

# Integrated Research on Disaster Risk addressing the challenge of natural and human induced environmental hazards

## Third Meeting of IRDR Scientific Committee

14-16 April 2010 ICSU Secretariat, Paris

### **SUMMARY REPORT**

## Members present:

Gordon McBean (Chair), Omar Darío Cardona, Raymond Chan, Susan Cutter, Richard Eiser, David Johnston, Allan Lavell, Steven Sparks, Kuniyoshi Takeuchi, Coleen Vogel, Angelika Wirtz

### Ex officio:

Reid Basher (ISDR), Heide Hackmann (ISSC) (part only), Howard Moore (ICSU)

### Apologies:

Maria Patek, Hormuz Modaressi, Ortwin Renn

## Other participants:

Jane Rovins (Executive Director, IRDR, IPO), Deliang Chen (Executive Director, ICSU), Hassan Virji (START International Inc.), Andrew Maskrey (ISDR), Ian Burton (Univ. of Toronto), Alik Ismail-Zadeh (Secretary-General, IUGG), Wendy Watson-Wright (Secretary, IOC, part-time)

## Opening and introduction of new participants

The Chair opened the meeting by welcoming the special guests. He announced that there had been two Committee resignations, received from Astri Surkhe and Michel Lang. He would welcome suggestions for new members that could be put to the Co-sponsors for consideration, bearing in mind the need to fill certain 'gaps' in expertise around the table.

## **Approval of Draft Agenda**

Two items were added to the draft agenda: one relating to a programme proposal from the IOC, the other concerning ICSU's institutional response to disaster events. With these additions, the draft agenda was approved.

## Summary Report of Second Meeting, and matters arising not treated elsewhere

The Summary Report was approved, with minor changes to the English in one section. The importance was underlined of having a list of agreed tasks distributed in a timely manner in future.

## **International Programme Office and Executive Director appointment**

HM reported on negotiations that had taken place with Chinese counterparts for the establishment of the IPO for IRDR at the Center for Earth Observation and Digital Earth (CEODE) of CAS in Beijing. Jane Rovins had been recruited as Executive Director, and she would take up her duties at the end of May. A powerpoint presentation was given on the new Headquarters building of CEODE, where the IRDR IPO would enjoy excellent facilities.

There was a proposal before the IRDR Co-sponsors that the Director-General of CEODE (currently Prof. Guo Huadong) would henceforth be an ex-officio member of the Scientific Committee.

HM tabled the draft text of a Constitution that he had prepared for IRDR; this attracted a number of specific comments. The document also gave rise to a short discussion on the need for clarity on the role(s) of the programme's co-sponsors, as well as links with practitioner, governmental and funding communities. Emphasis was placed on capacity building in the practitioner domain.

Jane Rovins was invited to introduce herself to the Committee; the Meeting had been provided with her Curriculum Vitae.

### **Update on contacts/discussions with potential partners**

The Chair reported on continuing discussions with WWRP and WCRP. Formal MoUs between programmes had not been thought necessary by WMO: instead, there would be simply an exchange of letters of cooperation between the Chairs of the programmes' Scientific Committees or their equivalent. Forms of words for such letters were under consideration.

In the wake of the imminent retirement of Reid Basher, ISDR would be represented on the Committee by Andrew Maskrey, Coordinator of the *Global Assessment Report*. Andrew was welcomed by the Chair and gave a broad introduction to the *GAR* and its editorial development. He underlined that the *Report* is coordinated within the ISDR Secretariat but is not a corporate report of ISDR. The research background is carried out by main partners, of which there were some 40 for last edition. The current *Report* is in the final planning stage, for publication in time for the Third Global Platform in mid-2011. AM invited IRDR-SC to think ahead as to how IRDR might be involved in the development of the 2013 Report (theme: an enabling environment).

This is something that ISDR would welcome and is an opportunity for ISDR to take full advantage of IRDR. It was agreed that at a future meeting more time be devoted to IRDR's input to the methodologies of the 2013 *GAR*.

It was recalled that IRDR had committed itself to a Consultative Forum to which potential partners could be encouraged; the UN Global Platform could be an event onto which one might be piggy-backed – or the IDRC Davos Conference. A Forum of partners is what funders are likely to be looking for.

It is important that IRDR has an inventory of scientific meetings at which the IRDR might be spoken about. In particular, IRDR must be present at practitioners' conferences, and send a message that IRDR exists.

The value of one-on-one meetings with other partner organizations was stressed; examples given were visits foreseen by the Chair and ED to NSF, GFDRR and START in Washington. National actors are important (the NSF S&T budget for sustainable development stands at US\$700 million, of which US\$100M is new money).

Account needs to be taken of different funding mechanisms and processes. An important challenge for the IRDR is to demonstrate the value of investments in research that lead to disaster risk reduction and thus reductions in the costs of post-disaster recovery and assistance. IRDR must consider how to link with governments.

## Capacity building and collaboration with START

Hassan Virji, Executive Director of START International Inc., described the work of the organization and its large portfolio of activities on global change education. START was set up by IGBP and is now co-sponsored by IGBP, WCRP and IHDP. START is working increasingly with the social sciences. It does not have universal coverage, START has projects and regional offices in Africa and Asia but it does not work in the Americas, nor in the fields of solid-earth and tsunami derived disasters. START with the support of APN and others have an ongoing project on Cities at Risk, and several members of the IRDR Scientific Committee are involved therein.

It was recalled that there had been an agreement in principle at the last meeting to work with START in a mutually beneficial way in the area of capacity building in DRR related to hydrometeorological hazards, and the signing of a Letter of Agreement was pending. The Board of START International and START co-sponsors have agreed. CV agreed to work with START in carrying out an institutional mapping of southern Africa.

### Capacity building mechanisms in the Americas

AL gave a presentation on capacity building opportunities in DRR in Latin America, and described IAI and its antecedents. IAI has less capacity-building in its portfolio. Opportunities exist for South–South cross-working. It was agreed that AL and ODC would take further what they had started - investigating the IAI and other possible connections and build a proposal on what IRDR should do.

## Forensic investigations (FORIN) programme

The Chair gave a brief background to the FORIN programme and introduced Ian Burton, former Member of the IRDR Planning Group and Chair of the ad-hoc working group on FORIN.

IB described FORIN as a new look at the idea of case studies, and spoke to the Report of an adhoc working group meeting that had been held in Toronto on 1-4 February 2010 and financed by a small grant from ISDR. The Committee generally commended the Report and its recommendations, believing that FORIN could be a very valuable showcase activity of IRDR. KT made a complementary presentation on the deliberations of the Japanese National Committee for IRDR on the subject.

It was agreed that FORIN be taken further with the production of a template for the forensic investigations by a properly constituted Working Group reporting back to IRDR-SC. Ian Burton was invited to chair same, and make proposals for a limited membership, involving a mix of people from different sectors. RB confirmed that more substantial ISDR funding would in all probability be forthcoming to take this activity forward in 2010 and beyond.

It was agreed that a brief report on the FORIN initiative be published as soon as possible (the discussion underlining the urgency of launching IRDR's own website), possibly followed by publication of a longer piece in an appropriate journal and/or a posting on PreventionWeb.

On behalf of the JNC, KT offered to host a workshop on FORIN in Japan immediately ahead of the IRDR Kick-off meeting in March 2011.

## Long-term database, monitoring systems and tools

In her presentation on the subject, SC recalled that there exists very little capacity for monitoring the human condition as part of disaster risk reduction; sharing data is not something that commonly occurs in the social sciences. Any initiative by IRDR must avoid the reinvention of the wheel, but rather seek to build a network and link capacities. This linking of centres and nodes to enable them to talk and communicate is paramount.

There are fundamental gaps in the acquisition and management of long-term, systematic data. The IRDR programme should contribute an understanding of the driving factors involved, and could link well with FORIN; the advantage of taking in local expertise (often lacking a formal system of data collection or storage) was underscored. There is a marked lack of data at the sub-national level. There needs to be a holistic approach to data that establishes what kind of information needs to be produced, identifies appropriate indicators, and is above all sustainable.

The Committee discussed the nature of the work of a number of groups in the data area, especially CRED and the Science and Technology Committee of ISDR. The need to work with both was underlined. There was broad support for the idea of continuing with the data initiative, and it was agreed that an ad-hoc working group would be constituted.

## **AIR** project

RE recounted the history of idea of AIR as an IRDR flagship project. It is, in fact, not a project as such, but a consideration of the decision processes. How will people think about risk before a disaster event happens + what they will think in the light of their experience. A presentation was provided in support.

Discussion touched upon: the value of comparing of contrasting locations involving a single hazard (Haiti v Chile v Seattle) and a multi-hazard situation in a single location; consideration of lay v. expert judgement; mapping of the relationships between projects; and risk perception and action as a focus.

It was agreed that a more appropriate title could be Risk Interpretation and Action, or RIA.

RE was invited to make proposals for a RIA Working Group looking into the fundamental questions raised and suggesting how to draw up a meaningful research programme. This might involve the preparation and publication of a paper setting out the basic tenets and posing the research questions (not conclusions).

## **Extreme Natural Hazards and Societal Implications (ENHANS) project**

In his introduction, the Chair welcomed the important initiative of IUGG. Alik Ismail-Zadeh described the structure of IUGG, the IUGG GeoRisk commission and the origins of the ENHANS project in a PP-supported presentation. The initiative was broadly welcomed as a very timely contribution to IRDR, and individual Committee members promised involvement in the various regional events proposed.

### **IPCC Special Report on Climate Extremes**

The Chair made a presentation on the preparation of the IPCC Report. He had repeatedly requested the identification of research gaps in Chapters 1 to 8, so that IRDR can use the report to support requests formulated for funding agencies. Chapter 9 will have interesting story lines.

### Canadian-funded Cities at Risk project

The Chair described the project, and the short-listing of the preliminary application to the IRIACC (Canada) for a research grant for a study of coastal mega-cities at risk due to climate change. The project, if funded, will partner with IRDR and START. Preparation of the full proposal is underway and will be submitted on 15 September 2010 (several IRDR-SC members involved).

### **Intergovernmental Oceanographic Commission proposal**

A proposal from the IOC was examined for IRDR to be involved as partner in the revision of Post-tsunami Field Survey Guide published in 1998. It was agreed that discussions would continue, although caution was expressed about picking up seemingly unconnected projects, resulting in a rag-bag of an IRDR programme.

## **Establishment of designated IRDR International Centre for Excellence**

The Chair described the concept of IRDR International Centres of Excellence. A limited number of International Centres of Excellence (ICoE) could be established, through the SC-IRDR and the relevant national IRDR committees, to provide regional and research foci for the IRDR. Each ICoE research programme will embody an integrated approach to disaster risk reduction that directly contributes to the IRDR Science Plan and its objectives of the scientific characterization of natural and human-induced environmental hazards, vulnerability and risk; the understanding of decision-making in complex and changing risk contexts; and the reduction of risk and curbing losses through knowledge-based actions. The ICoE will also contribute to the cross-cutting themes of: capacity building; case studies and demonstration projects; and assessment, data management and monitoring. The ICoE and the IRDR projects will collaborate to provide global contributions towards achieving the IRDR legacy. The ICoE will, in particular, enable regional scientific activities through regionally-focussed contributions based on regional inputs and by being visible centres of research motivate participation in the IRDR.

The ICoE will vary in their structure and include the possible establishment of a Centre shared between two or three locations in different countries. The Host Institution will be agreed between the participating organizations and the SC-IRDR.

It was agreed that general Terms of Reference be drafted for the ICoE. There needs to be clarification over the relationship between the new ICoEs and the IRDR IPO.

A proposal from the Academy of Sciences located in Taipei has already been made for the establishment of an IRDR International Centre of Excellence there. This had come as a result of the supplementary recommendation of the group making the IPO Site Visits that some kind of research pole might be set up there. Accent would be placed on interdisciplinarity, with the strong involvement of economics and the other social sciences.

While the Committee reacted positively to the generous offer made to host and pay for the centre in question, it was agreed that this centre needed to be consistent with the ICoE TOR which would set a clear policy regarding IRDR international centres. Value added needed to be demonstrated in each case.

It was agreed that caution and political sensitivity needed to be shown in creating the Taipei centre too rapidly, and before the IPO had been given the chance of establishing itself in Beijing. It was important not to put the excellent and positive relationship with China at risk.

It was agreed that the Chair would continue to negotiate with the authorities in Taipei, it being understood that IRDR-SC needed to approve the ICoE designation procedure and criteria.

SS asked how other, existing research institutions with strong and relevant existing programmes – for example the International Seismological Centre in Singapore – could be encouraged to associate themselves with IRDR. Again, a standard procedure was needed, with clear and transparent rules of engagement.

### **Creation of an Executive Committee**

The draft Constitution of IRDR foresees the establishment of an Executive consisting of the Chair plus three Vice-Chairs. The Executive would be empowered to take decisions in the intermeeting periods and report to the full Committee on the next available occasion. Upon a proposal by the Chair, it was agreed that the following be named as Vice-Chairs: Susan Cutter, Dick Eiser and Kuni Takeuchi.

#### **National Committees for IRDR**

KT described the establishment of the Japanese National Committee within the framework of the Civil Eng. and Architecture Committee of the Science Council of Japan. The Committee has 25 members, and could be considered a consortium of domestic organs supporting IRDR.

A number of proposed activities were described and an offer to host a forthcoming meeting of IRDR-SC was made.

JNC-IRDR now has a website (at http://www.ifi-home.info/IRDR\_Japan.html), which includes the Science Plan plus a Japanese translation; a second meeting of the Committee is foreseen for 24 May 2010.

## Promotion of IRDR and its objectives

There was a broad discussion on the development of the IRDR programme. It was considered very important that a Work Plan be developed, along with an agreed procedure for the endorsement of the programmes of other organizations. IPO needs to play aggressive role in seeking funding. The promotion of regional programmes was advocated.

HM proposed that the Committee consider convening an international conference on disaster risk in China in early 2011 as a kick-off event for IRDR. This would publicise the new programme, but also facilitate the creation of 'an IRDR community' and provide an appropriate forum at which the principles and approaches being adopted could be presented and discussed with potential partners and contributors. It was felt that the Chinese authorities might view this proposal positively and provide funding for it to become reality. The proposal was broadly supported, and it was agreed that the matter should be pursued with CAST and CEODE.

## IRDR and the response to disaster events

The ISCU Executive Board had invited IRDR-SC to consider what institutional response IRDR and ICSU might take to specific disasters. It was agreed that letters of condolence to nations or administrations were not appropriate. In IRDR, emphasis is on prevention rather than response/recovery. On the other hand, IRDR must be ready to respond in the framework of the case studies, and we should be ready to provide results of our research programmes. Overall, care should be taken in what IRDR says publicly; all needs to go through IRDR-SC for approval first.

## **Chair's summary and Action Points**

- 1. Nomination of three Vice Chairs: SC, RE and KT.
- 2. Agreement on Fourth Meeting in Beijing, with week of 15-19 November as a possibility.
- 3. Need to find replacement member(s) to fill gaps in expertise.
- 4. Need to create rules of engagement on ICoEs, some with flexibility re clusters or groupings. A similar document is required for National Committees.
- 5. A positive holding response to be given to the Taipei ICoE offer, with a request for a more detailed research agenda.
- 6. Preparation and exchange of Letters of Cooperation with WCRP, WWRP and START. plus others. Jane to work on contacts.
- 7. Approach to be made to Chinese partners by HM re major kick-off conference in China in March 2011. Central theme could be Building research alliances and consortia. Programme Committee to be set up in the coming months (including Chinese representatives).
- 8. Establishment of IRDR Working Groups:
  - FORIN (Forensic Investigations) Ian Burton to Chair a Working Group involving Allan, Susan and Kuni. Next meeting probably piggybacked with IPCC meeting in Geneva in October. Also follow up on offer of JNC to host a workshop. Ian to work on Group membership and establish a timeline. Preparatory work will include refinement of report of the Toronto meeting and core components (template) plus optional components and add-ons. Approval of the template by SC would be followed by a call for proposals, leading to meeting in early 2011.
  - RIA (Risk Interpretation and Action)- Dick to chair a Working Group to build up RIA as a research activity. The ToRs need to be developed. Chairs of the various Working Groups established would be invited to attend meetings of IRDR-SC and report on progress. One session of the next meeting would be devoted to an in-depth discussion of the projects and their control.
  - Data and Information Susan invited to plan a working group on data and information during the coming months, and report to the next meeting.

## Date and venue of next meeting

It had been agreed that the second meeting of 2010 would be held, if possible, in CEODE in Beijing, the site of the IPO. The DG of CEODE had been consulted and two dates in November 2010 had been suggested: Monday 15 to Wednesday 17 November inclusive, or Monday 22 to

Wednesday 24 November. Note was taken of the availability of individual Committee members during the month of November; as soon as a decision could be taken with CEODE the Committee would be informed of the date assigned.