TTR LISTING

1. Partner 1: NOCcruise
   D297 via the Classroom@sea website

2. Partner 3: NIOZ
   The cruise RV Pelagia (64PE 238 June 21- July 21) to the Rockall Bank area was attended by 4 university students who produced written reports for their respective university. One of the students joined the cruise in collaboration with L.Thomsen (Partner 18) to work on public outreach by making small videos and to help with the cruise diary which was published on the web (www.nioz.nl).
   The cruise results will become part of a planned exhibition on deep water coral ecosystems in the ECOMARE centre for coast and North Sea in 2006. In 2004 ECOMARE had a total number of 360,000 visitors.

3. Partner 17: Instituto Hidrografico
   During the reported period an internship was offered to a student from the International University of Bremen. The internship involved a period of one week at IH, were the student accompanied the final stages of the preparation of the D.Carlos I cruise and got a global view of IH activities. Between 11 and 30 July 2005 the IUB student participated, onboard the D.Carlos I, in the two phases of the CruiseIHPT2005-HERMES02cruise, integrating in the scientific teams.

4. Partner 18: IUB
   During summer 2005 three undergraduate students were sent to two different field campaigns at the Iberian and Norwegian continental margin. For the HERMES outreach the students wrote cruise diaries which were accessible during the cruise via internet (see cruiseplan for RV Pelagia for 2005

5. Partner 24: OGS
   During the course of the OGS summer 2005 acquisition campaign in the Ionian Sea, three activities were undertaken as contributions to WP10:
   a) Video recording of the various activities aboard the OGS Explora while at sea, both on deck (e.g. SVP and coring, deployment/recovery of the seismic acquisition system) and below decks (multibeam and subbottom data registration, preliminary data processing). The recordings (c. 6 hours) will be edited to produce educational films for presentation and/or distribution to schools. Two main subjects are envisaged, ‘Geoscience at Sea – Working on an Oceanographic Research Vessel’ and ‘Discovering Mud Volcanoes in the Deep Sea’.
   b) Interviews with a southern Italian newspaper, the Gazetta del Sud, resulting in an article describing the purpose of the work by the OGS Explora and the discovery of a new province of mud volcanoes on the Calabrian Arc.
   c) Contribution of three bulletins to the HERMES website reporting the progress of the acquisition campaign and the discoveries made.
Objectives for next 6 months: Edit and montage the video footage acquired aboard the OGS Explora during the summer 2005 campaign and to write texts to accompany two educational films, one on ‘Geoscience at Sea – Working on an Oceanographic Research Vessel’ and the other on ‘Discovering Mud Volcanoes in the Deep Sea’.

6. Partner 31: University of Aveiro
We were involved in the training of undergraduate and PhD students during the Training Through Research Cruise (July-August 2005, RV Prof Logachev – IOC). During the cruise, hands-on training in an active research environment was provided. Trainees contacted with several sampling methodologies in the fields of geophysics, sedimentology, biology and microbiology, and could collect data for their own research projects. There were daily seminars and student presentations as well as interpretation and discussion of the results obtained during the cruise.

7. Partner 33: IOC-UNESCO
IOC, in co-operation with several partners such as Moscow State University (Russia), National Oceanography Centre Southampton (UK), Ghent University (Belgium), University of Bremen (Germany), University of Aveiro (Portugal), Rabat University (Morocco) organized and convened, between 6 June and 5 August 2005, the 15th cruise of the Training-through-Research (TTR) programme. The cruise was carried out on board the R/V Professor Logachev (Russia). The TTR-15 cruise was a contribution to WP10 (Education and Public Outreach). Training was provided in three geographical areas: Legs 1 and 2 took place in the Black Sea (4 June- 1 July), Leg 3 – in the Mediterranean Sea (1-18 July) and Leg 4 in the Gulf of Cadiz (19 July- 4 August).

The guiding principle of the TTR programme (of IOC) is a combination of advance research with formal education and on-the-job training, both on board the research ship and in shore-based laboratories.

Training was provided to a total of fifty (50) students from the following 13 countries: Belgium, China, Georgia, Germany, Italy, Morocco, Mozambique, Portugal, Russia, Spain, Switzerland, Turkey and UK (see list in Annex I). Thirty of them were undergraduate students, six - M.Sc. students, 11- PhD students and three post-doc young professionals.

Shipboard training was provided by two ways. Every morning a lecture or a seminar was hold for students and other participants. Lectures, related to subjects of the cruise’s research objectives, were given by co-chief scientists and other leading researchers. Students learned about various deep-sea processes, such as: sedimentary processes, cold seeps at continental margins, gas hydrates, tectonics, geophysical methods etc. This was followed by on-the-job training in data collection, analysis and interpretation. Also, two one-day “Logachev Conferences at Sea” were held in order to give the students an opportunity to present and discuss their research findings.
The equipment used for research and training included: a single-channel high-resolution seismic system with airgun sources, an OKEAN long-range side-scan sonar, a hull-mounted 3.5 kHz profiler, a MAK deep-towed system containing a high- to middle-resolution side-scan sonar and a 5.1 kHz sub-bottom profiler. A 6-m gravity corer, a box corer, a kasten corer, a CTD system, an under-water digital TV camera, a TV-controlled grab and a dredge were also used for more detailed studies.

At seminars, a challenging opportunity was given to the students to present their current research topics and discuss them with other students and senior colleagues. Also, research results of each leg were discussed, to familiarise the students with methods of scientific synthesis (see Annex II).

The students, guided by group leaders, were also involved in report writing (a detailed scientific cruise report is normally published by IOC within one year of the cruise’s termination).

The list of students trained within the TTR-15 cruise, as well as the list of lectures and seminars are given in Annexes I and II.

Objectives for next 6 months: a post-cruise conference scheduled for end-January-early February will contribute to this WP. At the conference the students will have an opportunity to present and discuss their research results and make plans for further research. IOC will publish the conference proceedings (abstracts/short papers). The students’ preparation for and presentations at the conference will be part of their training in science.