Geophysical Research Abstracts
Vol. 14, EGU2012-7104, 2012
EGU General Assembly 2012

Towards a distributed infrastructure for research drilling in Europe

C Mevel (1), R Gatliff (2), J Ludden (2), G Camoin (3), B Horsfield (4), and A. Kopf (5)

(1) European Consortium for Ocean Research Drilling (ECORD), IPGP, Paris, France, (2) British Geological Survey, UK, (3) European Consortium for Ocean Research Drilling (ECORD), CEREGE, Aix en provence, France, (4) GFZ German Research Centre for Geosciences, Potsdam, Germany, (5) MARUM, Bremen, Germany

The EC-funded project “Deep Sea and Sub-Seafloor Frontier” (DS3F) aims at developing seafloor and sub seafloor sampling strategies for enhanced understanding of deep-sea and sub seafloor processes by connecting marine research in life and geosciences, climate and environmental change, with socio-economic issues and policy building. DS3F has identified access to sub seafloor sampling and instrumentation as a key element of this approach.

There is a strong expertise in Europe concerning direct access to the sub seafloor. Within the international program IODP (Integrated Ocean Drilling Program), ECORD (European Consortium for Ocean Research Drilling) has successfully developed the concept of mission specific platforms (MSPs), contracted on a project basis to drill in ice covered and shallow water areas. The ECORD Science Operator, lead by the British Geological Survey (BGS) has build a internationally recognized expertise in scientific ocean drilling, from coring in challenging environment, through down hole measurements and laboratory analysis to core curation and data management. MARUM, at the Bremen University in Germany, is one of the three IODP core repositories. Europe is also at the forefront of scientific seabed drills, with the MeBo developed by MARUM as well as the BGS seabed rocks drills. Europe also plays a important role in continental scientific drilling and the European component of ICDP (International Continental Scientific Drilling Program) is strengthening, with the recent addition of France and foreseen addition of UK.

Oceanic and continental drilling have very similar scientific objectives. Moreover, they share not only common technologies, but also common data handling systems.

To develop an integrated approach to technology development and usage, a move towards a
a distributed infrastructure for research drilling in Europe has been initiated by these different groups. Built on existing research & operational groups across Europe, it will facilitate the sharing of technological and scientific expertise for the benefit of the science community. It will link with other relevant infrastructure initiatives such as EMSO (European Marine Seafloor Observatories). It will raise the profile of scientific drilling in Europe and hopefully lead to better funding opportunities.