

**13<sup>th</sup> Meeting of the IRDR Science Committee**  
Hosted by the Ocean University of China, Qingdao, Shandong Province, China  
1 to 3 June 2015

**Summary Report**

**Documentation**

[Documents prepared for the 13<sup>th</sup> SC meeting](#) and presentations given during the meeting are available to download in the SC members' zone on the IRDR website.

**Attendance**

**SC members:** Irasema Alcántara-Ayala (Vice-Chair); Jörn Birkmann; Ann Bostrom; Sálvano Briceño; Susan L. Cutter; S.H.M. Fakhruddin; Virginia Jiménez Díaz; David Johnston (Chair); Shuaib Lwasa (Vice-Chair); and Kuniyoshi Takeuchi (Vice-Chair)

**Ex officio members:** RADI (Huadong Guo); ICSU (Denise Ling Ling Young for Heide Hackmann)

**IRDR IPO:** Rüdiger Klein (ED); Lang Lang (AO); Jiqiang Wang (OA); Kerry-Ann Morris (outgoing JSO); and Anne Castleton (incoming SO)

**Invited guests:** Fang Chen, IRDR China; Tianhua Hong, UNESCO-HIST; Paul Kovacs, ICoE-DRHBPI; Alan Kwok, Massey U.; Wei-Sen Li, ICoE-Taipei; Jie Liu, RADI; Shih-Chun Candice Lung, IRDR ICoE-Taipei; Kehou Pan, Ocean U of China; Joy Jacqueline Pereira, UKM/ANCST; Robyn Pharaoh, IRDR ICoE-REaL; Hirokazu Tatano, Kyoto U; Kenichi Tsukahara, IRDR Japan; David A. Smith Wiltshire, National U, Costa Rica; Qian Ye, Beijing Normal U/IRG; Jianxin Zhang, CPS/CAS

**Apologies**

**SC members :** Djillali Benouar; Omar Darío Cardona; Anthony Oliver-Smith; Mark Pelling; Sisi Zlatanova

**Annexes**

Annex 1 - [List of 13<sup>th</sup> SC Meeting Participants \(incl. guests\)](#)

Annex 2 - [List of and Links to 13<sup>th</sup> SC Meeting Preparatory Documents](#)

Annex 3 - [List of 13<sup>th</sup> SC Meeting Presentations](#)

Annex 4 – [SC13 Action Items](#)

**Day 1: Business meeting - Open to SC members and ex-officios**

**0. Welcome**

The SC Chair opened the meeting. The Qingdao meeting hosts presented their institution.

**1. Approval of the Agenda**

The IRDR SC Chair presented the agenda for the 13th IRDR SC meeting.

The Chair requested a discussion of the recently compiled *London Reflections on phase II of IRDR programme* be added under item #3. Due to the travel schedule of Paul Kovacs item #7.1 (presentation of and decision on new ICoEs) was moved to day 2.

**Decision:** The SC approved the revised agenda.

**2. Approval of 12<sup>th</sup> SC meeting report**

The IRDR SC Chair presented the previously circulated draft report of the 12th SC meeting.

**Actions Decided on at the 12<sup>th</sup> IRDR SC Meeting**

Agenda Item	Action	Lead (Support)	Status
2	2.2 Request the Co-Sponsors approach Future Earth's (FE) governance structures with the aim to introduce a mutual representation on Science Committees between FE and IRDR.	ED (Chair)	Done, no decision by ICSU EB, but exploring approach applicable to all ICSU co-sponsored initiatives
3	3.3 Discuss the composition of the four project Working Groups at 13 <sup>th</sup> SC meeting.	SC	Resume discussion on the SC13 agenda
4	4.1 Promote IRDR's Public Forum session and report widely on IRDR's presence at 3 <sup>rd</sup> WCDRR. 4.3 Ensure regular flow of information between the Programme and regional platforms via relevant contact persons and delegates. 4.4 Work on appropriate language to frame the Consultative Forum (CF) in terms of co-design for research. 4.6 Discuss a proposal for the format, timing and funding of a Consultative Forum at 13 <sup>th</sup> SC meeting.	IPO comms  IPO comms  CF Sub-committee  SC	Done by IPO  Done regularly by IPO/CO where counterpart identifiable  No further discussions (now linked to review)  Resume discussion on SC13 agenda
5	5.2 Remind the IRDR network of need for structured reporting prior to SC meetings. 5.3 Explore possibilities for regional applications of the AIRDR analytical framework.	IPO  IPO/All IRDR bodies	Templates circulated (used by some ICoEs / NCs) ED launches discussions with Japan / China / ICSU ROLAC
6	6.1 Regularly share substantive material for inclusion in the IRDR communication platforms (website, newsletters, annual reports, etc.). 6.2 The German and Canadian IRDR ICoE proposers requested to submit full proposals for consideration at 13 <sup>th</sup> SC meeting.	IRDR ICoEs  IPO	Some ICoEs do this regularly  Done
7	7.1 Distribute the Draft Guidance Note for Implementation of IRDR ICoEs to all current ICoEs. 7.2 Propose revised ToRs for NCs after further meeting of these IRDR bodies. 7.3 Members of the Task Group review draft ToRs for IRDR flagship projects to attend the launch	IPO  IPO	Done  Wait to understand role of ISDR NPs after Sendai Done (K. Takeuchi to report at SC13)

<b>Agenda Item</b>	<b>Action</b>	<b>Lead (Support)</b>	<b>Status</b>
	of the ICoE Taipei flagship project and report at 13 <sup>th</sup> SC meeting. 7.4 Propose candidates for Associated Projects (APs)	SC SC	No new proposals received
8	8.1 Request input from the SC / other IRDR bodies for Communications Plan. 8.2 Identify contact persons within respective organisations for the CO. 8.3 Provide ICoEs with reporting guidance notes as basis for reporting template for the Annual Report. 8.4 Produce a general IRDR presentation and make available to the SC. 8.5 Develop a “Partners of the Month” section on the IRDR website. 8.6 Reflect on key messages coming out of the 3 <sup>rd</sup> WCDRR at the 13 <sup>th</sup> SC meeting.	IPO/CO SC IPO/JSO IPO/CO IPO/CO SC	Done from IPO side Done from IPO side wherever possible Done from IPO side Done by Susan Cutter (regularly updated by IPO) Not done (waiting website revamp) Not done; resume discussion on SC13 agenda
9	9.1 Collect more information from Co-Sponsors, ISSC, UNISDR about World Social Science Forum and 3 <sup>rd</sup> WCDRR.	IPO	Done
10	10.1 Collect from ICSU information about the timeline and format for the evaluation of the Programme. 10.2 Invite SC members to volunteer for the Consultative Forum Task Group	IPO IPO	Done, updates to be reported on SC13 agenda Done: see 4.4, 4.6 resume discussion on SC13 agenda
11	11.1 Update SC on ICSU’s plans for evaluation of the IRDR programme. 11.2 Submit to the ED further elements towards an analysis of the SC composition for the future.	IPO SC	Done, updates to be reported on SC13 agenda – Not done (London paper addresses)
12	12.4 Explore with IRDR China the possibility for capacity building workshops focusing on IRDR themes.	IPO	Done – workshop held after SC13 meeting with SC faculty
16	16.1 Propose the venue for the 13 <sup>th</sup> SC meeting for the first half of June 2015. 16.3 Explore options for planning SC 14 meeting in South Africa. 16.4 Liaise with the Chinese hosting organisations to provide additional information about costs and venues for the third IRDR Conference in 2016.	IPO IPO IPO	Done – Qingdao Done - ICoE REaL Done

The IPO reviewed the actions points from SC12. Specific comments or action points continued through SC13 identified with SC12 agenda number below.

(2.2) The SC noted that the ICSU EB had not decided on the proposal to have a mutual representation on the respective SC's between IRDR and Future Earth, and invited the ICSU secretariat to clarify the next steps in this regard.

(2.2) The SC suggested that all SC members and other IRDR bodies be encouraged to build closer links to the Belmont Forum in order to influence future funding calls (especially IRDR NCs for countries where funding agencies are part of the Forum, as is the case for Japan with Science Council Japan, the parent organization of IRDR Japan. It was also suggested to involve ICSU’s Regional Offices for partnering in future Belmont Calls. SC member Jörn Birkmann volunteered to provide follow-up.

(5.3) Members of IRDR Japan and IRDR China are planning Japanese and Mandarin versions of AIRDR, using or building different bibliographic and bibliometric tools. Both will seek guidance

from AIRDR / SC. ICSU ROLAC is exploring possibilities to support an Latin American AIRDR version.

(9.1) The third World Social Science Forum ‘*Transforming Global Relations for a Just World*’ will take place in Durban, South Africa, 13-16 September 2015. IRDR will be represented by Shuaib Lwasa. Several WSSF / RIA fellows will also join accepted / funded sessions (incl. on risk governance). Co-sponsor ISSC is invited to give guidance on how IRDR can contribute to the World Social Science Report.

(11.1) The SC discussed the SC member nominations process, with four SC member’s terms expiring (incl. that of SC Chair David Johnston, and two members of the Executive Committee). The SC also discussed suitable candidates. Several SC members felt it was advisable to include members from outside academia, such as major policy and funder actors (World Bank), if they had demonstrated a strong commitment to / support for research-driven approaches. The SC was encouraged to circulate the call that had been launched, and to help identify and recommend strong nominees.

The SC requested that Action Items be made available in the Member Zone well in advance of SC14.

#### **Decisions:**

- 2.1 The SC approved the 12<sup>th</sup> SC meeting report.
- 2.2 The SC requested that Chair / IPO contact the ICSU secretariat and ask them to clarify their next steps regarding the requested proposal to have a mutual representation on the respective SC’s between IRDR and Future Earth.
- 2.3 The SC requested that the possibility of building closer links to the Belmont Forum be explored by all IRDR bodies. SC member Jörn Birkmann will follow-up.
- 2.4 SC members agreed to identify and help nominate suitable candidates for the SC.
- 2.5 The SC requested that Action Items be made available in the members’ zone of the IRDR website well in advance of SC14; SO will follow-up.

### **3. Review of outcomes of the 3<sup>rd</sup> WCDRR**

**3.1.** *The SC reviewed the achievements of the 3rd WCDRR and its potential impact on the future of the IRDR Programme. JSO Kerry-Ann Morris presented and highlighted the role played by IRDR at the 3rd WCDRR. SC members reflected on their Sendai experiences and on possible follow-up.*

With ICSU as organising partner, IRDR played a high-profile role in preparing the 3<sup>rd</sup> WCDRR, as well as by leading the 400 strong STMG delegation at the conference. The IRDR/STMG publications stall was very popular - especially AIRDR reviews and the recent FORIN case study brochure.

IRDR was, with ICSU and a number of UN agencies, co-organiser of the **Multi-Stakeholder Segment Working Session: ‘Applying Science and Technology to DRR Decision-Making’** on 15 March 2015. SC Chair Johnston gave the STMG statement on 17 March 2015; the 4 + 2 formula agreed upon by STMG leaders for the implementation of Sendai was featured as key overarching commitment.

A **Public Forum** event on 15 March 2015 introduced the IRDR WGs: ‘*Integrated Research on Disaster Risk: the Role of Science in Disaster Risk Reduction*’. Members of the IRDR family participated in many other sessions, e.g. on the **Ignite** Stage (Benouar, PeriPeriU), in three other **Multi-Stakeholder Segment Working sessions** (Cardona, Alcántara-Ayala, CAS-TWAS SDIM), and in multiple **Public Forum** events (e.g.: Lwasa, Takeuchi, RADI, ICoE-REaL).

The SC members discussed key texts arising from the 3<sup>rd</sup> WCDRR and confirmed the challenges of interacting with nonacademic stakeholders while maintaining the distinctive nature of IRDR which is about furthering the boundaries of science.

### **3.2. Follow-up to Sendai: Discussion of London Reflections on Phase II of IRDR**

*Prior to the meeting several SC members provided reflections on key issues for the programme post-Sendai. Based on these inputs and additional SKYPE conferences, the London Reflections on Phase II of IRDR was compiled. VC Shuaib Lwasa presented the paper as the starting point for a discussion about the next phase of the programme, reviewing achievements, obstacles and opportunities.*

The SC discussion also took into account the IPO's operational requirements and priorities as well as the resignations of the ED and the CO. Initially, some actions were identified to determine IRDR's way forward. These suggestions concern internal reflections, but could also be included in the ToR of any future review:

#### **Internal structures**

- Review progress of WG projects – what still needs to be completed, what can be promoted and how, how to approach WG sub groups?
- Review the current IRDR structure and operations: SC composition; relationship with co-sponsors; need to strengthen links with and among IRDR bodies (WGs, NCs, ICoEs); critical required core functions from IPO.

#### **Research profile:**

- Identifying new research questions (e.g. related to “Big Data”);
- Working more on “extensive risk” / slow onset disasters (at the very least: raising awareness);
- Taking stock of integrated research – generate a synthesis book by end of IRDR program

#### **Network:**

- Building stronger alliances with non-academic stakeholders, also at local level;
- Strengthening relationships with other networks and groups, such as Future Earth, ISDR (also at regional level: Asia, Africa, Latin America).

Subsequently, SC members broke into two groups to discuss internal structures (workings of the SC, functions of the IPO etc.), networking, and Sendai follow-up issues. SC members emphasized / elaborated on and/or added a number of additional reflections (the notes below cluster contributions from both groups and from the plenary in line with the principle lines of reflection identified above).

#### *Internal structures:*

- Need for SC to set its own clear (achievable/measurable) targets and objectives (background: Science Plan, less so Strategic Plan), including the domain of fundraising (can money be channeled through China without needing to follow China's financial rules). *The vision: move SC meetings from reporting to a strategic planning role;*
- Need to further clarify role / task of SC members (beyond ToR: specific allocation of tasks aimed at the integration of programme activities, e.g. flagship project). *The vision: SC to lead on IRDR family integration;*
- Need for stronger presence of co-sponsors at SC meetings; this could enable more effective programme governance discussions at SC meetings. *The vision: stronger role for IRDR in co-sponsors strategies;*
- Need to develop a format for structured capacity building across the programme to generate the skill base necessary for integrated research, for example ISSC workshops, FORIN workshops (ex. integrated approaches present in less than 10% of Latin American universities according to ICSU ROLAC report). *The vision: anchor integrated research in academic skills profile;*
- Need to better leverage ICoE and NC contributions. For example: can DATA WG be expanded into vulnerability / resilience metrics with the help of ICoE VaRM?. The strategy for the NCs could build on the London consultative meeting held in Nov. 2014. *The vision: structured progress at ‘family’ integration;*
- Need to strategically leverage the links with ICSU Regional Offices and make explicit links to ISDR regional offices (e.g., invitations to ICSU RO's to attend SC meetings rarely accepted). *The vision: better global/regional linkages;*
- Clarify restrictions for core IPO operations in China (and margin for host organisations to maneuvers to improve the current situation), IPO management, and other programme constraints. *The vision: ensure that IPO can fulfill core programme functions.*

#### *Research profiles:*

- Demonstrate scientific leadership in integrated research (goes beyond Sendai to underlying risk factors; links to SDGs and CCA; etc);
- Continue working towards balance / integration between natural sciences (incl. engineering) and social sciences (incl. humanities);
- Reflect on rise of integrated research in areas beyond DRR science (synthesis book);
- Reflect on and promote appropriate terminology for integrated research (e.g., “extensive risk” vs. “high frequency-low intensity disasters” vs. slow onset disasters);
- Function as voice and conduit for advances in (and resources for) *fundamental* integrated science in DRR domain (where most of post-Sendai focus will be strong on applied policy-and-practice links);
- Simultaneously explore new modes for knowledge co-creation and co-delivery with non-academic stakeholders.

#### *Networks:*

- Overcome fragmentation of DRR science (consider integrated problem-/solution-focused approaches);
- Clarify and strengthen relationship with STAG: currently, SC Chair David Johnston continues as interim liaison – transmitted invitation to submit ideas for science meeting by STAG planned for early 2016 - , but in the longer term a permanent observer from STAG on the SC might be appropriate;
- SC meetings should have stronger content dimension (allowing for exchanges with other / new relevant networks, discussing new approaches);
- Continue working on concrete connections between IRDR science and policy-/decision-makers (identify external champions);
- Use SC nominations process to engage strong partners (possibly also: permanent observers): institutions and individuals may need to be approached directly (e.g.: GFDRR);

Discussion also revolved around the need to address the core functional requirements of the IPO, and the resulting staffing and operational needs, the following concrete measures were proposed:

#### *Immediate (functioning of the IPO)*

- SC’s expressed strong concerns about IPO disruptions and knowledge erosion given upcoming staff transitions (e.g., ED, CO, JSO) and asked for interim management of the IPO (SC Chair reminded the SC that the previous transition without local interim management was un- satisfactory);
- A meeting is requested of all co-sponsors to discuss IRDR’s future (ideally, SC Chair and ED should be present; alternatively a document with key reflections about plans and requirements for the programme would be helpful);
- Preliminary overview of current obstacles drawn up by ED for meeting ICSU / CAST on 18 June; meeting of Chair and ED with ICSU/ISSC planned for 2-3 July; meeting of all co-sponsors with Chinese counter-parts as soon as possible thereafter. RADI mentioned a five-person delegation;
- Identify levels / areas of influence of RADI / CAST / CAS in order to secure the functioning of the IPO in line with the core requirements, and obtain commitments (RADI’s informal arrangements with IPO are not sustainable and do not resist conflict or pressure); if unsatisfactory, consider splitting office functions between Beijing and another location (Paris?);
- Consider inviting offers from other IRDR bodies to compensate for the shortcomings of current IPO location (e.g., communications function elsewhere). Capacity building should be run out of Beijing if mobility of funds is guaranteed (CB is part of 4+2 formula for implementing Sendai).

#### *Medium-term (relationships)*

- ED could be invited to work on an analytical report to SC (opportunities; obstacles; options);
- ICSU-led review of IRDR programme should be speeded up to allow for adjustments in time for Phase 2 of the programme;
- ISDR engagement in programme governance is better served if ex-officio delegate is not from a regional office. A global programme such as IRDR needs close connections with ISDR’s central operations (e.g., relationship with STAG not mediated by ex-officio delegate).

### **Decisions:**

- 3.1 The SC moved to acknowledge the critical contributions of Kerry-Ann Morris, outgoing Junior Science Officer, in securing the continuity of the IPO in periods of transition and in the logistics for the IRDR presence at the 3<sup>rd</sup> WCDRR.
- 3.2. The SC resolved to leverage the notion of the Consultative Forum to create a platform for the co-design, co-production, co-delivery of knowledge.
- 3.3. Regarding the core functions and services of the IPO, which should determine any future arrangements, the SC agreed with the proposal elaborated as #6 of the *London Reflections on Phase II of IRDR* as follows:
  - free access to (and no restriction on dissemination of) all relevant information;
  - free movement of people and funds, so that relevant activities can be supported globally by scientists, staff and resources wherever / whenever that support is needed;
  - ease in the acquisition and redistribution of funds collected from outside the main donor institution; and
  - freedom of choice for a broad synthesis of knowledge, without restrictions on the kind and provenance of input and contributors.
- 3.4. An SC ad hoc group will identify and develop key elements for IRDR core messages after Sendai: Irasema Alcántara-Ayala (VC), Virginia Jiménez Díaz, Sálvano Briceño, and Susan Cutter were joined by Mark Pelling after the SC meeting.
- 3.5. The current IRDR EC will work, in collaboration with the ED, towards meeting ICSU's information needs, including priorities and elements for a workplan.

## **4. IRDR Consultative Forum**

*At the 12<sup>th</sup> SC meeting, the SC decided that the Consultative Forum (CF) should serve primarily to refine the research agenda and not constitute an additional policy arena. It was also to form an online Task Group (including the SC Chair, ED) to prepare the CF. The Task Group would propose a preparatory work plan, including partners to be involved, timeline, venue, resources and objectives.*

The earlier suggestion to hold such a meeting prior to or at Sendai had been abandoned due to scheduling difficulties. Since then, it had been considered advantageous (in terms of available funding) that the CF be incorporated as stage one into the ICSU-led evaluation of the IRDR programme (with costs partly covered as a part of the review process), in the form of a structured dialogue with non-academic stakeholders, thereby also contributing to the implementation of Sendai (development of a co-designed research agenda).

### **Decisions:**

- 4.1: SC members Shuaib Lwasa (VC), Jörn Birkmann, S.H.M. Fakhruddin, and Ann Bostrom volunteered to develop a proposal for the format, timing and funding of a Consultative Forum.

## **5. Development of IRDR Bodies (Pt.1):**

*A call for SC nominations is currently circulating; previous discussions among the SC and IRDR's co-sponsors have raised questions about the composition of the SC and IRDR's working groups.*

### *Science Committee Nominations*

The current Call for nominations for the SC has taken into account requests made by SC members and co-sponsors: disciplinary balance and gaps; a strong case for future SC members to demonstrate experience with integrated research; the need to address the current gender imbalance of the Committee; a more inclusive approach for upcoming replacements (ISDR had asked for a more inclusive approach to the composition of the SC).

The Call for nominations was designed in close cooperation with ICSU. After the deadline on 30 June, the Extended SC Executive Group will submit an annotated list of proposals to the three co-sponsors (scheduled for July). The co-sponsors will appoint new members and nominate the new SC Chair in a

electronic decision-making session in summer 2015. Two new SC Executive Group members will need to be elected once the SC is complete.

The SC stressed that strategic choices will need to be made for the list and agreed that there is a need for a Chinese member on the SC and that all world regions must be represented. Nominees based at non-academic institutions (such as NGOs, private sector) should be considered where these have strong research arms that are amenable to advancing integrated DRR research, as was the case previously on the SC. However, SC members cautioned that it should not become another multi-stakeholder body.

#### *Working Groups*

The SC briefly touched upon the question of how the WGs should be composed to be both scientifically authoritative and inclusive. They expressed the need for transparency about the WG member selection process, and acknowledged that the topical areas of different WGs require fluidity and different compositions. Sub-working groups, as suggested at the 12<sup>th</sup> SC meeting for RIA (Children and Youth; Indigenous knowledge), can also be a way forward to combine inclusiveness, transparency, and excellence without creating unwieldy bodies.

#### *Decisions:*

5.1. The SC welcomed the opening up the recruitment process for SC members and acknowledged the concerns expressed by co-sponsors (geographical distribution, gender), as well as the opportunity for including scientific expertise from outside the academic community.

5.2. The SC will circulate widely and add own nominations in response to the Call for Nominations for new SC members.

5.3. Proposals for the WG composition and selection process will be requested from WG co-chairs with reference to the WG work-plans for the post-2015 period (current workplans come to an end soon); these matters will be discussed in a dedicated session at SC14.

#### **6. IRDR/IPO hosting environment:**

*IRDR IPO host RADI discussed developments including the audit of IRDR's funding line from the PRC's Ministry of Science and Technology. The IPO delivered the IPO report.*

On behalf of RADI, LIU Jie from the International Cooperation Office explained how the restructuring of institutes of the Chinese Academy of Sciences (CAS) will affect RADI: RADI's role in providing technology solutions for disaster monitoring and response will be enhanced under the new approach that aims at building a big facility (as part of the "Centers of Big Science Facilities – CFBI" approach). RADI's stations receive data from three satellites that cover 70% of Asia and have set up virtual stations in 3 neighboring countries. Last year Professor Guo and RADI received one of seven 'Projects to Watch' awards from the UN Big Data Climate Challenge.

The Ministry of Finance performed an audit of the IRDR program operations in China (IRDR China, RADI support structures, IPO, which are the three key elements of the composite grant) from November 2014 – March 2015; the purpose was to evaluate the IRDR program on its performance, progress, financial execution. No final report will be available before the end of the 2015, but the preliminary results suggested:

1. IRDR was a successful initiative and has made great progress;
2. A more detailed annual work plan and budget plan should be provided, and the accomplishment of tasks shall be measured in a more scientific way.
3. There is a need to strengthen the promotion of IRDR and its networking both in China and internationally, and to strengthen the financial management and auditing of IRDR.

The ED informed the SC that neither the ToR of the audit nor the timeline had been communicated and that the IPO was asked to provide substantial documentation at very short notice in mid-January.

Subsequently, the IPO office report presented a candid and mostly challenging picture of recent developments. These included resignations (ED, CO) and challenges in recruiting new staff (science officer, CO), but also the eventual successful recruitment of a new science officer. Communication successes (e.g.: new publications, news items, increased contact database) and challenges (IT



environment and China's social media and other restrictions) were discussed that impact the core functions of the IPO. Briefly, the report mentioned recent concerns with RADI's human resource management of the IPO (faulty handling of IPO staff taxes; unexplained withholding of salaries), and included an update about the health concerns referred to in an earlier IPO report (incl. Beijing's air quality which has improved; canteen hygiene quality which hasn't).

**Decisions:**

- 6.1. The SC noted the two reports and congratulated RADI on their scientific successes.
- 6.2. The SC expressed its concerns at the impact on the functioning of the IPO arising from management issues within the hosting institute and from restrictions imposed by the wider environment. The SC urged that discussions are launched as soon as possible between the IRDR co-sponsors and the Chinese hosting partners CAST, CAS/CASS and RADI to resolve the resolvable issues: to this end, a creative and solution-oriented approach should be adopted.

**Day 2: Open to existing and potential new members of the IRDR community**

**7. Development of IRDR Bodies (Pt.2)**

*Proposals for 2 new NCs – Iran and Argentina - were considered. Proposals for new ICoEs were deferred to agenda item 12.*

The SC considered for this meeting two proposals for IRDR National Committees: both proposals (from Iran and Argentina) bring together a wide range of actors.

Iran's proposal is very inclusive and has generated much interest from a variety of actors in Iran. It identifies areas where they want to be involved with current IRDR projects. In response to questions from SC members it was pointed out that also social sciences are participating in the Iranian proposal (they did proactively involve their National Sociological Association) and that the issue of gender diversity had been implicitly addressed in the composition of the preparatory meeting (one of the drivers of the proposal is Professor Iran Ghazi from Isfahan).

In the Argentinian proposal the large cast of involved institutions reflect a well-established network, but the proposal does not articulate how they could or would like to work in the IRDR programme structure. SC members mentioned that much of the Argentinian DRR science environment is dominated by emergency management experts, often from the military, who may use, but do not, typically, develop new scientific approaches; this may constitute an additional challenge and opportunity.

**Decisions:**

- 7.1. The SC approved the Iranian application for establishing an IRDR National Committee.
- 7.2. The SC did not approve the Argentinian proposal in the current form and recommended that the proposers be encouraged to reapply and address the requirements of the ToR. SC and IPO remain available to help in this and answer any questions.

**8. Reports / previews from Co-Sponsors**

*Of the co-sponsors, only ICSU sent a delegate (Communications Officer Denise Young). ISSC had sent some e-mail notes for the IPO to update the meeting. The UNISDR ex-officio member could not attend because the regional IAP meeting was scheduled at about the same dates in Bangkok (in order to attend that meeting, SC member S.H.M. Fakhruddin left towards the end of day 2, and R. Klein immediately after day 3).*

**ICSU**

ICSU had been subjected to an [external review](#) in 2014. The ICSU leadership are now preparing their response but the gist is: ICSU must recapture its role as global voice of science; promote transformative, solutions-oriented science (four global challenges); gain wider recognition in the

domain of policy advice and strengthen its outreach, incl. public engagement with science (potentially a new area of activity for ICSU). Funding and governance also require a step change. As part of the review, also the operations and objectives of ICSU's regional offices will all be under scrutiny: ROA had already been reviewed and the report is to be made public soon; ROLAC and ROAP reviews are underway, with reports due later in 2015. After completing all reports, ICSU will review their regional strategy and decide on a common set of recommendations to be implemented.

The SIDA application that was being prepared by the ICSU secretariat has now reached the advanced stage of negotiation. It will focus on ROLAC and ROA; ROAP had initially been involved in the preparations, but then identified its own priorities and are no longer included. Themes are likely to be: global environmental change; disaster risk reduction and resilience; sustainable energy; and human health and well-being in the urban environment. About 25% of the budget could be for activities linked to IRDR. In January 2015, ICSU submitted the 5 year proposal titled "*Building capacity for integrated research on Global Sustainability in Africa and Latin America and the Caribbean*". The next calls will target early career researchers (e.g., < 10 years work experience) in Africa and LAC. Overall, the proposal requests €9.3 million over 5 years (mainly for research grants).

Along with the Sendai and SDG processes, ICSU is also working with UN-Habitat (III). VC Shuaib Lwasa is also already involved with the preparatory and research work of UN-Habitat. The Future Earth programme has a complex new globally distributed secretariat and is completely independent. The ICSU EB has not yet decided the issue of mutual representation on FE and IRDR SCs.

#### *ISSC*

Notes from ISSC reported on preparations for the World Social Science Forum and FE-related funding and networking initiatives which are open to IRDR related researchers, especially research towards transformative processes. At WSSF there will be a funded session of RIA fellows and IRDR will support Shuaib Lwasa to attend the Forum.

#### *Decision:*

8.1. The SC was concerned at the absence of two out of three co-sponsors and feared that this reflected negatively on the role of IRDR in their respective strategies. The SC expressed its hope that the upcoming exchanges on the future of IRDR among co-sponsors will ensure a regular co-sponsor presence at future SC meetings.

8.2 SC members are invited to suggest activities with the co-sponsors that would be conducive to enhancing the impact and visibility of the IRDR Programme.

### **9. Next IRDR meetings – SC14 and IRDR Conference 2016**

*The SC discussed the location and focus of SC14 as well as the timing of the next IRDR conference. Information below about the next IRDR conference was added after the meeting.*

The SC decided to hold the 14<sup>th</sup> SC meeting in South Africa. Two options were considered: holding the meeting jointly with the WSSF in Durban in September 2015 (ruled out due to elevated costs and scheduling) and having the ICoE REaL host the meeting in mid-November at Stellenbosch University.

#### *Next IRDR conference (not discussed but added for background):*

According to the agreements concluded between international and Chinese programme co-sponsors, the IRDR conferences are expected to be held in China. Regarding the 2014 conference, Chinese co-sponsors criticized the low level of Chinese presence in the planning and performance of the conference. The new ED also noticed a serious under-budgeting for the conference.

The 2016 conference had been scheduled for June, but preparations had not made sufficient progress. Budget estimates for Beijing were too high and there were different interpretations about the role of the IPO (secure international participation vs. international fundraising). Agreement had been reached to establish three committees:

- International Organising Committee (comprising leading political, social and scientific actors in the field of DRR science, incl. highest-level representatives of co-sponsors: leadership and advice on partnerships and high-level sponsoring);
- International Scientific Advisory Committee (comprising SC members and other leaders of IRDR science: programme and selection of speakers);
- Local Organising Committees (Chinese co-sponsors: CAST and relevant sub-units, RADI, IPO [Chinese partners responsible for mobilising local sponsorship]). Local organizing committee could not be convened due to scheduling difficulties (other engagements of key CAST staff).

Sálvano Briceño, Djillali Benouar and SHM Fakhruddin (SC volunteers for IRDR conference organising group), jointly with the ex-officios, SC Chair, Vice-Chairs, and the IPO will resume discussions with Chinese co-sponsors after meeting on IRDR's future.

The SC Chair proposed to hold the next IRDR Conference in conjunction with the January STAG Conference in Geneva. This was an appealing option and initial discussions with Chinese co-sponsors were positive, though this idea was discarded since practical and procedural obstacles were described.

#### **Decisions:**

- 9.1. SC 14: The SC and other IRDR bodies asked to suggest African partner networks and institutions to be invited to the upcoming SC meeting in South Africa.
- 9.2. The SC's internal conference organising group, jointly with the ex-officios, SC Chair, Vice-Chairs, and the IPO, will resume discussions with the Chinese co-sponsors after meeting about the future of the IPO.
- 9.3 SC Chair and ED are requested to explore possibilities to collaborate with STAG on next conference.

## **10. Any Other Business**

*The SC did not raise any other business.*

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### **Day 2, part 2: Open to IRDR community members and partners**

## **11. Reports from IRDR Working Groups**

*The Working Groups DATA, FORIN and RIA presented recent progress and planned activities.*

### **AIRDR** (outgoing co-chair Susan Cutter)

After the completion of the 2015 reports and publications, there was no formal report about AIRDR; it was noted that there are now possibilities for AIRDR-inspired documentation and analytical exercises to be taken forward by an IRDR China Working Group and by members of IRDR Japan respectively. Also the Steering Group set up by ICSU-ROLAC had some conversations with partners about pursuing an AIRDR documentation project in LAC.

### **DATA** (outgoing co-chair Susan Cutter)

#### **Progress:**

- Co-chairs D. Ehrlich and S. Cutter presented at Sendai on *Guidelines on Measuring Losses from Disaster: Human and Economic Impact Factors - DATA Project Report No. 2* which was completed in time for Sendai
- 'Peril'/hazard classification: receiving feedback for version 2.0.; implementing the classification system in databases (Desinventar already using and Sheldus now incorporating).
- Improved internal WG communication by establishing password protected FTP site to exchange documents.
- WG meeting in Delft (The Netherlands) in February: human impact report finalized; strategic plan for next steps (consultations and membership coverage; sub-working group for indirect/economic losses; financing and hosting for meetings and projects).

**Networking:** DATA participates as members in CODATA (via Linked Open Data for Global Disaster Risk Research [LODGD]); met with WB and GFDRR on data repositories; is member of UNESCAP Expert WG of government representatives from across Asia who will use DATA's peril classification and glossary as benchmark for assessing existing and emerging national databases, with Indonesia taking the lead; UNESCAP EWG will also review and evaluate human impacts document. EU Loss Data group reviewed human impacts document and will consider adding population exposed indicator for inclusion in EU reporting; will also ask members to report on the list of perils based on the IRDR classification and hazard glossary. DATA is investigating connections with other groups, (e.g. joint work with JRC and with indicators group of ISDR).

**Next steps:**

- Revise and revise peril classification
- Review implementation of peril classification across existing databases
- Revise human impact indicators (e.g.: "affected populations") and economic indicators
- Guidance on establishing national loss databases.

It is DATA's intention to develop guidance that can be targeted to specific geographical regions (roll-out for Asia and Europe launched; 2016: discussions with Africa and LAC). Work of the committee is laying foundation for developing Sendai indicators relating to hazard demographics.

**Requests:**

- Funding for meeting to work on next steps (hosted by Munich Re or in Vienna): ca.US\$15,000
- Add member with economic expertise to the WG
- Request from IRDR-Japan to add Prof. Kawasaki (Data Integrated Analysis System, DIAS)

**Discussion:** H. Guo (RADI, and former chair of CODATA) asked about DATA's plans with regard to "Big data". S. Cutter explained that after Phase 1 (which had been focusing on generating agreements for classifying loss data through the unique coalition of private, public and NGO actors and data owners), Phase 2 under co-chairs D. Ehrlich (JRC) and S. Zlatanova (TU Delft) could now consider new forms of data generation (remote sensing etc), considering also the appropriate level of relationship with CODATA.

With DATA's intention to develop guidance to target specific regions and create national databases where these don't exist, the WG is working with SFDRR towards relevant indicators. Loss data and risk indicators are very different, but that accurate recording of loss data can also help demonstrate the urgency of research into underlying causes for disasters, thereby moving towards better risk indicators. DATA could consider future sub-working groups on "Big Data" and on vulnerability.

**FORIN (co-chair: Irasema Alcántara-Ayala)**

**Progress:** A FORIN workshop held in Paris in November 2014 was used to produce elements for an expanded FORIN-2 document. The drafting group met again in February, reviewed feedback received and a further small drafting group meeting (incl. ICSU's Howard Moore) is expected to finalize the document in August 2015.

FORIN 2.0 will have four main objectives: academic research; education; DRM policy; and development; it proposes four different methods: 1) Retrospective Longitudinal Analysis (RLA); 2) Projective Longitudinal Analysis (PLA): Disaster Scenario Building; 3) Comparative Case Analysis (CCA); and 4) Meta-Analysis (MA). It will look towards case studies in due course.

Susan Cutter, Ian Burton, Jörn Birkmann and Mark Pelling had produced a FORIN brochure with case studies which was distributed to great acclaim in Sendai. Upcoming publications include: an article on FORIN for the Routledge Encyclopedia of Natural Hazards which is being written by two WG members; 2) *The Journal of Forensic Research* has solicited a contribution and considers devoting an entire issue to FORIN. The co-chairs are in the process of developing a proposal to that end. A list of scientific journal articles produced by members of the FORIN WG since 2013 was presented.

**Networking:** IPO and WG co-chair Alcantara-Ayala had assisted in connecting IRDR China members (RADI) and institutions in Mexico (civil protection) for a proposal on storm disasters, submitted under a bi-lateral intergovernmental programme for S&T cooperation between China and Mexico. WG co-chair I. Alcántara-Ayala attended a regional Central America and Caribbean network of university leaders who agreed to establish a regional university network for universities on DRR and to establish a science-based masters with a joint curricula – the baseline would be integrated research; FORIN would be part of the curriculum. The data included in the report prepared by SC member V. Jiménez Díaz for ICSU ROLAC was very helpful in setting up this network.

**Requests:** The FORIN Work Plan developed in 2012 has remained unchanged so far, with requests for US\$250,000 of estimated costs for each case study. The WG expects to have funding in hand before identifying projects and PIs. While funds have been generated by the FORIN WG for four workshops and two drafting group meetings (post-workshop follow-up with participants not documented), no efforts were made to obtain funding for the case studies.

**Discussion:** The SC found it useful to employ university alliances for the promotion of IRDR-related projects; it warned of duplication and fragmentation of efforts, though, given that it was pointed out recently a major network of relevant institutes received funding from the Swiss Development agency (110 proposals, 45 granted). Mainstreaming IRDR through cooperation rather than duplication would be desirable, especially since this alternative and existing network also focuses on inclusion, graduate studies, social change. The ED confirmed that the FORIN 2.0 document will be published and disseminated by the IPO (English version); ICSU ROLAC will need to mobilise resources for a Spanish translation.

**RIA (co-chair Ann Bostrom)**

**Progress:** The US-Japanese Tokyo Risk Communication Symposium in October 2014 helped develop a research program. Over 200 people attended this meeting.

NSF felt that capacity building would be enhanced with more collaboration between the US and Japan as well as internationally. With more flexible funding guidelines, IRDR could have co-sponsored the meeting. The symposium concluded that there was need at 3 scales for research:

- Individuals: human cognitive processes (e.g. eye tracking);
- Meso-scale: human behavior and decision makers in hazard-related contexts (e.g.: stigmatization of certain agricultural products from Fukushima region);
- Causality in social and environmental changes resulting from hazardous processes (geophysical and social macro-dynamics): E.g. social media reflecting changes in societal behavior as people think about risks and what they should do at the time of the event.

The NSF symposium report is due soon and can provide a basis for the 2<sup>nd</sup> RIA framework paper; the report, in some modified form, might also be publishable as a RIA report.

The SC discussed that funding structures for research into integrated risk communication as an interdisciplinary and international field could be modeled on formats such as the EU-co-funded Trans-Atlantic (funding and strategy) Platform (between national funding agencies), connecting country-level research efforts on risk communication.

**RIA fellows** (SC Chair and WG member David Johnston): Most RIA Fellow projects have come to an end, but the reports have not yet been reviewed. Based on their own research projects and agenda, some RIA fellows are funded to attend ISSC's World Social Science Forum in Durban to present at a session on governance. RIA fellow activities included webinars as reported in recent IRDR Newsletters, and also contributed to the emerging RIA sub-working groups: Kevin Ronan (Central Queensland U, Australia) is leading work on children (review paper for GAR; ICoE-CR research workshop planned for July 8, 2015 on "*The role of children in disasters: a programme of research*") and there is potential also for links with UNESCO.

Another RIA theme is the incorporation of indigenous knowledge into local and national decision making (there were many interactions with groups during the Sendai process). Dr. Cassie Kenney

from New Zealand is working in this area. RIA notes that the SFDRR has many mentions of public engagement and they see this as an avenue where RIA can support and engage with the framework.

- King's College London's recently established ICoE-RIA currently led by SC member Mark Pelling, and has just posted some funded positions for research on RIA related themes.
- With the help of UK research grants, the ICoE RIA is also building stronger links into UN-Habitat: their project on urban resilience will convene an open science meeting in Malawi.
- Also "Early Warning Systems" as interface between humans and systems is a RIA research thread that could have subgroups. S.H.M. Fakhruddin spoke about the DRR Expert Forum convened Antalya, Turkey, in February 2015, sponsored by USAID and GFDRR. He had co-chaired a session on Early Warning Systems.

#### **Decision:**

11.1. The SC felt IRDR should offer some support for the planned meeting of the WG DATA, provided funds are available in the budget and provide Chinese hosts can accept the transfer of funds for programme activities abroad (in conjunction with 2016 STAG conference, rather than separately).

11.2. The SC supports granting publication funding for FORIN 2.0 English version; the Spanish version falls outside the remit and should be dealt with by the co-sponsors' Regional Offices.

11.3. The SC encouraged RIA's thematic sub-working groups to achieve or expand the objectives of the WG's in the light of the SFDRR. Collaboration with ICoE's will be helpful.

## **12. Reports / previews from IRDR ICoEs:**

*Reports from the ICoEs focused on past, ongoing and planned activities, as well as opportunities for cross-ICoE and other cross-programme collaborations. Reports on past activities cover the period since the last report (e.g., activities since the last SC meeting).*

### **ICoE-Taipei** (report: Shih-Chun Candice Lung)

**Reporting:** ICoE-Taipei's international programme focuses on capacity building, supporting and hosting visiting scientists, holding symposia and workshops and hosting a series of Advanced Institutes (AIs):

- Co-hosted 3<sup>rd</sup> Psychological Intervention after Disaster (PIAD) workshop, Mianyang, China, December 8-11 2014; now planning now for 4<sup>th</sup> PIAD workshop, Taipei, 9-12 November 2015.
- Hosted AI "Disaster Risk and Loss Reduction", on 20-25 April 2015. It offered 18 midcareer researchers and practitioners practical training on engineering and socio-economic risk reduction solutions. IRDR's R. Klein spoke on integrated risk management and post-Sendai reflections. Follow-up projects for fellows are being considered.
- Research seed grant (\$15K) final reports from RIA / World Social science fellows under review.

Media appearances: Tony C., Liu, IRDR-ICoE, in TV-interview regarding loss reduction for earthquakes especially on building evaluation and retrofit after the April 20<sup>th</sup> earthquake.

The ICoE Taipei domestic component includes promoting and coordinating IRDR-related research such as: Mega-seismic risk and multi-geological disasters in Taiwan; Impact of Climate and Land Use Change on Environmental Hazards and Adaptation; Vulnerability Assessment for Heat Wave and Relevant Adaptation Strategy Recommendations; and Open ISDM: Open Information Systems for Disaster Management.

**Planning:** Organize/sponsor future AIs which will all support the implementation of the Sendai Framework, such as:

- Proposed AI on FORIN case studies;
- Proposed AI on interlinked topics of "IRDR", "Future Earth", and "Health and Wellbeing in the changing urban environment (UHW)", as discussed with IPO ED;

Typically, the AIs would lead to joint projects, for which seed grants are competitively awarded, to support IRDR research. ICoE Taipei will continue to support:

- PIAD workshops,
- visiting scientists program,
- Pan-Asia Risk Reduction (PARR) Fellowship Program,

- IRDR SC Flagship Project (presented by Wei-Sin Li, with contributions from SC member / liaison Kuniyoshi Takeuchi) and the IRDR-related international scientific activities, as well as other IRDR and ICSU Programmes (e.g.: Future Earth).

**ICoE VaRM** (Susan Cutter):

**Reporting:** Activities and publications reported include contributions to the upcoming “Nature” article (Issue 18 June 2015); Additional paper arguing that existing disaster loss databases underestimate disaster losses;

**Planning:** Oxford University Press is preparing an encyclopedia and several SC members are involved, initially as an online publication.

**ICoE CR** (David Johnston):

**Planning:** ICoE is in an expansion mode, with a dedicated building and set to become the disaster research hub on Massey University Wellington campus (launch August 2015); one week annual event on integrated Emergency Management during the first week of March.

**ICoE UR&S** – not represented, no official report: IPO reported on the joint seminar organized by ICoE and NC Colombia.

**ICoE REaL** (Robyn Pharaoh, Periperi U, Stellenbosch University, South Africa)

**Reporting:**

- In the reporting period 10 publications, incl. seven peer reviewed publications;
- Continued short courses and academic programs (involving 560 students);
- Continued mobility of members (short courses, e.g., students & practitioners to South Africa);
- Individual courses offered by ICoE members / SC members (e.g., “DRR and journalism”, Djillali Benouar, Algeria);
- Setting up international advisory board and elements for a multi-annual work plan;
- Much energy devoted to preparing for 3<sup>rd</sup> WCDRR in Sendai (co—hosting session on Higher Education and DRR; Ignite sessions; meetings with JICA etc);

**Planning:**

- Summative evaluation of Periperi U, third cycle by USAID (new proposal delayed to January 2016 due to changes in priorities in USAID).
- Consultative meeting planned for in June/July in Ethiopia.
- Preparations for SC meeting in Nov. 2014.

**ICoE-RIA** – not represented, but [written report submitted](#) (in Member’s Zone).

## Expressions of Interest for New IRDR ICoEs

SC member Jörn Birkmann presented the revised proposal for the establishment of *ICoE for Critical Infrastructure and Strategic Planning (CI&SP)* for discussion. The envisaged ICoE will be led by Prof Jörn Birkmann and established at the interdisciplinary institute of Spatial and Regional planning (IREUS), within the Department of Civil Engineering and Environmental Management at the University of Stuttgart, Germany. It includes the UNU Institute for Environment and Human Security, Bonn; the Karlsruhe Institute of Technology (KIT); the Center for Disaster Management and Risk Reduction Technology (CEDIM), University of Potsdam; and the Institute for Social Science, Department of Technical and Environmental Sociology at the University of Stuttgart.

It proposes to support integrated research on the resilience of critical infrastructures, their management and the increasing dependency of societies on the functioning of critical infrastructures. It will be an important network among national and international researchers in the field of critical infrastructure and planning research and IRDR’s project working groups DATA, FORIN and RIA. The proposal went through a rigorous development process with core members of the proposing institutes and the German Committee for Disaster Reduction (DKKV) - Germany’s IRDR National Committee (NC).

Paul Kovacs (future director of ICoE and current also NC Canada representative) presented the proposal for a new *IRDR ICoE for Disaster Resilient Homes, Buildings and Public Infrastructure (DRHBPI)*. DRHBPI is based at the Institute for Catastrophic Loss Reduction (ICLR) at Western University, London, Canada which is Canada's oldest and largest university-based disaster risk reduction research institute and is a world-class centre for trans-disciplinary disaster prevention research and communications. ICLR was established by Canada's property and casualty insurance industry as an independent, not-for-profit research institute.

DRHBPI proposes to work to advance the scientific foundation for enhancing the resilience of the built environment to damage from hazards including earthquakes, flood and severe weather. ICoE-DRHBPI has natural links to three of IRDR's established project working groups (AIRDR, FORIN and RIA), as well as to the WMO WWRP Working Group on Societal and Economic Research and Applications (WG SERA).

#### **Decisions:**

12.1. The SC was grateful for the ICoE reports and asked ICoEs to use the IRDR reporting template to cover the period since the last SC meeting as well as to include forward planning. The SC requested that ICoEs reflect explicitly - in actions and reporting - on integration and internationalization.

12.2. The SC requested the IPO to draw up a list of the IRDR ICoEs and to propose, for the next SC meeting, a preliminary analysis of which areas of the IRDR science plan are effectively delivered by the existing ICoEs and their activities and what gaps still need to be filled (also with regard to support necessary for the IRDR WGs), so that ICoEs appear as clear components of the IRDR strategy.

12.3. The SC requested that ICoE Taipei document experiences of the flagship project in long-term interactions with local government so that lessons can be drawn. It would also be useful to engage the ICLEI community.

12.4. The SC suggested that PIAD is an opportunity to use post-event trauma studies for long-term strengthening of resilience: interactions with other IRDR activities would be desirable.

12.5. The SC unanimously accepted the two proposals for new two IRDR ICoEs, but had specific requests for both of them which will be reflected in the letters of approval.

12.6. The SC encouraged ICoE CI&SP to develop collaborations with the IRDR programme, especially with the newly established Canada-based ICoE Disaster Resilient Homes, Buildings, and Public Infrastructure (ICoE-DRHBPI). ICoE CI&SP is requested, for the 14<sup>th</sup> SC meeting, to discuss how they will exploit possibilities under EU and other European grant calls to further the IRDR research agenda.

12.7. The SC invited the ICoE DRHBPI to be more specific about their links to the rest of the IRDR programme at their report to the 14<sup>th</sup> SC meeting. The SC would like to see the already identified collaborations (e.g. IDRIM) elaborated further in the first 6-month report.

12.8. The SC requested that the two new ICoEs develop collaborations; as a first step for both new ICoEs, it is suggested that they mutually appoint representatives on their respective International Advisory Boards.

12.9. The SC requested the IPO to prepare the respective acceptance letters and MoU's along the lines sketched in the discussions and decisions.

### **13. Reports from IRDR National Committees**

*Attending NCs update the meeting on their activities.*

#### **IRDR Japan** (Kenichi Tsukahara)

**Reporting:** IRDR Japan (and its parent organization Science Council Japan) had major responsibilities in preparing the *Tokyo Conference on International Study for Disaster Risk Reduction and Resilience: Towards a new science and technology to consolidate disaster risk reduction and sustainable development* held on the 14-16<sup>th</sup> of January as well as an important role at the 3<sup>rd</sup> WCDRR in Sendai in March 2015. The IRDR Japan presentation included a [video](#) showing the Tokyo Action Agenda and reflecting the achievements of the Tokyo conference.



**Planning:** Science Council Japan is now developing recommendations to the government of Japan as follow-up to the Sendai commitments. These recommendations will be made in September / October 2015 and will be based on SFDRR and the Tokyo Conference.

#### **IRDR China** (Fang Chen)

**Reporting:** 2015 saw the launch of a new IRDR China National committee. With Prof Huadong Guo (RADI) as chair, IRDR China entered a new phase. Five new interdisciplinary working groups will focus on: earthquake and geo- hazards, drought and floods, severe storms, climate change driven disasters, and disaster risk in urban environments. In addition, a 6<sup>th</sup> group is working on an assessment and strategic report of integrated disaster-related research in China (a Mandarin AIRDR). IRDR China offered specific input for the Chinese government's new geopolitical strategy ("One Belt One Road") with evolving collaborations in Central Asia and South-East Asia. The capacity building workshop, organized by the IPO and IRDR China for the two days after the 13th SC meeting, is meant to introduce the next generation of Chinese DRR scientists to methodological advances offered under the IRDR programme and stimulate new research programmes and relevant conference papers.

**Planning:** IRDR China contributed to the working session on *Earth Observations and High Technology to reduce risks* at Sendai and is involved in the follow-up. They plan to develop a think tank for integrated research to contribute new ideas globally and are supporting initiatives to strengthen bilateral relations between IRDR bodies (e.g., RADI / Mexico; IRDR China with UK partners and ICoE RIA under the UK-China IRNHiC funding opportunity, collaborating with Bruce Malamud [KCL]). Both IRDR China and IRDR Germany are engaged in capacity building in Kyrgyzstan and could collaborate.

#### **IRDR New Zealand** (David Johnston)

**Reporting:** IRDR New Zealand came about as part of the country's *Natural Hazards Platform* and brings together funding from 2 government departments and 7 research universities for approximately 15 million NZ\$ a year for research.

**Planning:** IRDR NZ is now leading a government advisory group for the post-Sendai implementation and has a meeting scheduled with the government on 15<sup>th</sup> June. They are discussing strengthening bilateral links to UK, Australia, and Asian partners.

#### **Other NCs:**

The ED summarized NC activities of those who had not sent delegates (Australia, Canada, Colombia, France, Germany, US) and also outlined activities of ICSU Regional Offices in Africa, Asia and Latin America and the Caribbean (with additional comments on ROLAC from Irasema Alcántara-Ayala).

#### **Decision:**

13: The SC noted the NC reports and suggested that resources be made available to invite delegates from the relevant expert groups of ICSU's Regional Offices for the next SC meeting.

### **14. Reports on regional partner networks**

*IRDR SC members and invited guests reported on selected relevant regional initiatives.*

**Antalya Expert Forum** - S.H.M. Fakhruddin reported on his participation at this meeting, sponsored by USAID, GFDRR and others. The forum sought to illuminate the challenges in learning from previously identified lessons. Fakhruddin presented *A lesson identified is not a lesson learned* during the hydro-meteorological disaster theme; USAID is willing to support some of the 6 activities:

1. Develop a simple, user-friendly "Lessons Identified" Portal;
2. Offer incentives for DRR learning for capacity building and pilot project transitions to long term;
3. Blend and integrate DRR & CCA: proposed a Fund 'Orange';
4. Identify and build a role for the next generation (youth & young professionals);
5. Attend to weak links and feedback on Hydro-meteorological Warning Systems; and
6. Governments, banks, and donors to improve coordination.

***APEC Emergency Preparedness WG (EPWG)*** - Wei Sen Li, Secretary General of the NCDR Taipei, is co-chair of APEC's EPWG and presented on the recent WG meeting in May 2015. EPWG members are sent from their governments (diplomats and DRM experts) and can invite academia, NGOs, and regional and global multilaterals of the 21 APEC countries. Outputs of their meetings are submitted to APEC's ministerial meetings. The EPWG focuses on strengthening public-private partnership capacity for emergency preparedness and business continuity plans and seeks to create a useful and replicable model that would lower barriers between science and private sector decision makers. The EPWG was formed in 2005 as the Task Force on Emergency Preparedness (it was never intended to provide emergency relief) and has five priorities:

- Business and community resilience
- Public-private partnerships
- Disaster risk reduction
- Cooperation and coordination with regional and international stakeholders
- Preparations for the recovery phase

The EPWG will hold a workshop on “*Scientific Decision Support for Emergency Preparedness of Natural Hazards*” at the end of July 2015.

***Pan Asian Risk Reduction Fellowship Programme (PARR)*** - Wei Sen Li also shared a short presentation on PARR. Asian researchers, practitioners, and policy makers are selected in this START-facilitated initiative. The PARR Research Fellows programme seeks to enhance capabilities for advancing and applying knowledge on critical issues of global environmental change and DRR in the Asia-Pacific and to enable actors to produce, communicate and apply science that is relevant and usable across the science-policy-practice interface. PARR Fellows are matched with a mentor at a host institution to carry out individually designed risk reduction projects. They are provided with a mixed experience of intensive training, interactions with a policy partner, and implementation of a risk reduction project that is integrated into their everyday work.

***Asian Network on Climate Science and Technology (ANCST)*** – Dr. Joy Jacqueline Pereira presented *Disaster Risk Reduction & Climate Change Adaptation: Initiatives & Approaches*. She leads the SE Asia Disaster Prevention Research Initiative based at SEADPRI-UKM (Universiti Kebangsaan Malaysia) and is the ASEAN coordinator of ANCST (supported also by the U. of Cambridge). ANCST seeks to encourage closer collaboration between Asian research centres and has pilot projects in 10 Asian countries. In addition to India, the funder, ANCST has 10 government and 10 university partners (in the ASEAN context the governments determine what they'll support as an academic center of excellence). One major challenge is cross-border data sharing.

***2nd Global Summit of Research Institutes for DRR (GSRIDRR)*** - This summit was held 19-20 March 2015 at Kyoto University, Japan. Hirokazu Tatano (Disaster Prevention Research Institute, Kyoto U.) presented the summit elements: evaluate research achievements of the last decade; identify research gaps, needs and challenges; formalize an international forum on natural disaster research (GADRI - Global Alliance of Disaster Research Institutes) suggested by UNISDR STAG; and propose a research road map. 83 institutes from 21 countries attended and efforts were made to confederate some of the leading higher education institutions (HEIs) post Sendai. The DPRI will serve as the first secretariat and prepare another summit in two years.

***Economic Cooperation Organization (ECO)*** - The ED presented exchanges with this regional economic and policy coordination network of 15 Western/Central Asia nations – a region where earthquakes as well as slow onset disasters and landslides are important. At the last meeting, their heads of state passed a set of recommendations acknowledging DRR as a complex issue and seeking to establish a standing advisory group to governments. They seek to connect to expertise in biological, geological and social sciences and look to IRDR and other networks to offer advice on developing suitable approaches. They sought involvement from IRDR for their October 2015 conference.

***Pan-Eurasian Experiment (PEEX)*** - LIU Jie (RADI International Cooperation Office) presented on behalf of PEEX co-chair Huadong Guo. PEEX is a multidisciplinary research collaboration, focusing

on climate change, air quality and environmental exchange and was originally a bottom up initiative of Russian, Finnish, and Chinese research organizations. 20 different countries are now involved (PEEX is open to other countries to join). RADI was involved in the startup phase several years ago, is home to the China office, and will be hosting the next PEEX conference in May 2016. The overall goal of PEEX is to contribute practical and integrated solutions to the grand challenges in CCA, biodiversity, air quality, and food security. PEEX is a multidisciplinary initiative with 4 foci: understanding and codifying land use changes; establishing research infrastructure – comprehensive research stations; knowledge transfer to the next generation; and increasing public awareness.

**Future Earth (FE)** - SC Chair David Johnston spoke briefly about Future Earth projects IRDR is involved in. An initial pilot project looks at co-production (activities planned later in the year); IRDR was invited to be on the WG. Johnston will meet these FE colleagues at the upcoming IUGG conference in Prague (June/July 2015). He asked for a volunteer (preferably someone based in Europe where the coordinators of this pilot project are based) to take his place in this project WG.

**ICSU Regional Office for Latin America and Caribbean (ICSU-ROLAC)** - VC Irasema Alcántara-Ayala presented the work plan of ROLAC's hazards and disasters committee. The work plan dovetails well with IRDR's agenda. Of specific interest to IRDR are priorities #3 (capacity building with an emphasis on FORIN-style investigations) and #6 (collaboration with IRDR). She mentioned several upcoming activities that the IRDR family should be involved in. They include:

- Facultad Latinoamericana de Ciencias Sociales (FLACSO) presentation of GAR in Costa Rica, 22-26 June 2015.
- 1<sup>st</sup> ICSU ROLAC Annual Conference, in Mexico with emphasis on DRR, planned in April 2016.
- Capacity building for FORIN: planned for late 2015 (training workshop and study cases).
- Integrated workshop on science, policy and practice, to be held as an annual activity.
- Collaborating with IRDR to promote creating national IRDR committees (starting with Panama).
- Develop an AIRDR-style assessment for Spanish-language literature (Alonso Brenes) using as a starting point the draft report by V. Jiménez Díaz.

Virginia Jiménez Díaz presented results and recommendations of her research report "*Identification of existing advances and linkages of the scientific and academic community initiatives on DRR in Latin America and the Caribbean*". The report covers higher education and research institutes in 18 LAC countries with the help of the La Red network across Latin America. Further coverage is needed for Cuba, Trinidad and Tobago and Barbados. Brazil was not included. Less than 6% of the academic institutions were working on DRR initiatives but 820 lecturers were teaching some form of DRR in 70 universities. There were few linkages between academic programs and national DRR entities and little public access to research and publications. There are very few regional journals, so that those who publish research mostly do so outside the region. 104 DRR research projects were identified of which 19% worked within one discipline, 33% were inter/transdisciplinary, and 49% were multidisciplinary.

**Others (postponed to day 3)** - VC Kuni Takeuchi presented informally on his attendance at ICLEI's (Local Governments for Sustainability) recent "*Sustainable Solutions for an Urban Future*" World Congress in Seoul, Republic of Korea, 8-12 April 2015. The Congress gathered over 2,500 delegates from 249 local governments worldwide. ICLEI was established in 1990 and now has 1000+ cities involved. The "*Seoul Declaration*" sets out a path to global urban sustainability and was adopted by ICLEI World Congress participants, ICLEI members, partners, and other local governments.

**Discussion** - ICLEI has developed a MoU with the World Council on City Data. For the resilience rhetoric to be meaningful, we need to base the resilient city concept on relevant and correct city data (10 essential indicators for resilience). ICLEI was one of the core partners in the Major Group Local Government at the Sendai PrepComm meetings and has expressed interest in collaborating with IRDR. VC Shuaib Lwasa and ED are planning to attend ICLEI meetings (connected also to UN-Habitat and Rockefeller Foundation's Resilient Cities initiative) in Bonn later in June 2015, with the intention to identify partners for establishing laboratories for exchanges between science and decision makers at local level. Paris will also be hosting a city summit at the end of 2015 with 1,000 mayors.

The engagement with ICLEI is a good foundation for IRDR engagement with local governments, possibly also for the roll-out of the ICoE Taipei flagship project (see page 15 above).

**Decisions:**

*The SC welcomed the opportunity for exchanges with related networks, and considered the following areas for collaboration:*

- 14.1. Encourage S.H.M. Fakhruddin to continue engagement with the Antalya Expert Forum, ensure their presence at the next IRDR conference, and IRDR's presence at their next meeting;
- 14.2. Suggest that IRDR should be given an opportunity to present at the next APEC-EWG on its work on DATA and EWS;
- 14.3. Encourage ANCST to involve IRDR and connect with thematic working groups (e.g., urban; climate change etc.);
- 14.4. Suggest that the Global Summit systematically involve the IRDR ICoE's and that the IPO ensure a mutual presence at the respective conferences;
- 14.5. Reach out to the ECO network once current priorities for consolidation of the programme are settled; the new Iran NC could take the lead and help engage and make this link;
- 14.6. Maintain link with PEEEX through IRDR China and RADI; this could be a useful entry point for closer collaboration with relevant Russian scientific institutions;
- 14.7. David Johnston and Jörn Birkmann to agree on FE pilot project working group representation;
- 14.8. ICSU ROLAC / La Red: IPO to offer editing support for the English language version of the report. Strategic recommendations on integrated DRR science in LAC region should leverage the survey data (incl. development of subsequent phases, covering Brasil), at ISDR regional meetings.

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**Day 3- Open to IRDR community members and partners**

**15. IRDR partners in China:**

*Several DRR science approaches were presented based in Chinese academic institutions. They capitalize on the country as a science and technology leader and the location of frequent disasters.*

**Chinese Psychological Society (CP)** - the DRR related work of CPS was presented by Prof. Jianxin Zhang of the Institute of Psychology, Chinese Academy of Science, and member of the ICSU ROAP steering group. CPS is a member of IRDR China and is in their 4th year of collaboration with ICoE Taipei to offer the "*Psychological intervention after disaster*" (PIAD) international capacity building workshop. The 2008 Sichuan earthquake, which saw untrained people pour into the disaster area to help with psychosocial issues, motivated CPS to start working on disaster psychology. CPS now offers training to help psychosocial responders. They have learned that good relationships with local governments need to be established to allow interventions aimed at helping local residents. Equally, CPS learned that any post-disaster intervention must consider religious and cultural differences; this is supported by quantitative observations (e.g., research found a significant difference in people's reaction to a specific disaster based on their distance from the epicenter). While, generally speaking, social sciences are not as well funded for carrying out applied research aimed at disaster prevention and response as the natural sciences are, in China this imbalance is starting to be addressed.

**Beijing Normal University / Integrated Risk Governance** - Prof Qian YE of Beijing Normal University spoke in his role as Executive Director of the ICSU / IHDP / FE project and for Integrated Risk Governance (IRG). Much of IRG's work focuses on how to deal with very large-scale, systemic and complex disasters (VLSDs) which exceed current coping capacities. He recalled in *IRG Project: Past and Future and Proposal for Cooperation* that IRG was proposed to ICSU in 2006 as a project looking at global, national, and regional levels; IRG was officially launched in 2011 with research, capacity building, and several other activities. This includes how to use the substantial money donations that occur in response to major disasters. IRG have, through BNU, developed a policy impact within China and are contributing to UNISDR's efforts to produce indicators, assessments, a finance mechanism, and a governance framework, in the domain of VLSDs. In 2010, they began

editing the *International Journal of Disaster Risk Science (IJDRS)* - recently accepted by Thomson Reuters' scientific index). IRG, hosted by Beijing Normal University, has become a FE project.

IRG proposed several ways of collaborating with IRDR: (1) Journal: IRDR to contribute to a special journal issue (IJDRS) of reactions to Sendai or propose an IRDR guest editor for one thematic issue; (2) develop joint workshops and conferences/conference sessions as has been done in the past; (3) co-develop research initiatives with FE (possibly jointly approaching Belmont Forum); (4) locally, to more fully develop cooperation among IRDR, IRDR-China, IRG and BNU. The SC felt that a partnership with IRG was a priority partnership: at the very least, elements for a common strategy and talking points should be developed.

**HIST** - is a programme and an International Center on Space Technologies under the auspices of UNESCO and based at RADI. HIST serves the conservation and management of UNESCO designated sites and was presented by Deputy Executive Director Dr. Tianhua Hong. With 1007 UNESCO world heritage sites (in 161 countries), 621 Biosphere Reserves (119 countries), 111 Geoparks (30 countries), and nearly 140 new sites soon to be designated by UNESCO, HIST's vision is to make full use of space technologies for better identification, conservation, management and sustainable development of the natural and cultural heritage of humankind. The presentation gave some case studies (Nepal's world heritage sites before and after the earthquake; Cambodia's Angkor Wat site etc.). There is a growing awareness within UNESCO about the need to address disaster risk and to build disaster awareness into planning. There is some awareness of the protective and risk reduction function of eco systems; this is not yet recognized in international law. HIST invited IRDR to provide input on this aspect to be shared by Dr Hong at the upcoming UNESCO meeting.

**Centre of Excellence on Space Technology for Disaster Mitigation (CAS / TWAS SDIM)** - Prof. Fang Chen presented "*Using Space technology for Disaster Mitigation*" and elaborated on the core aim to enhance scientific and research capacities for disaster mitigation in developing countries through the use of the most advanced space technologies. The Centre hosts training workshops, conferences, seminars; and offers scientific reports and advisory services. Currently, they have launched 11 research projects and are cooperating with 13 developing countries. Of special interest is the Cropwatch system which operates on several scales - local, national global. Their SatSee technology creates a low cost virtual ground station, with real-time quick-look imagery. CAS-TWAS participates in UNISDR's WG on satellite technology for developing countries. Among their recent accomplishments are four key application systems developed and transferred, publication of a strategy report, four training workshops, and 15 students and scholars studying at SDIM (some of whom will join the IRDR SC/IRDR China capacity building workshop).

#### **Decisions:**

The SC welcomed this opportunity for exchanges with related networks in China, and considered the following areas for collaboration.

15.1. Active participation of Chinese Psychological Society (CPS) in IRDR China.

15.2 Proposals of IRG and suggests to explore further contributions on IRDR's view of the SFDRR for a special journal issue of IJDRS; the internal working group tasked to prepare a future IRDR conference is to develop ideas for joint activities; for SC members tasked to explore links with FE to co-develop research initiatives with FE (possibly also: jointly approaching Belmont Forum). IRDR-China is encouraged to make full use of the networks of IRG and BNU.

15.3. Sálvano Briceño will provide HIST with text on DRR linkages to be shared at UNESCO mtg.

#### **16. Upcoming events**

*The SC had no further recommendations or alerts on upcoming relevant DRR events.*

#### **17. Closing remarks (farewell)**

*The SC thanked the outgoing SC Chair David Johnston and outgoing members of the SC and the SC Executive Group for their dedicated service to the programme. The SC thanked the outgoing ED for his services to the IRDR programme.*