Almost there! Preparing for the 25th IOC Assembly, and later in the year the 5th anniversary of the Indian Ocean tsunami, a long series of IOC tsunami meetings has kept everybody more than busy. The 2009 series of ICG meetings has almost finished. The first Global Meeting of the ICGs for Tsunami Warning Systems brought together for the first time almost all elected ICG office bearers and representatives from partner organizations to exchange experiences, identify commonalities and draft the way forward into sustained operations. They took stock of what has been achieved since 2004, and through the TOWS WG-II meeting formulated important recommendations for the IOC Assembly to discuss.

Putting more emphasis on regional stakeholders and optimizing the detection networks for seismics and sea level were the highlights. Agreement on common standards and performance indicators has been advanced to provide a uniform global coverage. Now the downstream part of communicating warnings to the general population will draw more attention and resources. Another priority is to make the Tsunami Warning Systems more viable by focussing on the multi-hazard aspects and the impact this will have on the systems design and performance.

IOTWS

The Sixth Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS-VI) was held in Hyderabad, India, 7–9 April 2009. The meeting was attended by 70 delegates from 11 Member States of the IOTWS, 3 Observer States and 9 UN agencies and other organisations. A key outcome of the meeting was the adoption of the guidelines on “Tsunami Risk Assessment and Mitigation for the Indian Ocean: Knowing Your Tsunami Risk – and What to Do About it” (see section “Other News”). Working Group 3 also presented a report on the Indian Ocean Tsunami Hazard Map, developed by Geoscience Australia with technical input from Working Group 3 members and with funding support from the Australian Agency for International Development (AusAID).

The ICG established a Task Team to review structure of the Working Groups and their Terms of Reference, reporting to the Steering Group within 6 months. The review will be carried out in the context of the TOWS-Working Group’s review of global working group harmonisation. The current Working Group Chairpersons and Vice-Chairpersons were invited to continue in their roles until the review has been completed. The ICG thanked the Government of India for its hospitality and for hosting the meeting at short notice. The next session will be held in Yogyakarta, Indonesia in March or April 2010.

PTWS

ICG/PTWS meeting in Apia, Samoa

The Twenty-third Session of the Intergovernmental Coordination Group for the Pacific Tsunami Warning and Mitigation System (ICG/PTWS) was held in Apia, Samoa, 16-18 February 2009 and chaired by Mr Giorgio de La Torre. The meeting was attended by 61 participants, comprising representatives from 21 ICG/PTWS Member States.

One of the most important outcomes of the meeting was the approval of the PTWS Medium Term Strategy 2009-2013, resting on three basic pillars: Hazard Assessment, Warning and Preparedness. Subsequently, it was decided to restructure the ICG Working Groups into three Technical Working Groups (Risk Assessment and Reduction; Detection, Warning and Dissemination; and Preparedness and Readiness) and four Regional Working Groups (Central American Pacific Coast; South East Pacific; South West Pacific and South China Sea).


Giorgio de La Torre from Ecuador was elected Chairman and Filomena Nelson from Samoa and Yohei Hasewaga from Japan were elected Vice-Chairpersons.
**Other news**

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ISO-approved signage (2008)

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The Sea Level Station Monitoring Facility continues to enhance its performance and includes new tools for visualizing the sea level data. In two years, the number of sea level stations has increased from 30 to more than 300.

http://www.ioc-sealevelmonitoring.org

The ICG-NEAMTWS VI approved and adopted guidelines entitled “Tsunami risk assessment and mitigation for the Indian Ocean; Knowing your tsunami risk - and what to do about it”. The guidelines describe methodologies for assessing, firstly, the tsunami hazard, then community vulnerability, preparedness and risk in respect of that hazard. The guidelines were developed by an international group of experts under an initiative of Working Group 3 of the ICG/NEAMTWS and supported financially by WAPMERR, Dubai and the UNDP. They are published as No. 52 in IOC’s Manuals and Guides Series and will soon be available online.

The International Institute of Seismology and Earthquake Engineering (IISEE) and Japan International Cooperation Agency (JICA) invite trainees from Cook Island, Fiji, India, Indonesia, Malaysia, Peru, and Vanuatu for one-year training on "Tsunami Disaster Mitigation". For more information, please contact IISEE (http://iisee.kenken.go.jp/) and/or JICA Overseas Office.

**CARIBE-EWS**

A Tsunami Information Centre for the Caribbean (CTIC)

The United Nations Development Programme (UNDP) Sub-regional Office (SRO) for Barbados and the Organisation of Eastern Caribbean States (OECS) have committed Euro 430,000 to be distributed over a period of two years, from 2009 to 2011, in support of the proposed Caribbean Tsunami Information Centre (CTIC). These monies will be programmed from the Government of Italy’s Euro 3.5 million Enhancing Resilience to Reduce Vulnerability in the Caribbean (ERC) Project.

This support for CTIC was revealed earlier this year at a workshop for beneficiary countries and partner institutions in Barbados. At that meeting, Resident Representative of the UNDP Barbados and the OECS and UN Resident Coordinator for Barbados and the OECS, Ms. Michelle Gyles-McDonough explained that her office was placing an even greater emphasis on Disaster Risk Management and Adaptation to Climate Change.

In her presentation, Dr. Inniss, Deputy Director of the Coastal Zone Management and Chairwoman of the ICG CARIBE-EWS noted that development of tsunami early warning systems for the region was structured in four working groups. These are monitoring and detection systems, warning guidance; tsunami and coastal hazard inundation hazard risk assessment and research; warning, dissemination and communications and preparedness, readiness and resilience. She added that the CTIC was a critical requirement for readiness, given that tsunamis were infrequent hazards.

The ERC is a multidimensional project with several key elements, developed to strengthen civil protection mechanisms. These are the establishment of a network of real-time decision support centres for early warning in the sub-region; a strengthened national disaster management mechanism, including enhancing civil society mechanisms and national planning and communications for early warning systems; an enhanced regional tsunami public awareness programme with a focus on public awareness programming through the establishment of the CTIC.

Participants at the workshop also used the forum to offer national and regional contributions on the structure and implementation of the project. These included the Caribbean Disaster Emergency Response Agency (CDERA), the Caribbean Institute for Meteorology and Hydrology (CIMH) and representatives from the ICG/CARIBE-EWS. Honorary Consul for Italy, Ms. Paola Baldi and Chief Minister of Montserrat, the Honourable Dr. Lowell Lewis were also in attendance.

For further information on the ERC project, please contact Mr. Ian King at ian.king@undp.org or visit the UNDP website at www.bb.undp.org.

**NEAMTWS**

The ICG/NEAMTWS secretariat has been opened in Bonn. This is part of IOC efforts to act more efficiently through regionalization of ICG secretariats.

In January 2009 UNESCO/IOC and UNBONN signed a memorandum of understanding that established the ICG/NEAMTWS Secretariat and the UNESCO/IOC liaison office to UNISDR-PPEW in the Bonn UN Campus. The new project office is tasked to: (i) Provide secretariat support for the ICG/NEAMTWS; (ii) Assist the UNISDR-Platform for the Promotion of Early Warning (PPEW) office on issues related to the multi-agency Indian Ocean Consortium Initiative; and (iii) Ensure strong linkage of the IOC Tsunami Unit to the European Commission, DG Environment, Civil Protection Unit and the Crisis Monitoring and Management Technologies Unit SES/IPSC at the Joint Research Centre (JRC), Ispra.

Initial funding has been provided by the German Federal Ministry of Education and Research (BMBF) and UNISDR.

The Bonn UN Campus is located in the Langer Eugen, a former parliament building that now hosts the offices of 19 UN agencies.

Our colleagues Stefano Belfiore and Ul Wolf in front of the Langer Eugen, where the new ICG/NEAMTWS secretariat is located.
The CARIS HIPS&SIPS software Workshop on bathymetric data processing took place in Bangkok from 16-20 March 2009, organized within the COAST MAP IO Work Plan for 2009 and kindly hosted by the Hydrographic Department of the Royal Thai Navy. A total of 10 representatives from the Indian Ocean countries were trained. The Workshop was conducted by instructors from CARIS (Canada) and sponsored by the Government of Italy.

The programme on the development of Standard Operating Procedures (SOP) for tsunami warning continues to progress. A total of 7 technical assistance visits and workshops have been conducted in Pakistan, Vietnam and the Philippines, and over 130 participants have taken part in the training. The programme aims to strengthen regional tsunami warning and emergency response capacity by providing guidance, templates, and best practice examples to member states in the Indian Ocean and Southeast Asia regions.

After three calls, the "IOTWS Fellowship programme in sea level science and applications", reached its end. A total of 30 fellows from 18 countries were trained under this programme, funded by Norway. We would like to thank all participants for their enthusiastic contributions as well as their supervisors for their support.

The Global TWS meeting:

The IOC hosted the Global Meeting of the Intergovernmental Coordination Groups for Tsunami Warning Systems (GLOBAL TWS) at UNESCO headquarters in Paris, from 24-27 March 2009. The GLOBAL TWS meeting took place roughly four years after the creation of the three regional groups (ICG/IOTWS, ICG/NEAMTWS and ICG/CARIBE-EWS) at the 23rd Session of the IOC Assembly (June 2005), complementing the existing group in the Pacific (ICG/PTWS).

The meeting was a unique opportunity for the four groups to come together, interact and learn from each other with a view to make a better use of their resources and address common problems in a more effective way. Fifty-five participants, including the ICG chairpersons and most of the elected officers of the ICG Working Groups attended the meeting, Mr Javier Valladares, chairman of IOC, chaired the sessions.

The meeting was opened by the Director-General of UNESCO, Mr Koïchiro Matsuura, who in his welcome speech noted that "this meeting marks an important milestone in our collective efforts to establish a global early warning system for tsunamis".

The agenda of the meeting followed the recommendations of the Working Group on Tsunamis and other Ocean Hazards Warning and Mitigation Systems (TOWS-WG) as adopted by the 41st Session of the IOC Executive Council (i.e. "the need to harmonize regional ICG structures to create efficiency and facilitate exchange of knowledge and information among the ICGs").

During the first two days of the meeting, plenary sessions introduced by lead speakers were held. Topics covered included (i) ICG’s needs (ii) global approach of technical issues and standards (including tsunami detection, risk assessment, warning communication and community preparedness and readiness) and (iii) streamlined governance for all ICGs. Following this same topic definition, the group split up in breakout sessions to come up with a list of recommendations to be further examined by the TOWS-WG and considered by the Member States on the occasion of the forthcoming 25th Session of the IOC Assembly.

More information available in the meeting’s website.