SCOR/IOC Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB) Programme

GEOHAB was created by SCOR and IOC to promote international research to study the ecological and oceanographic mechanisms underlying the population dynamics of harmful algal blooms (HABs) in comparable ecosystems worldwide. Such knowledge will be used to develop predictive models of HABs. GEOHAB published its *Science Plan* in 2001 and its *Implementation Plan* in 2003.

For the purposes of implementation, the GEOHAB SSC adopted a three-category system for defining and endorsing GEOHAB research:

1. Core Research is comparative, interdisciplinary, international, and directly addresses the overall goals of GEOHAB as outlined in the GEOHAB *Science Plan*. Core Research will involve scientific co-ordination by the SSC and comprises oceanographic field studies conducted in, and application of models to, comparable ecosystems, supported by identification of relevant organisms; and measurements of the physical, chemical, and biological processes that control their population dynamics.

2. Targeted Research addresses specific objectives outlined in the GEOHAB *Science Plan*. Targeted Research may be solicited by the SSC as the need arises from Core Research Projects.

3. Regional/National Research is coordinated at a regional or national level rather than by the SSC, but may be endorsed by GEOHAB. For endorsement by GEOHAB, Regional/National Research activities must share objectives with GEOHAB in furthering the understanding of the ecological and oceanographic mechanisms underlying HAB population dynamics, but may have other overall objectives. Parts of Chinese GEOHAB (CEOHAB) have been endorsed by the GEOHAB SSC.

The present focus of GEOHAB is the development of detailed plans for Core Research in four ecosystem types:

1. Upwelling Systems
2. Fjords and Coastal Embayments
3. Eutrophied Systems
4. Stratified Systems

Small open science meetings have been held for the first two topics and the other two will be held in 2005. These meetings will provide the basic information for the Core Research Project plans for each ecosystem type.

Included in the *Implementation Plan* are Framework Activities that are not research, but will facilitate the implementation of GEOHAB. They serve to enhance the value of research by ensuring consistency, collaboration, and communication among researchers, and include scientific networking and co-ordination of resources, data management, specification of protocols and quality control, capacity building, interaction with other programmes and projects, and resources and funding.

The next meeting of the GEOHAB SSC will be held in Cape Town, South Africa in November 2004. The focus of this meeting will be on the Core Research Projects and their implementation and future management, the development of targeted research projects (specifically those related to modelling and observation systems), the development of standard measurement protocols within GEOHAB, and the formulation of a GEOHAB data committee.