The CYCLOPS Project

Stefano Nativi

University of Florence (IT) and CNR-IMAA (Italian National Research Council - Institute of Methodologies for Environmental Analysis)

Abstract

This presentation will introduce the CYber-Infrastructure for CiviL protection Operative ProcedureS (CYCLOPS) project, funded in the priority: research Infrastructure – communication network development of the European FP6. CYCLOPS is a Specific Support Action of EGEE.

CYCLOPS main objective is to bridge the gap between Grid and GMES communities making Civil Protection people be aware of the services provided by Grid infrastructures, and, at the same time, letting Grid researcher to be aware of Civil Protection specific requirements and service enhancement needs.

The Global Monitoring for Environment and Security (GMES) concept was endorsed by the EU Commission to gather and use all available data and information in support of sustainable development policies. GMES has the potential to stimulate economic growth by creating innovative value-added services. The challenge for GMES is to use these services to enable decision makers to better anticipate or mitigate crisis situations and management issues related to the environment and security. The Final Report for the GMES Initial Period recognized the European Civil Protection (CP) as one of the GMES service categories. This report outlines the importance to develop enabling e-infrastructures and virtual organization services to serve specific GMES applications. Indeed, the EU EGEE (Enabling Grids for E-Science in Europe) project provides a powerful GRID platform to implement services for specific application Communities. However, GRID evolution has mainly focused on technology, while, GMES service have mostly been user-oriented. Thus, there is a need to cross-disseminating the approaches, requirements and visions of the diverse Communities, in order to fully exploit the GRID capabilities for GMES applications. CYCLOPS brings together these two important Communities: GMES and GRID, focusing on the operative sector and needs of European CP.

CYCLOPS main actions include: 1) To disseminate EGEE results to the CP Community, assessing EGEE infrastructure for CP applications. 2) To provide the EGEE Community with knowledge and requirements that characterize the CP services. 3) To evaluate the possibility to utilize the present EGEE services for CP applications, developing the research strategies to enhance EGEE platform. A valuable case in point is the Forest Fires use scenarios. 4) To develop the research strategies to enhance Grid platform, especially for Earth sciences resources, providing a sort of roadmap for the future European research activities.