Deep sea frontier infrastructure and synergy in Europe

Angelo De Santis (1), Phil Weaver (2), and DS3F Work Package 8 Working Group (3)

(1) INGV, Istituto Nazionale Geofisica e Vulcanologia, Roma, Italy (desantisag@ingv.it, 0039-0651-860397), (2) NOCS, National Oceanography Centre, Southampton, UK, (3) Different affiliations from European Institutions

Deep Sea monitoring and studies represent the new frontier of science.The aim of the Deep Sea Frontier Initiative is to identify and address the crucial technological and infrastructure needs of the deep-sear scientific community. Synergies amongst all scientific and technological partners in Europe and the rest of the world will continue to be the most important component for successful deep sea research. The FP7 European Project DS3F (Deep Sea and Sub-Seafloor Frontier) will provide a roadmap towards enhanced understanding and sustainability of the continental slope and deep sea of Europe and beyond. Among the nine DS3F Work Packages (WPs), WP8 – Infrastructure and Synergy, will identify the technological needs and survey the present availability of infrastructure and large exchangeable instruments at European level. Another element involves the prioritisation of infrastructure development, access and utilisation. This WP will also provide guidelines for the optimal sharing and use of seagoing facilities in partnership with the Eurofleets FP7 project. It will develop an Agreement/MoU to maintain access to scientific drilling through European membership to IODP, establish and develop in situ long-term monitoring observation capabilities by means of multi-parameter seafloor and borehole observatories and moorings, implement a network of laboratories in Europe to improve analytical and modelling facilities in conjunction with the development of data banking and computer based handling facilities able to deal with large data sets. Collaborations and partnerships with industry and international research programmes will be another important element to achieve the goals of the project.