

Minutes of the Fifth Meeting of the InterMARGINS Steering Committee

25th April 2002

Acropolis Conference Centre, Nice, France

1. Introduction

1.1 The Chairman, Professor Bob Whitmarsh, opened the meeting at 1610 hours. Those present were Dr Warner Brueckmann (Germany), Dr Bilal Haq (NSF, USA), Dr Wonn Soh (Japan) and Professor Tony Watts (UK). Dr Juergen Mienert (Norway) attended for only a brief period because of other commitments. Apologies for absence were received from Professor Sierd Cloetingh (Netherlands), Dr Paul Egerton (ESF), Dr Gary Karner (USA), Drs Hans-Christian Larsen and John Hopper (Denmark), Professor Onno Oncken (Germany), Dr Luis Pinheiro (Portugal) and Dr Wyss Yim (Hong Kong, China).

1.2 The tabled Agenda for the meeting was agreed.

1.3 The Chairman introduced the meeting by briefly recounting the history of InterMARGINS to date. He reported that he had taken over the InterMARGINS Office in October 2001 from Dr Brueckmann and stated that his main objective was to build on the work of Dr Brueckmann by increasing communication, and strengthening contacts, with the continental margins research community world-wide.

2. Minutes of the last meeting

The Minutes of the last meeting, which took place on 25th June 2001 in Edinburgh, Scotland, had yet to be finalised but brief notes were tabled. Final Minutes will eventually be posted in the InterMARGINS web site.

3. Membership

The Chairman reported that currently Japan, USA and (very soon) UK were paid up members of InterMARGINS. More members were welcome. The subscription for Full membership was \$15,000 and for Associate membership was \$5000. Members discussed future membership. Concern was expressed that no contact had been established at Academy-of-Sciences level with China. Dr Haq offered to try and make such a contact during an upcoming visit to Qingdao, China **[Action Dr Haq]**.

4. National Reports

4.1 **USA.** Dr Haq, on behalf of the USA MARGINS Program, presented a report of MARGINS activities. In February 2002, 36 proposals had been received by NSF of which 11 are planned to be funded at a total cost of \$6.0m. This includes new funds of ca. \$1.0m. The funded projects included the Rupturing Lithosphere (Gulf of California) (1), the Subduction Factory (5) and the Seismogenic Zone (2). In addition a new Source-to-Sink sub-program had started in 2002 with target areas in Papua New Guinea (Fly River). Two Fly River projects had been funded. Finally a Subduction Factory Workshop on the Izu Bonin-Marianas System had been funded jointly with Japan and would take place in Hawaii later in 2002. Although the northern Red Sea remained a prime target area for MARGINS, recent events had led to greatly increased operational costs and difficulties in the areas. Drs Karner, Haq and Jim Cochran (LDEO) visited the Geological Survey of Saudi Arabia in 2001 and had been well received.

Dr Haq reiterated that all MARGINS cruises welcomed participation by scientists from adjacent coastal states. Dr Haq finished by outlining the plans for a 'community sediment model' for the Source-to-Sink initiative. NSF was concerned that although good models existed for various components, there was no overarching consideration of the entire 'source to sink' system. There is a need to develop protocols so that the parts can be linked together. The community was enthusiastic and land and sea-based scientists, as well as mathematical modellers and software experts, had attended a recent MARGINS workshop. A proposal in this area may be submitted by the community to NSF. The Source-to-Sink science plan was also being revised and improved.

4.2 Japan. Dr Wonn Soh reported on margins research activities within Japan since June 2001. Several workshops were planned or had taken place. Workshops on the Nankai Trough Seismogenic zone would take place in Tokyo (May 2002) and California (June 2002). A workshop on the drilling of the Chelungpu Fault (Taiwan), the site of a deep earthquake in 1999, by the International Continental Drilling Program took place in Chunli in June 2001 and was attended by ca. 70 people. A second workshop was planned in Tokyo in July 2002. Lastly a joint Japan/Korea workshop was planned in Kyonju in September 2002 to discuss scientific drilling in the Sea of Japan. Cruises during 2001 included several to the Nankai Trough (ODP Leg 196, KAIKO and others) and studies of gas hydrates on the Kuroshima Bank (Okinawa Trough), involving long-term monitoring of the sea bed, of seepages at Hatsushima (Okinawa Trough) and related to the biosphere at Archaean Park, Suiyo Seamount (Izu Bonin-Marianas). In 2002 cruises were scheduled to the following places, Sunda Strait using the SHINKAI 6500 submersible, Mariana Arc using OBS and seismic profiles (jointly with scientists from USA), Nankai Trough (further IODP site surveying with backscatter acquisition), Archaean Park and Kuroshima Bank (gas hydrates). Dr Soh ended by noting that Japan's InterMARGINS Programme has no funds for margins research. Finally, he emphasised that Japan is keen to lead the co-ordination of research on continental margins in the Asian region.

4.3 United Kingdom. Professor Watts reported on activity within the UK's Ocean Margins LINK programme which is funded by the Natural Environment Research Council to the tune of £4.5m over 5 years. It is the intention that this funding is matched by an equal amount of industry support. He recalled that the programme began in FY1999-2000 and was due to end in FY 2005/2006. The programme had three main target areas (deep structure, sediments and fluids). Further details are available on www.nerc.ac.uk/funding/thematics/oceanmargins. At first, 8 small start-up projects had been funded. Subsequently, 7 full projects had been funded including some acquisition of data in the North and South Atlantic oceans and in the Mediterranean. Currently, a further 6 full projects were under consideration for funding. Other funds were being used on training (research students and postdocs), data archiving and programme administration. Prof. Watts ended by stating that he was optimistic that in future the requirement for UK scientists involved in Euromargins to find 50% funding from industrial sources would be relaxed.

4.4 European Science Foundation (ESF). Professor Watts, being best qualified among those present, also reported on the current state of the Euromargins project. He reminded the Committee that Euromargins had grown out of ESF sponsored workshops and an ESF Network which had taken place since 1997. The original plan, which had been broadly followed, had been to fund two phases of research. Euromargins had become the ESF's first EuroCores Programme; such programmes were started in 2001 to encourage international co-operative research funded by national funding agencies.

The Management Committee consisted of the representatives of 10 such agencies and the formerly named Science Steering Committee had members from 9 countries. In a first call for outline projects 61 proposals were received of which about 30 were asked to prepare full proposals. These proposals, received by 1st March 2002, were currently under review. Decisions were expected in September 2002.

4.5 Germany. The Chairman read a short report supplied by Professor Oncken. The principal activities had been,

4.5.1 The national German Margins program - funded by the Ministry of Science - was published with a call for pre-proposals by the end of summer 2001. Some 27 pre-proposals were submitted, 7 of which were requested to submit full proposals. It is estimated that between 2 to 4 of these projects will be funded. Decisions will be taken during the summer and it is expected that the program should be up and running by the start of 2003.

4.5.2 Three major margin-related programs funded by the German Science Foundation are currently active (Andes, Middle America, Hellenic arc). One of them, the Andes program which is headed by Prof. Oncken, has recently been extended for another three years following international review.

4.5.3 Discussion on the future funding of the German research vessel *Sonne*, a key component of many margin-related projects, is drawing to a close. It now appears that the ministry will be ready to extend the contract for the ship for several years to come. This may also have some impact for future joint international activities.

4.5.4 Last autumn 2001 a joint international symposium by German earth science societies was held in Kiel with the topic 'Margins'. It was the most successful geodynamics meeting held during the past decade in Germany with a very large attendance by an international audience.

4.6 Portugal. The Chairman read a short report supplied by Dr Pinheiro. Although no national margins organisation exists at present in Portugal an energetic group of scientists, mostly from Lisbon and Aveiro, were carrying out significant research offshore Portugal often in collaboration with scientists from Italy, France, Spain and the USA. Dr Pinheiro reported that he and Dr Luis Matias (Lisbon) had recently completed the pre-stack depth migration and time migration of several industry standard multichannel seismic reflection profiles across the Tagus Abyssal Plain collected by the EC-funded Iberia Atlantic Margins (IAM) Programme in 1994. Dr Pinheiro also planned to search for gas hydrates off west Iberia as expressed by bottom-simulating seismic reflections. Dr Matias had funds to shoot a wide-angle seismic line with OBH's southwards from Cape St Vincent in summer 2002. Working with French and Italian scientists investigations of the north-south Marques de Pombal structure (thrust fault?) located off SW Iberia, a possible hypocentre of the 1755 Lisbon earthquake, were continuing. Finally, in the Gulf of Cadiz, Dr Pinheiro had used the Russian ship *Logachev* over two summers to investigate fluid flow from the accretionary prism associated with the Eurasia/Africa plate boundary. Mud volcanoes and carbonate chimneys had been discovered. Further work was planned in the Gulf of Cadiz both this summer and, if funded by Euromargins, later with Dr Henriët (Belgium).

4.7 China. A brief note had been received from Dr Wyss Yim regarding his activities on investigating continental shelf sedimentation.

4.7.1 The International Geological Correlation Programme (IGCP) Project No. 464 'Continental shelves during the last glacial cycle' held its first annual conference in Hong Kong on 25-28 October 2001. It was attended by about 60 participants.

4.7.2 The International Association of Sedimentologists (IAS)/Society for Sedimentary Geology (SEPM) Environmental Sedimentology Workshop on Continental Shelves: Processes, Record, Utilization and Management was held in Hong Kong on 7-10 January 2002. It was attended by about 50 participants. A special publication of the IAS is being planned.

4.7.3 The IGCP Project No. 464 second annual conference will be held in Brazil in late August 2002.

4.7.4 An oral and poster symposium is planned for the INQUA Congress in Reno 2003 focusing on Continental Shelves, Karsts and Drylands. See .

4.8 Norway. Dr Mienert reported that a national programme (NORMAR) had been set up in Norway. The principal scientists involved were Professor Olav Eldholm, Dr Jan Faleide and himself. The Acting Chairman was Dr Faleide. A new web site was being set up which would include active proposals, areas of research work, objectives of the programme, publications, research teams and much more. Some of the research was directly supported by industry and the results were therefore commercial-in-confidence; approval would be needed to supply results from such research. NORMAR was keen to join InterMARGINS as a fully paid-up member and the Chairman was requested to send a letter of invitation [Action Prof. Whitmarsh].

5. InterMARGINS Office report

5.1 Meetings. The Chairman reported on his activities since taking on the InterMARGINS Office in October 2001. Although it had not been possible for him to attend the Fall AGU meeting in San Francisco InterMARGINS had jointly sponsored a MARGINS Town Meeting there on the Nankai Trough and the Seismogenic Zone.

5.2 Web Site. The principal activity had been to refresh the InterMARGINS web site (www.intermargins.org). This was now available and included a new feature which was global maps of Scheduled and Recent (since 1999) research cruises. The maps had clickable icons and provided outline details of cruises. The Chairman reminded the Committee that this new feature would only be as useful as the information received. He invited members, as national representatives, to draw this feature to the attention of their colleagues and if possible to collate and transmit such information to the InterMARGINS Office.

5.3 Finance. The Chairman reported that InterMARGINS was in a sound financial position. Three full subscriptions of US\$15,000 had been received in about the last 18 months whereas outgoings were approximately US\$2000 (Nankai meeting December 2001 \$1300, Chairman's attendance at EGS XXVII \$700). Two further full subscriptions were expected in the near future. Outgoings were expected to increase during the current year depending on the extent and nature of future growth of activities.

5.4 Authorisation of expenditure. The Committee unanimously agreed to give the Chairman authority to spend up to US\$1000 at a time. Larger sums would require clearance from the representatives of the member countries which were paid-up full members of InterMARGINS.

6. Future objectives

The Chairman opened a discussion of future objectives and invited suggestions.

6.1 Newsletter. Dr Haq expressed Dr Karner's and his own view that it was very important to produce a hardcopy (paper) Newsletter. Such a Newsletter would reach those who were unable to use, or not in the habit of using, the Internet. It would also be a good place to advertise the InterMARGINS Web site.

The Chairman agreed but said that a successful newsletter would depend on contributions from the community. It was recognised that this was in part a chicken and egg situation. The Chairman agreed to prepare a Newsletter before the December 2002 AGU meeting in San Francisco [Action Prof. Whitmarsh].

6.2 Workshops and meetings. The Chairman asked for reactions to the idea of sponsoring a workshop on research on conjugate pairs of rifted continental margins e.g. the Newfoundland and west Iberia margins. Without exception conjugate margins were in different countries and for scientists working on such margins to collaborate and exchange ideas required specific assistance or incentives. The Committee agreed in principle and asked the Chairman to investigate what assistance might be required, for example in the form of travel grants, to set up such a meeting [Action Prof. Whitmarsh]. The Committee also agreed that InterMARGINS should sponsor special sessions at conferences and could financially assist speakers or perhaps students with travel to such meetings. It might however be appropriate to give first priority to assisting people from countries that were fully paid-up members of InterMARGINS.

6.3 Technology. It was agreed that a longer term aim could be to prepare lists of facilities or sea-going equipment e.g. submersibles, OBS, or even ships, suitable for margins research that were available for charter, barter or exchange.

7. Integrated Ocean Drilling Program (IODP) plans for margins drilling

Dr Soh raised his concerns at the slow progress in planning for IODP drill sites on continental margins. Dr Soh stated that firm proposals were needed quite urgently but no support system appeared to exist yet within IODP for drilling by either the *DV Chikyu* or by the replacement for the *DV JOIDES Resolution*. Most members were less concerned and pointed out that some excellent ideas for proposals had been put forward in the reports of the CONCORD and COMPLEX meetings. They suspected that mechanisms would soon appear and that planning was going on in the background. It was agreed that an article on IODP margins drilling should be part of the planned Newsletter. The Chairman also agreed to seek out .pdf copies of the CONCORD and COMPLEX Reports and mount them on the InterMARGINS web site [Action Prof. Whitmarsh].

8. Any other business

8.1 Logo. It was suggested that a new logo should be designed by a competent designer which could be used in sponsoring meetings, flyers and other announcements [Action Prof. Whitmarsh].

8.2 Vote of thanks. Finally the Committee unanimously and warmly thanked Dr Brueckmann for all his work, over the period 1999-2001, which he had put into setting up the InterMARGINS Office at Geomar and for creating the original InterMARGINS web site.

9. Dates of next meetings

It was agreed that the next two meetings of the InterMARGINS Steering Committee would take place in the periods 6th-10th December 2002 in San Francisco (Fall AGU) and 7th-11th April 2003 in Nice, France (joint EGS/EUG/AGU meeting). The precise dates would be chosen later.

10. Closure of the meeting

There being no further business the Chairman thanked members for travelling to Nice and closed the meeting at 1845 hours.