ESF RESEARCH CONFERENCES

Rapporteur Report

Partnership:	
Conference Title:	**Understanding Extreme Geohazards: The Science of the Disaster Risk Management Cycle**
Dates:	27 November - 2 December 2011
Chair:	European Science Foundation
Rapporteur:	Dr Paola Campus, European Science Foundation, Science Officer, Life, Earth, Environment and Polar Sciences Unit.

General Comments

The ESF-COST High-Level Research Conference 'Understanding Extreme Geohazards: The Science of the Disaster Risk Management Cycle' took place in Spain, St. Feliou de Guixols, from 27 November to 2 December 2011. The purpose of the Conference has been to gather the highest possible number of scientists and experts in geohazards and disaster risk management to review the state-of-the-art in understanding extreme geohazards and to identify future needs in the framework of geohazards research, risk management and risk reduction.
My background in seismology, volcanoes and physics of the atmosphere gave me the possibility to have a major insight in the activities, presentations and discussions in the course of this Conference.

Quality of Scientific Programme, Presentations and Discussion

The scientific Programme addressed the issue of extreme natural events, occurring in the Earth's crust or at the interface between the solid Earth and the atmosphere (earthquakes, volcanoes, landslides, tsunamis) and causing major disasters and loss of human lives. Although extreme natural events of this type are infrequent and restricted to certain geographical regions, their potential impact is huge and of global scale.
The Conference has been divided in a number of Sessions which addressed all the current issues related to extreme geohazards:

Session 1. Extreme geohazards: What we know and potentially do not know.
Session 2: Preparing for the extreme: quantifying the probabilities and uncertainties of extreme hazards.
Session 3: Preparing for the extreme: costs of preparation versus costs of disasters.
Session 4: Predicting increased risks for extreme hazards: earthquakes.
Session 5: Predicting increased risks for extreme hazards: volcanoes and landslides.
Session 6: Knowing the hazards and the potential disasters.
Session 7: Early warnings before and during the event.
Session 8: Assessing the disaster: the first few hours.

The presentations have been all of high quality from the scientific point of view and served very well the purpose of highlighting what has been achieved until now and what is still missing in terms of extreme geohazards monitoring, related risk management and increased global resilience.
Experts of geophysics, risk management, architecture, international law and private insurances presented their specific approaches to the problem of extreme geohazards.

The joint, very active discussion clearly pointed out that a synergetic approach to the problem of extreme geohazards, involving also experts of social sciences and policy makers, is crucial to mitigate the risk of disasters.

Informal Networking and Exchange; Atmosphere

The schedule and the atmosphere of the Conference were ideal to develop an easy exchange of information. Time and space for informal discussions were allocated both during the conference and in the course of the breakfasts, lunches and dinners organized in a common area. The young researchers demonstrated to be fully integrated in the discussions.

Balance of Participants

The Conference gathered an appropriate number of young researchers and experts.
The balance of national groups was, in general, reasonable. It was understandable to observe some clustering of experts coming from specific Countries which are more exposed to the risk of extreme events.

Outlook and Future Developments

The major organizations involved in this conference (IRDR, UNESCO, IUGG, GEO, GEOSS, UNOPS) with facilitation of the ESF-LESC Unit endorsed the preparation of an ESF Position Paper aiming to summarize all the current issues related to extreme natural events, to identify the areas where an improvement in knowledge and risk management is of paramount importance for the society and economy of nations and to propose a roadmap to address in the most efficient way forward on these issues.

Follow-up

The Conference opened the floor to develop several future activities and discussions: the community which attended the Conference is currently exchanging several e-mails to discuss additional initiatives. The potential for an immediate and long term follow-up is very high and every action should be contemplated to facilitate additional interactions among experts.

Organisation and Infrastructure

Venue, catering and accommodation were extremely appropriate for the Conference. The on-site administration and support was excellent and highly appreciated by the participants.

Summary & Overall Assessment

The Conference "**Understanding Extreme Geohazards: The Science of the Disaster Risk Management Cycle**" achieved all its aims, generating a series of very stimulating discussions which underlined the need for a comprehensive and synergetic approach, including scientific, management, legal, social and policy components, when facing the challenge of mitigating risk and increasing global resilience in case of extreme geohazards.
The quality of the scientific programme, presentations and discussions was high and set the basis for further developments of scientific networks aiming to address in more detail the problems discussed at the Conference.
The interaction among young and senior researchers has been very good.
ESF has been actively involved in initiating the exploration, together with the experts of the various research groups, of immediate and long term follow-ups.
In summary, the Conference was a success and every action should be contemplated to facilitate additional interactions among the experts who gathered in Sant Feliu de Guixols.

About ESF Research Conferences

The Scheme

This conference is part of the European Science Foundation's (ESF) Research Conferences Scheme. The Scheme aims to promote scientific excellence and frontier level research throughout Europe and the rest of the world. Conferences aim to provide leading scientists and other participants, including young researchers, with a platform to present their work, to discuss the most recent developments in their fields of research and to network.

Conference Format

The core activities should be based on lectures by invited speakers, who are leaders in their respective fields, followed by extensive discussion periods. An informal exchange of ideas, both inside and outside the lecture room, should be encouraged, and the number of sessions in the daily timetable should be limited in order to allow sufficient time for interaction between the participants. Time should be reserved for a 'Forward Look Plenary Discussion' about future developments in the field.

Participants can take all their meals together to encourage further contact and networking, which can be particularly beneficial to younger researchers who may be less outspoken in the formal lecture room setting. In order to gain optimum benefit from the conference, both the speakers and the participants are asked to stay for the whole duration.

Division of Tasks

The Conference Chair is responsible for ensuring the quality of the scientific programme through the selection and invitation of speakers, and through the selection of participants.

The ESF Conferences Unit is responsible for managing all the logistical aspects of the conference organisation, including the provision of an on-site secretariat.

Further information: www.esf.org/conferences