First-Year Assessment Report of EMCOL Advisory Committee

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During the EMCOL Advisory Committee (EAC) meeting held at the Faculty of Mines (ITU) 19-20 April 2006, the first-year activity and progress of the EMCOL project was presented by the coordinator Prof. N. Cagatay. The progress report was discussed with the EAC members. Thereafter the EAC members spent a few hours visiting the different laboratories, storage facilities and looked at some field equipment. In addition, the EAC members had the chance to talk to the EMCOL graduate students as well as individual EMCOL team members. The general impression was that a lot of progress has been made in a very short time. Following the EAC meeting on April 20, which reviewed the status and progress of the EMCOL working packages (WP) in more detail, the EAC has made the following assessment on the first year status of the EMCOL project:

WP1: Fully refurbished laboratories are in place, which fulfill modern standards in terms of space and technology. The management of the laboratories is functional and the personnel assigned to the project allows efficient use of the equipment for both technical operation and accurate data acquisition.

WP2: EMCOL is formed by a combination of senior and junior scientists, students and technicians. Considering the relatively short time EMCOL exists, it is positive to see that they have already one PhD student supported by EMCOL funds, two students supported by TUBITAK (Turkish Scientific and Technological Council) and 3 part-time students by ITU (Istanbul Technical University). According to the observation of the advisory committee the EMCOL team is highly motivated and enthusiastic towards accomplishing the EMCOL objectives. Involvement of potential users of EMCOL equipment in the monthly meetings of the EMCOL Management Committee will provide a broad use of the facilities once the infrastructure has been completed and is fully functional.

WP3: EMCOL was able to put in place infrastructure consisting of high-tech-instrumentation (e.g. XRF-Scanner) as well as low-cost, locally produced equipment (e.g. sediment traps and platform used in lake research). In particular the purchase of non-destructive core analysis technology (XRF-Scanner and Multi-Sensor-Core-Logger) will allow data acquisition with very high vertical (time) resolution and subsequent numerical (multi-component) analysis highly demanded in modern research projects. The new parametric subbottom profiler (INNOMAR model SES 2000) will allow innovative research in particular in the field of earthquake investigation and risk analysis because the lateral resolution of the system is significantly better than that of non-parametric systems. It is the impression of the EAC that the selection of equipment was carefully prepared and well thought through with respect to the research tasks EMCOL is going to support. The entire laboratory and field equipment of EMCOL is already on a very high technical level comparable to well-equipped top-science institutions in the EC. The high publication record of the EMCOL team gives the impression that the investments will be utilized with high scientific efficiency. For purchase of the Geotek MSCL it is recommended to buy a gamma-ray attenuation sensor to ensure determination of density/porosity with a high vertical resolution, which also includes fresh-water sediments.

WP4: First attempt on training of the EMCOL team has already been accomplished by

inviting instrument-specific experts. It is understood that contacts were established with EC institutions on further training of students and young scientists during the second year of the project. It is the impression of the EAC that the use of equipment already installed in the laboratories is fully understood and started to produce highly sophisticated scientific results (e.g. on a high-resolution Holocene record from the Black Sea).

WP5: The EMCOL team has already taken steps towards integration with the EC scientific community by presenting the EMCOL project and its scientific results produced with EMCOL infrastructure on national and international conferences. The EMCOL team is active on developing further international collaborations by participating in EC proposals. The advisory committee is convinced that this will attract more local and international graduate students to join the EMCOL team in the future and/or use EMCOL infrastructure. The advisory committee encourages EMCOL to develop links with advance undergraduate students for their future utilization of EMCOL infrastructure.

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