GEOTRACES Report to SCOR - 2004

The international GEOTRACES Planning Committee met for the first time in Oxford, UK, on 31 May-June 3 2004. All 11 Full Members of the committee attended, as well as 7 of the Associate Members. The meeting began with introductions by meeting participants, followed by a presentation about the evolution of large-scale ocean research projects by Ed Urban (including a description of how SCOR would interact with the group, in terms of oversight, funding, and services provided). Presentations were made about the four national GEOTRACES meetings held to date, as well as relevant activities in Japan:

- USA (Bob Anderson)
- UK (Gideon Henderson)
- France (Catherine Jeandel)
- Germany (Martin Frank)
- Japan (Toshi Gamo and Jing Zhang)

The plans of other international ocean science projects were discussed, to determine what makes a good Science Plan and what GEOTRACES is trying to achieve with the plan. The major goals of project were discussed, as well as its major selling points, how to focus the project on key questions, and how to structure the science plan around these questions. Following this discussion, the group developed an outline for the science plan. It will be built around two themes:

- Theme 1—Modern cycling of TEIs: micronutrients, contaminants, baseline, particle cycling, global change present). That is, everything we want to learn about modern processes.
 - Interfaces: atmosphere, freshwater, ocean margins, mid-ocean ridges
 - Internal cycling: biogeochemical, physical (circulation, particles),

The research proposed will cross-cut the research being planned/conducted by other international projects (e.g., SOLAS, IMBER, LOICZ, InterRidge, MARGINS, ODP, CLIVAR), so the GEOTRACES plan will be careful to specify how GEOTRACES research can contribute to the research being planned/conducted by related projects. The GEOTRACES Planning Committee includes one Full Member who is a member of the SOLAS SSC and another who is a member of the IMBER SSC. Formal liaisons will be established with other international research projects.

- Theme 2—Development of Proxies: helping to understand the past environment, global change past
 - What controls the proxies in the water column?
 - How are the proxies recorded?
 - Coring

One member of the GEOTRACES Planning Committee is a member of the SCOR/IMAGES WG 124 on Analyzing the Links Between Present Oceanic Processes and Paleo-Records (LINKS). Formal liaisons will be established with SCOR/IMAGES WG 123 on Reconstruction of Past Ocean Circulation (PACE) and with IMAGES.

Based somewhat on the international SOLAS *Science Plan and Implementation Strategy*, the group agreed to a structure for each of the science sections with five subheadings:

- 1. Present understanding
- 2. Areas for advance (i.e., general area where more understanding is desirable)
- 3. Specific Objectives (i.e., deliverable goals of a 5-10 year programme)
- 4. Implementation (brief suggestions only this is not designed to be a full implementation document)
- 5. Interaction with other programmes

The plan will also include sections on modeling (enabling and synthesis); standards, sampling protocols and intercalibration; data management; sample archiving (water, aerosols, cores); project structure and management; working groups and standing committees; education and outreach, relationships with other projects; timeline; and deliverables. For other sections there is no need to conform to a particular format. The approximate timeline for writing of the science plan was agreed to be

End June:	Those tasked with writing up sections to complete task and return to co-chairs.
End July:	Chairs complete first draft and return to planning group members
End Aug:	Comments on full draft from planning group members
Sept:	Continued improvement of draft and presentation at SCOR meeting in Venice
Sept-Oct:	Feedback sought from wider marine chemistry community
Nov:	Sub-group of planning group meets to finalize draft plan and identify any areas
	still requiring work.

The committee determined that, in addition to the editorial meeting, it would be useful to plan meetings of subgroups for data management, and for standards and intercalibrations. SCOR has informed the co-chairs that NSF has approved funding for these meetings. The next meeting of the full planning committee will be held in May or June 2005.