous initiatives and projects promoting them. The possible role of the e-IRG Data Management Task Force in facilitating information exchange was a topic of active discussion in the workshop.