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اللجنة الدولية الحكومية لعلوم المحيطات
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IOC Circular Letter No 2403

(Available in English only)

WWW/TE/ch
13 September 2011

To: ICG/IOTWS Tsunami Warning Focal Points (TWFP) and Tsunami National Contacts (TNC)
ICG/IOTWS Chair and Vice Chairs
ICG/IOTWS Working Group Chairs and Vice Chairs

cc. Official National Coordinating Body for liaison with IOC Member States
Permanent Delegates/Observer Missions to UNESCO of IOC Member States
Directors of UNESCO and IOC Regional Officers in the Indian Ocean Region

Subject: IOTWS Indian Ocean Tsunami Exercise - "IOWave11"

At the 8th Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS) held in Melbourne, Australia in May 2011, the ICG decided to organise an Indian Ocean Wave Exercise (IOWave11) on 12th October 2011. The ICG also decided that the IOTWS Regional Tsunami Service Providers (RTSP) would commence operations on 12th October 2011 following the IOWave11 exercise and that the current Interim Advisory Service (IAS) provided by the Japan Meteorological Agency (JMA) and the Pacific Tsunami Warning Center (PTWC) would continue in parallel until the 9th Session of the ICG/IOTWS. This letter provides details of the IOWave11 exercise in which all IOTWS Member States are encouraged to participate.

IOWave11 will simulate the Indian Ocean countries being placed in a Tsunami Warning situation and require the National Tsunami Warning Centres (NTWC) and (optionally) the Disaster Management Organisations (DMO) in each Member State to implement their Standard Operating Procedures (SOP). The exercise scenario will replicate the earthquake parameters of the Magnitude 9.2 earthquake, which occurred off the coast of Aceh on 26th December 2004, and the simulated tsunami will take approximately 12 hours to travel from its source to the southern coast of South Africa. The exercise will commence at 0100hrs UTC on 12th October and will run in real time. Exercise bulletins will be issued by the RTSPs, JMA and PTWC. An IOWave11 Exercise Manual will be distributed in the near future with further details of the exercise scenario and the simulated bulletins.

Guiding principles for the planning and conduct of Exercise IOWave11 are listed in Annex 1 for your information. Some Member States have indicated that they intend to conduct the exercise down to community level, by involving the NTWC, DMO and the local coastal community. This

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end-to-end conduct will test the SOPs and communications links at all levels of the warning chain and will require detailed planning of the exercise at the national to local level to ensure that it will be successful. However, Member States should only conduct the exercise to the level that they are prepared for, which at a minimum should include testing the SOPs at the NTWC and the operational lines of communication between the NTWC, the RTSPs and JMA/PTWC.

In order to ensure that the commitment of participating Member States is fully coordinated, we seek your nomination of a **National Contact for Exercise IOWave11** with whom we will communicate about planning for the conduct of the exercise. The designated National Contact will be expected to confirm the accuracy of existing tsunami warning arrangements within your country, including the identification of operational points of contact for receipt and dissemination of tsunami warnings downstream from the NTWC. The designated National Contact will also be responsible for coordinating input to the exercise evaluation, details of which will be circulated as part of the IOWave11 Exercise Manual.

The commencement of the RTSP service in the Indian Ocean on 12th October 2011 marks a significant milestone for the IOTWS and represents the culmination of 6 years of development and preparation since the ICG decided to develop its own regional tsunami warning capability at its 2nd Session in December 2005. The IOWave11 exercise will provide the IOTWS Member States with an opportunity to evaluate their readiness for the new service and help to identify any modifications that need to be made to their tsunami warning SOPs. I would therefore urge all Member States to participate in IOWave11 to the extent possible.

I would be grateful if you could provide the details of your National Contact for Exercise IOWave11 **by 21 September 2011** to the ICG/IOTWS Secretariat by email (iotws@unesco.org) or FAX (+61-8-9226 0599). I would also encourage you to disseminate copies of this letter to the appropriate organisations and authorities within your country.

Yours sincerely




Wendy Watson-Wright
Executive Secretary, IOC
Assistant Director-General, UNESCO

ANNEX 1

Guiding Principles for IOWave11 Exercise

1. The exercise will simulate each IOTWS Member State being placed in a Tsunami Warning situation and require the National Tsunami Warning Centre (NTWC) and (optionally, at the Member State's decision) the Disaster Management Organisation (DMO) to implement their Standard Operating Procedures (SOP).
2. The exercise scenario will simulate and replicate the earthquake parameters of the Magnitude 9.2 earthquake that occurred off the coast of Aceh on 26th December 2004. The exercise will commence at 0100hrs UTC on 12th October 2011 and will run in real time. The simulated tsunami will take approximately 12 hours to travel from its source to the southern coast of South Africa.
3. Exercise bulletins will be issued by the IOTWS Regional Tsunami Service Providers (Australia, India and Indonesia), the Japan Meteorological Agency (JMA) and the Pacific Tsunami Warning Centre (PTWC), and will be sent to the Tsunami Warning Focal Points (TWFP) and other designated contact points in each Member State.
4. The scenario will be conducted in real time.
5. All Member States are strongly encouraged to participate to the extent possible in their country.
6. Due care should be taken not to inadvertently alarm the public.
7. Participating Member States are requested to share information regarding the procedures applied and lessons learned during the exercise.
8. The details of the exercise, as well as its expected outcomes and performance indicators, will be defined in advance. Exercise outcomes and performance measures will be reported on a standard evaluation form which will include at a minimum:
 - a. How each Member State received the warning (eg., GTS, fax, email, SMS);
 - b. Elapsed time between when bulletins were issued and when they were received and recognised;
 - c. What assessment tools were applied for decision making about evacuations;
 - d. How the public was notified and instructed (if applicable);
 - e. Elapsed time until public was notified and instructed (if applicable);
 - f. Summary of each Member State's National Emergency Plan for tsunamis, including any chapters on exercises;
 - g. Feedback from stakeholders regarding their own performance and the performance of the information providers;
 - h. Media response.