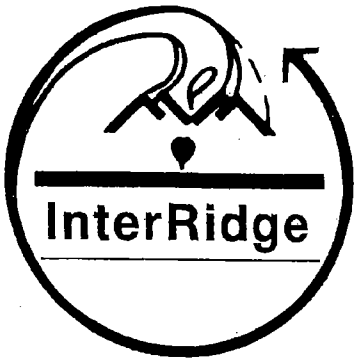

InterRidge

Steering Committee Meeting December, 1994
Report

AGU Fall Meeting, Moscone Center
San Francisco, CA, USA
6 December, 1994

Chair:
Roger Searle

Contents

InterRidge Steering Committee Meeting December, 1994
Participant List

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Absent: Daniel Desbruyères, Charlie Langmuir, David Needham and Martin Sinha

InterRidge Steering Committee Meeting December, 1994
San Francisco, USA, 6 December, 1994

AGENDA

Introduction and Welcome (Chair)

Apologies for Absence

Minutes of last meeting

Report of the Co-Ordinator

InterRidge Budget

Project Reports
4-D Architecture of the Oceanic Lithosphere Project
SWIR Project

InterRidge Steering Committee Meeting
December, 1994 Report

The meeting was chaired by Roger Searle and attended by the following members of the Steering Committee: Bob Detrick, Jeff Fox, Jean Francheteau, Kensaku Tamaki and Tesuro Urabe. Heather Sloan attended as InterRidge Co-Ordinator and Dave Epp as an observer.

Apologies for their absence were received from Daniel Desbruyères, Charlie Langmuir, David Needham and Martin Sinha.

1. Minutes of the last Meeting

The "InterRidge Steering Committee Meeting 1994 Report" and associated documents were tabled by the Chair. Acceptance of the report was deferred to the next Steering Committee Meeting in order to give all Steering Committee members the time to review and comment on its contents.

2. Co-Ordinator's Report

Germany has confirmed that it will be joining InterRidge in 1994 as an Associated Member. Portugal has also paid its 1994 Associate Membership Fee. National Correspondents in both countries have been invited to name representatives to the Steering Committee in accordance with section 7.3 of the InterRidge Program Plan.

3. Meso-Scale Workshop: "4-D Architecture of the Oceanic Lithosphere"

3.1 Summary presented by the Chair

The meeting recommended three designated experiments to take place under Phase 2 of InterRidge. In each, there should be considerable emphasis on the linking of geophysical imaging with outcrop geology.

3.1.1 Fast-spreading experiment: Hess Deep

It was agreed to take advantage of the unique opportunity offered for access to the deep crust in Hess Deep and to designate this area as the site of the InterRidge 4-D Architecture of Fast-spreading Segments Experiment. The experiment would involve carefully co-ordinated surface and near-bottom geophysical and geological observations, sampling and drilling, in a series of nested targeted boxes of scales ranging from a few meters to 100's kilometers.

3.1.2 Slow-spreading experiment: Mid-Atlantic Ridge

This experiment would also involve co-ordinated studies in a series of nested boxes of similar scales to the fast-spreading experiment, and would include both flow-line transects of shallow drilling and dredging, coupled with deep and offset drilling at two sites characterised by relatively high and low Mantle Bouguer Anomalies. A short-list of four sites was drawn up, and National Correspondents were asked to obtain feedback on these from their national programmes.

3.1.3 Ridge Drilling

In recognition of the importance attached by the Meso-Scale Programme to drilling, it was further agreed to designate drilling studies as a third distinct component of the 4-D Architecture Experiments. This would include and co-ordinate the drilling proposed at Hess Deep and the MAR site, and would in addition promote further drilling at ODP site 735B on the SWIR.

3.1.4 Implementation

The Chair recommended that the Steering Committee would need to select one site for the Slow-spreading Experiment from the short-list, and would also need to consider means for co-ordinating the proposed experiments.

3.2 Feedback from National Programmes

RIDGE

The RISES Meeting, held immediately following the 4-D Architecture of the Oceanic Lithosphere Workshop, identified 3 major problems to be the focus of RIDGE segment-scale studies during the next 3-5 years and came to a consensus concerning the most suitable site(s) at which to address each of them:

- The origin of the gravity bull's eyes and the relative importance of magmatism and tectonism in ridge segmentation at slow-spreading ridges. Selected study area: 35°N on the MAR.
- The nature of the melt delivery and crustal magma plumbing system at fast spreading ridges including whether it is fundamentally 2-D along-axis or 3-D. Selected study areas: 9°03'N to 11°30'N and 17°S to 17°30'S (MELT Area) on the EPR.
- The interaction of magmatic, tectonic and hydrothermal active processes and their variability at the segment scale. Suggested study areas: 9°N and 17°S on the EPR and 35°N on the MAR.

A two-pronged approach was recommended for each of these problems: 1) a co-ordinated set of INTRA-segment studies and 2) a complementary set of INTER-segment studies.

A Multi-site approach is favored because it allows investigations to address each of the problems at the best place to do the science.

InterRidge Japan

The Japanese position on the outcome of the 4-D Architecture of the Oceanic Lithosphere Workshop will be deferred pending distribution of the Workshop Report.

Dorsales

Dorsale Members would like to include investigation of the ridge flanks in the design of a segment-scale experiment. Rather than name a single site at which to carry out such an experiment they prefer to be free to choose from among several sites. Several potential sites/segments in the Atlantic include: Lucky Strike, AMAR, FAMOUS, MARK and another segment further to the south.

Within the framework of the InterRidge project themes, the following sites were selected for investigation:

- Active Processes (including Biology): 9°N to 13°N on the EPR
- Meso-scale - segmentation: 9°N to 13°N on the EPR, Hess Deep, FARA (15°-40°N on the MAR)
- Meso-scale - back-arc basins: Fiji and Lau Basins
- Global: Southwest Indian Ridge.

BRIDGE

BRIDGE would endorse good science at any sites, but designated areas for BRIDGE funding are the Reykjanes Ridge, MAR Kane to Atlantis region, Scotia Sea and the Lau Basin. However, NERC core funding is available for ridge studies outside these geographic limits.

3.3 4-D Architecture of the Oceanic Lithosphere Project - Future considerations

Following discussion of the results of the 4-D Architecture of the Oceanic Lithosphere Workshop and the reactions of the various national programs available to date, the Steering Committee agreed that the best approach would be to design a set of experiments which address the identified problems. Site selection should be based on the suitability of a given area for implementation of a given experiment.

RECOMMENDATIONS: The Steering Committee recommends that the working groups established at the 4-D Architecture of the Oceanic Lithosphere Workshop develop a science plan which is non-site specific. This science plan will then be circulated to all National Correspondents/national program heads with a request for their input concerning both science and site selection as a function of suitability for a given experiment.

4 SWIR Project

A brief summary of communication between C. Langmuir and R. Searle concerning the SWIR Project was presented by R. Searle. In response to the canvassing letter circulated to assess the community and national programme support for the project, the BRIDGE Programme expressed a favourable opinion of the science but could not make any financial commitment to the Project since SWIR is outside the geographic areas prioritised by BRIDGE. Alternative funding by NERC remains a possibility on a proposal by proposal basis.

The next step suggested by C. Langmuir, is the formation of a small working group or *ad hoc* committee which would contribute to the writing of a SWIR Project Science Plan. This group

would be constituted of members from the various InterRidge nations and the work carried out chiefly by e-mail.

5 The InterRidge budget and membership

5.1 Request from France - Jean Francheteau

The French reiterated their position (see page 1 of InterRidge Steering Committee Meeting 1994 Report) that the Principal Membership fee of $20,000 is too high. They maintain that the fee should be reduced and that the level of service should be increased. In addition, they request that the UK make a host country contribution of $20,000 above and beyond its Principal Membership fee.

5.2 InterRidge Office Response - Roger Searle

In response to the French requested the InterRidge Office had 1) renewed efforts to encourage additional countries to join InterRidge, 2) formally request that BRIDGE/NERC make a host country contribution to the InterRidge budget and 3) prepared a 1995 budget justification. At the time of this meeting, no conclusive results were yet available on 1) and 2), though the BRIDGE Steering Committee was expected to consider the request for a host country contribution in its early 1995 meeting.

5.3 Steering Committee Response

The Steering Committee agreed that given the present constitution of InterRidge, any reduction of the Principal Membership fee would result in serious impairment of the functioning of the InterRidge Office. The InterRidge Office is currently operating on a budget of $90,000, below the minimum level approved by the Steering Committee in the course of their meeting in Tokyo, Japan, on the 5 & 6 September, 1994. It was further agreed, that should additional member nations join InterRidge, use of the additional funds would be prioritised as follows:

1. Bring the InterRidge Office Budget up to the minimum functioning level.
2. Increase the services offered by the InterRidge Office to the community through the implementation of a number of approved projects which are currently awaiting action.
3. Eventual reduction of the membership fee as follows: should there be a surplus of funds in the InterRidge Office Budget for any given year, the surplus would be divided by the number of Principal Member Countries and the amount subtracted from the following year's fee.

The Steering Committee urges R. Searle to continue in his efforts to obtain a UK host country contribution and additional members.

5.4 Situation update

The InterRidge Office is very pleased to report that since the December Steering Committee Meeting, Spain has been welcomed into the InterRidge Program as a Principal Member (1995) and Germany and Portugal as Associate Members (1994), all accounts paid in full. In addition, a host country contribution of $20,000 has been recommended to NERC by the BRIDGE Science Committee and unofficially approved. The 1995 Budget justification has been completed, circulated and appears as Appendix A of this report.

InterRidge

Steering Committee Meeting December, 1994

Report

APPENDIX A:

InterRidge Office

1995 Provisional Budget Justification

What is InterRidge?

InterRidge is an international and interdisciplinary initiative concerned with all aspects of mid-ocean ridges. It is designed to encourage scientific and logistical co-ordination, with particular focus on problems that cannot be addressed as efficiently by nations acting alone or in limited partnerships. Its activities range from dissemination of information on existing, single-institution experiments to initiation of fully multi-national projects.

Principal InterRidge activities are grouped under three major themes, or Integrated Projects, the objectives of which are:

- **Global Studies:** To acquire a balanced set of global-scale data on the entire mid-ocean ridge system, which implies notably a concerted effort of exploration in high latitudes where data are extremely sparse.
- **Meso-Scale Studies:** To investigate the interplay of mantle processes at temporal and spatial scales that bridge the gap between the global perspective and fine-scale studies of active processes. These "meso-scale" studies focus on processes that control magmatic and tectonic segmentation; quantification of mass, energy and chemical fluxes on the segment scale; and include a specific effort on ridges in marginal (back-arc) basins.
- **Active Processes/Temporal Variation Studies:** To observe, measure and monitor active processes at individual ridge sites in order to begin to quantify the fluxes of mass and energy involved and their biological consequences; and to understand the evolution, reproduction strategies and dispersion paths of hydrothermal vent biota and determine their relevance to and interaction with physical, chemical, and geological processes at the ridge-crest.

InterRidge activities are initiated within the international ridge crest research community, overseen by the InterRidge Steering Committee and the InterRidge Chair and co-ordinated through the InterRidge Office.

Who Does InterRidge Serve?

InterRidge is designed to serve national and international programmes, individuals and groups around the world engaged in ridge crest research.

What Services Does InterRidge Provide?

- **Promotes communication and exchange of information and ideas amongst members of the international ridge crest research community and the definition and co-ordination of international experimental programmes**. By organising and facilitating meetings and workshops around the above scientific themes, InterRidge provides a venue for identification and discussion of the scientific issues of chief concern to the community, and for planning and co-ordinating the experimental approach.
- **Dissemination of information.** InterRidge edits and publishes:
  - Meeting and Workshop Reports - These reports serve not only to communicate the proceedings of workshops and meetings to members of the community, but also as a vehicle for recommendations to various national and international research and funding agencies.
  - *InterRidge News* - This semi-annual newsletter is distributed free to members of the ridge crest research community. It contains:
    - reports on recent ridge crest cruises
    - updates on international co-operative research projects
    - news from national and international research programmes
    - various announcements and notices pertaining to ridge crest research
    - an up to date schedule of ridge crest cruises for 6 countries.
- **International Electronic Database.** The ultimate goal of this project, currently being undertaken by the InterRidge Office, is to link various national and institutional data archives via an InterRidge World Wide Web home page, which would allow users to access data maintained in several databases around the world with a single query.
- **International Ridge Researcher Directory.** The InterRidge Office is in the process of establishing an electronic international directory of ridge crest researchers accessible via the

Internet on the InterRidge Gopher (piglit.dur.ac.uk). The directory will list the fields of interest of each researcher as well as their full coordinates (address, telephone, fax, e-mail).

Taking Part in InterRidge

Any individual engaged in ridge crest research may contact the InterRidge Office to request that their name be put on the InterRidge maillist and/or electronic directory. They will then receive *InterRidge News* as well as workshop announcements and other information. If your country would like to become an InterRidge Member Nation, a national correspondent should be appointed in agreement with your national ridge crest research programme and funding agency. This correspondent should then contact the InterRidge Chair at the InterRidge Office for further information. InterRidge Principal and Associate Member Nations are entitled to representation on the Steering Committee and participation in the direction of the InterRidge Initiative.

InterRidge Publications:

InterRidge News:
InterRidge News, 1992, 1, 1, pp. 26.
InterRidge News, 1993, 2, 1, pp. 32.
InterRidge News, 1993, 2, 2, pp. 4 (bulletin)
InterRidge News, 1994, 3, 1, pp. 28
InterRidge News, 1994, 3, 2, pp. 44

Meeting and Workshop Reports:
InterRidge Program Plan, pp. 26, 1994.
InterRidge Program Plan Addendum 1993, pp. 9, 1994.
InterRidge Program Plan Addendum 1994, in prep.
InterRidge Meeting Report, Brest, France, 1990.
InterRidge Meeting Report, York, UK, 1992.
InterRidge Meso-Scale Working Group Meeting Report, Cambridge, UK, 1992.
InterRidge Steering Committee Meeting Report, Seattle, USA, 1993.
InterRidge Meso-Scale Project Symposium and Workshops Reports, 1994: Segmentation and Fluxes at Mid-Ocean Ridges: A Symposium and Workshops & Back-Arc Basin Studies: A Workshop, pp. 67, June 1994.
InterRidge Global Working Group Report 1993: Investigation of the Global System of Mid-Ocean Ridges, pp. 40, July 1994.
InterRidge Steering Committee Meeting Report, Tokyo, Japan, in prep.
InterRidge Global Working Group Report 1994: Indian Ocean Planning Meeting Report, 1994.
InterRidge Meso-Scale Workshop Report: 4-D Architecture of the Oceanic Lithosphere, in prep.

These publications are available from the InterRidge Office upon request.

InterRidge Office:
Personnel and Function

InterRidge Co-Ordinator

20%	Writing, editing and publication of workshop and meeting reports, including on site information gathering.
20%	Edition and publication of a semi-annual newsletter: *InterRidge News.*
5%	Maintenance of working links with both national and international organisations concerned with Mid-Ocean Ridge research.
5%	Maintain relations and correspondence assuring a two-way flow of information with National Representative and administrative bodies.
15%	Organisation and planning of meetings and workshops, including on site support.
5%	Responding to correspondence (telecommunication, e-mail, individual requests for information)..
3%	Diffusion of information to the international ridge sciences community (telecommunication, e-mail broadcasting, gopher, mass mailing).
8%	Generation of income through member nation subscription: initiation of relations with potential member nations, contacting national funding agencies, invoicing and follow-up.
10%	Development and maintenance of the InterRidge WWW home page and co-ordination of efforts to establish an international database.
5%	Development and maintenance of the InterRidge Researcher Electronic Directory
2%	Budget administration.
2%	Staff training and supervision.

Secretary (half-time)

Word Processing.

Maintenance of the maillist, e-maillist.

Response to routine correspondence

Filing

Carry out large scale mailings

Ordering and interdepartmental administration.

Accounts

INTERRIDGE OFFICE

PROVISIONAL BUDGET 1995

INTERRIDGE COSTS*

	ANTICIPATED COST FOR 1995	
PERSONNEL		
Chair	28,800.00	
Co-Ordinator (see justification attached)	28,800.00	
Secretary (half time; see justification attached)	9,900.00	
		67,500.00
TRAVEL (and expenses)		
Chair		
travel	2,500.00	
expenses	1,000.00	
subtotal	3,500.00	
Co-Ordinator		
travel	2,500.00	
expenses	1,000.00	
subtotal	3,500.00	
		7,000.00
MEETINGS AND WORKSHOPS		
Room rental	3,000.00	
Refreshments	1,150.00	
		4,150.00
OFFICE COSTS		
Telecommunications	750.00	
Printing:		
2 issues InterRidge News		
3-4 meeting reports		
Administrative documents		
(Program Plan, Addendums, etc.)	4,000.00	
Postage	7,000.00	
Supplies: paper, stationary, photocopying	1,000.00	
Overhead**	27,000.00	
Accommodation***	3,400.00	
		31,350.00
		$121,800.00

INTERRIDGE INCOME: NATIONAL CONTRIBUTIONS

PRINCIPAL MEMBERS: France, Japan, Spain, UK, US	100,000.00	
ASSOCIATE MEMBERS: Germany, Portugal	10,000.00	
		110,000.00

* All figures in US dollars.
** This figure was erroneously given as $18,600.00 in the papers presented in San Francisco.
*** This figure was erroneously omitted from the papers presented in San Francisco.