

Attendees : David Simmons - Benfield Greig

Dougal Goodman - British Antarctic Survey (Chairman)

Andrew Dlugolecki - CGU
David Crichton - CGU
Nigel Finlay - DP Mann

Nick Golden - Royal & SunAlliance Julia Graham - Royal & SunAlliance

Lance Garrard - TSUNAMI Jonathan Norman - Sedgwick

James Orr - TSUNAMI (Secretary)

Lynn Dimmock - Wren

Apologies : Simon Jennings - Benfield Greig

Paul Brand - Catlin

Minutes:

Dougal Goodman opened by thanking Royal & SunAlliance for hosting the meeting. He also thanked Nick Golden for speaking at the Royal Society on Tuesday, 13 April, at the evening event organised by the Foundation for Science and Technology, and confirmed that positive feedback had been received from a number of those who had attended.

1. Introduction of Lynn Dimmock to the Management Board

Dougal Goodman introduced Lynn Dimmock, as the deputy for Simon Groves.

2. Confirmation of Minutes of the Ninth Management Board Meeting

Dougal Goodman asked that it be recorded that Peter Young of Lancaster University had accepted an invitation to join the TSUNAMI Scientific Advisory Committee.

David Crichton also asked that the reference to his report on the UK Flood Risks Project should refer to new housing being developed over the next twenty years, rather than simply during 1999.

Given these amendments, the minutes of the previous meeting were accepted. (Subsequently also confirmed by Paul Brand of Catlin)

3. Project Approval Process – Tactical Projects

Dougal Goodman explained that Peter Taylor was concerned that the development of projects with a tactical advantage was too slow to provide a benefit to the consortium companies. Dougal Goodman therefore proposed that smaller, short-term projects could be developed and approved through a "fast track" process. Projects costing less than £40,000 and enjoying the support of at least three consortium companies (ascertained through separate



discussions) could be commissioned under the process. This proposal was accepted unanimously by the Board (including subsequent approval by Paul Brand of Catlin).

Dougal Goodman confirmed, in response to a question by Nick Golden, that the Board would be kept informed of the expenditure of the initiative on research projects, to avoid over-spending.

Dougal Goodman confirmed, in response to a question by David Crichton, that TSUNAMI could support work carried out by overseas researchers, but that DTI funding could not be used for this purpose. He also confirmed that DTI funding could only support collaborative projects backed by more than one member of the consortium.

Dougal Goodman also proposed that the Technical Advisory Committee should be required to meet on a more regular basis, to consider and discuss research proposals. This proposal was supported, with the proviso that this group could meet on a "virtual" basis, if practical.

4. Technical Advisory Committee – Terms of Reference

Dougal Goodman asked that the next meeting of the Technical Advisory Committee should be arranged shortly and that its terms of reference should be reviewed in the light of the above developments.

Action - TSUNAMI

David Crichton also asked that the Information and Public Relations Advisory Committee should be resurrected, in virtual form.

Action – TSUNAMI

5. Project Director's Report

a) Financial Position

James Orr confirmed that the costs of running the initiative were still within expected bounds and that the total commitments ran to some £816,000. These figures included allowance for VAT on the employment costs of Project Director and the costs of the event organised by the Foundation for Science and Technology.

It was also confirmed that cash-calls for the first two quarters of 1999 would be issued shortly and that the first call for 1999 had been delayed to help mitigate an under-spend at British Antarctic Survey. These, and all future, cash-calls would be subject to VAT and steps would be taken to recover VAT on all previous cash-calls.



Dougal Goodman also confirmed that DP Mann would issue invoices to the consortium companies for the costs of employing Lance Garrard for six months, once this period had expired. He thanked DP Mann for supporting the employment arrangements.

Julia Graham asked that detailed financial statements be sent to all of the consortium companies.

Action – James Orr

b) VAT

James Orr confirmed that enquiries with Royal & SunAlliance and the Natural Environment Research Council had confirmed that VAT was payable, both on the invoices for the employment costs of himself and Lance Garrard, but also on the cash-calls made on the consortium companies by the British Antarctic Survey.

6. Review of Planned Activies (Yearly Schedule)

The Board supported the format and content of the schedule of activities for the expected duration of the initiative.

7. Project Reports

a) Extreme Value Statistics

James Orr reported on behalf of Peter Taylor, that the Extreme Value Statistics Study Group had met on 24 March, attended by actuaries and statisticians representing all of the consortium companies.

This group had agreed to identify a number of key business challenges and tools with the potential for practical application within the insurance industry. Two potential business challenges concerned the development of a real-time reporting system for Year 2000 related claims and on analysing "reference losses" within the market of historical catastrophic events, to assess the probability of recurrence.

b) Extreme Weather in Northern Europe

David Simmons reported that the first meeting with the researchers from the University of East Anglia and University College London had been successful in raising the awareness of both teams, of each other's proposals and of the expectations of the industry sponsors.

David Simmons confirmed that the researchers were working on a joint proposal that would be reviewed by Dougal Goodman and Julian Hunt of the Scientific Advisory Committee, before being formally approved. It had also been agreed that the joint research project would not seek to address issues of economic vulnerability of insured entities to the extreme weather events, thus reducing the cost of the project.



c) Tropical Cyclone Forecasting Project

Lance Garrard reported that the project researchers had now carried out a review of the forecasting skill of the TSUNAMI system against that of Professor Bill Gray. This review had shown a substantial advantage in the TSUNAMI system, although it was stressed that such comparisons should not be taken as being definitive.

Lance Garrard explained that the next development by the Benfield Greig Hazard Research Centre of University College London would be to produce the 1 June 1999 pre-season forecast for US land falling hurricanes. Nigel Finlay asked that the consortium companies be given exclusive access to this report during the month of June. Lance Garrard confirmed that an exclusivity clause was not provided for this forecast, but that he would discuss this with the Met.Office, who manage the project.

Action – Lance Garrard

Lance Garrard also described Reading University's work using dynamic modelling, which suggested that improvements could be made in predicting US land falling hurricanes, given evidence of persistent southerly winds off the East Coast.

Andrew Dlugolecki raised the concern that allowing the researchers to publish on their research would reduce the advantage to the sponsoring companies. It was confirmed that a time-lag was included in the research, on the release of such material, and that the review process prior to publication would also create a delay.

Julia Graham suggested that there was a need to consider the continuation of the Tropical Cyclone Forecasts beyond the current programme of research.

d) Tsunami Risks

Lance Garrard reported that the development of a joint project plan, by the Benfield Greig Hazard Research Centre of University College London and Coventry University, was progressing well. Also, additional funding of £10,000 had been offered by the Health and Safety Executive, in return for the inclusion of a study on Tsunami Hazards in the North Sea (with the potential to impact offshore platforms).

The additional funding provided by the HSE would be partly used to publish a book, for an insurance audience. The initial phase of the research (ending around July 1999) would also be supported by a "road show" round the consortium companies, to help explain the fundamentals of the subject.



The second phase (ending in October 1999) would concentrate on Tsunami Risk Assessment, would look at disruption mechanisms, impact area affects and the vulnerability of coastal installations. David Whiting of ISL had also agreed to support the development of a map using a Geographical Information System (GIS) representing the Tsunami Hazard on a global scale. Also, regional-scale hazard assessments (including the North Sea study) would be provided, along with frequency/intensity data sets.

The third phase of the research (ending in January 2000) would include a workshop, looking at the application of new mathematical methods for enhanced Tsunami Risk assessment. Also, a detailed socioeconomic study would be produced for a localised area and a report provided on the future development of tsunami hazard assessment.

e) UK Flood

David Crichton reported on the first meeting of the researchers from the Flood Hazards Research Centre of Middlesex University and from the University of Southampton. He confirmed that the first meeting had been constructive and positive, with both sides expressing their gratitude for the opportunity to work together on the project.

David Crichton summarised the new data and policy issues that would arise over the near future. He also presented an abstract of a talk he will give at a forthcoming flood conference, to be distributed to the Board.

Action – TSUNAMI

David Crichton also confirmed that he had recently made a submission to the House of Commons Select Committee on flood risks and that he would be happy to make a submission on this to the Board, once Parliament had published its report on the meeting.

Action – David Crichton

f) Uninsured Losses

David Simmons reported that the first meeting on this project had been held and that progress towards developing a project plan had been made. He confirmed that a further meeting would be held on Friday, 23 April to agree the project plan.

David Simmons explained that the first phase of the research (from April to October 1999) would review the financial loss statistics and available data for a number of catastrophic events. These studies would include the development of plans for a number of detailed case studies.



The second phase of the research (from October 1999 to March 2000) would carry out detailed case studies, to identify the ultimate bearers of economic loss, what factors influenced non-insurance and public policy on insurance. David Simmons also presented slides that described the framework the researchers expected to apply in analysing the distribution of losses.

The third and fourth phases of the research, between April and October 2000 would draw conclusions about how scientific research and other scientific input could assist in the insurance of uninsured risks. The final report would involve consultation through a workshop and would be followed by press releases and the publication of articles in research journals.

8. Other Projects

No comments were made on the paper that was presented.

9. Any Other Business

a) Future of the Initiative

Nick Golden suggested that the Board should consider whether it would be willing to support the TSUNAMI initiative beyond its current planned lifetime, and the form that TSUNAMI should take. He suggested that these discussions should begin now, as budgetary decisions affecting funding in 2001 would be made in the second half of 1999.

Dougal Goodman agreed to consult individually with the Board, to develop a paper on the options available to support the continued existence of TSUNAMI.

Action – TSUNAMI

b) European Flood Conference

David Simmons asked that details of the forthcoming European Flood Conference, organised by IIASA, should be forwarded to all the Board members.

Action - TSUNAMI



c) Consolidation of Activities

Julia Graham suggested that all future activities of the initiative should seek to maximise the co-ordination of events, to reduce the number of separate meetings. The Board unanimously supported this.

Action - TSUNAMI

d) Presentation on Ground Penetrating Radar

David Crichton asked that British Antarctic Survey (BAS) provide a presentation at a future Board Meeting on their work on ground-penetrating radar. Dougal Goodman confirmed that he was happy to arrange this and that he would also arrange for a presentation on BAS's work on ice-cores.

e) Uninsured Losses Research by the University of Sussex

David Crichton mentioned that he was aware of work by the University of Sussex on uninsured losses, funded by the Department of the Environment, Transport and the Regions.

James Orr confirmed that, based on this information, he had contacted the researchers, who had advised that their focus was on social impacts and that they were interested in any data that the insurance industry might have. He had offered to put the researchers in contact with the researchers on the TSUNAMI sponsored project.

Dougal Goodman asked if it would be possible to enquire with the DETR whether they would be interested in supporting TSUNAMI's research in this area.

Action – TSUNAMI

f) 1000 Schools

David Crichton advised that a "1000 Schools" day was planned in August, with presenters visiting schools in the UK, to talk about natural disasters. It was suggested that TSUNAMI might seek to support this event and that the possibility of producing "TSUNAMI Information Packs" should be investigated.

Action - TSUNAMI

10. Date of Next Meeting

It was agreed that dates would be sought in June, September and the end of November.