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МЕЖПРАВИТЕЛЬСТВЕННАЯ ОКЕАНОГРАФИЧЕСКАЯ КОМИССИЯ

اللجنة الدولية الحكومية لعلوم المحيطات

政府间海洋学委员会

UNESCO - 1, rue Miollis - 75732 Paris Cedex 15
cable address: UNESCO Paris - telex: 204461 Paris - fax: (33) (0)1 45 68 58 12 - contact phone: (33) (0) 1 45 68 39 83/84
E-mail: p.bernal@unesco.org

IOC Circular Letter 2309
(English only)

31 August 2009

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-wide Tsunami Exercise "IOWave09"

At the 5th Session of the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS) held in Putrajaya, Malaysia in April 2008, the Member States recognised the need to test the functioning of the IOTWS and decided to establish a Task Team to consider and provide a detailed plan for a proposed Indian Ocean-wide exercise in 2009. The "IOWave09" Task Team, with Indonesia as chair, reported back to the ICG/IOTWS at its 6th session in Hyderabad, India in April 2009 recommending that an Indian Ocean-wide exercise should be held on 14th October 2009 to coincide with World Disaster Reduction Day. This letter provides details of the planned IOWave 09 exercise in which all IOTWS Member States are encouraged to participate to the extent possible.

To prepare for the exercise, the IOWave09 Task Team organised several meetings including a workshop in Jakarta, 12-14 August, 2009 which was attended by tsunami warning centre and disaster management specialists from 14 Member States. The exercise will simulate the Indian Ocean countries being placed in a Tsunami Warning situation and require the National Tsunami Warning Centres (NTWC) and (optionally) the National Disaster Management Organisations (NDMO) 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. Exercise bulletins will be issued by the Japan Meteorological Agency (JMA) and the Pacific Tsunami Warning Centre (PTWC) and the exercise will be run in real time. An IOWave09 Exercise Manual will be distributed in the near future with further details of the exercise scenario as well as the text of the simulated warning bulletins from JMA and PTWC. All documents will be available on the following website: <http://ioc-unesco.org/iowave09>

Chairperson

Lic. Javier A. VALLADARES
Capitán de navío (Ret.)
Licenciado en Oceanografía Física
Asesor Científico en Ciencias del Mar
Dirección de Relaciones Internacionales
Secretaría de Ciencias, Tecnología
e Innovación Productiva
Av. Córdoba 831 4to. Piso
(C1054AAH) Buenos Aires
ARGENTINA

Executive Secretary

Dr Patricio A. BERNAL
Intergovernmental Oceanographic
Commission — UNESCO
1, rue Miollis
75732 Paris Cedex 15,
FRANCE

Vice-Chairpersons

Dr Savithri (Savi) NARAYANAN
Dominion Hydrographer/Director-General
Ocean Sciences-Canadian Hydrographic
Service
Fisheries & Oceans Canada
615, Booth St., Suite 311
Ottawa, Ontario, K1A 0E6
CANADA

Julian A. REYNA MORENO
Capitán de navío
Secretario Ejecutivo
Comisión Colombiana del Océano
Transversal 41, No. 27-50 Piso 4° - CAN
Bogota, DC
COLOMBIA

Prof. Cherif SAMMARI
Chef, Laboratoire du milieu marin
Institut National des Sciences et
Technologies de la Mer (INSTM)
28, rue 2 mars 1934
2025 Salammbó
TUNISIE

Dr Sang-Kyung BYUN
Principal Research Scientist
Climate Change & Coastal Disaster
Research Dept.
Korea Ocean Research & Development
Institute (KORDI)
Ansan, P.O. Box 29
425-600 Seoul
REPUBLIC OF KOREA

Nicolay N. MIKHAILOV
Head, Oceanographic Data Centre
Russian Federal Service for
Hydrometeorology & Environmental
Monitoring
All-Russia Research Institute of
Hydrometeorological Information –
WDC
6, Korolev St., Obninsk
Kaluga Region 249020
RUSSIAN FEDERATION

To ensure that the NTWCs in each country are fully prepared for this functional exercise, the Task Team has decided to run a tabletop exercise on 14th September using the same scenario that will be used on 14th October. There will thus be 2 stages to the IOWave09 exercise:

1. 14th September 2009 – Tabletop Exercise

Who should be involved?: National Tsunami Warning Centres; National Disaster Management Organisations; Local Disaster Management Organisations, to the extent decided by each Member State.

Scenario: Aceh earthquake of 26th December 2004

Start time: 0800hrs UTC

Timescale: Compressed time, at NTWC's discretion

2. 14th October 2009 – Functional Exercise

Who should be involved?: National Tsunami Warning Centres; National Disaster Management Organisations; Local Disaster Management Organisations, local communities, to the extent decided by each Member State.

Scenario: Aceh earthquake of 26th December 2004

Start time: 0100hrs UTC

Timescale: Real-time

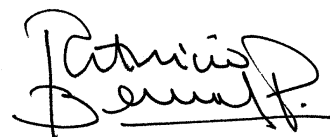
Guiding principles for the planning and conduct of Exercise IOWave09 are listed in Annex 1 for your information. Many Member States have indicated that they intend to conduct the exercise through to community level, ie. by involving the NTWC, NDMO and the local coastal community. This end-to-end conduct will test the SOPs and communications links at all levels of the warning chain but will involve detailed pre-planning of the exercise at the national to local level to ensure that it will be successful. A key point to make is that 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 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 IOWave09** 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, which will be circulated as part of the IOWave09 Exercise Manual.

As the 5th anniversary of the 26 December 2004 Indian Ocean tsunami disaster approaches there will be many reminders of the need to be prepared for this infrequent but potentially devastating hazard. The IOTWS has made considerable progress in the last 5 years and the time is ripe to conduct a test of the system. Exercise IOWave09 will be the first of its kind in the Indian Ocean and will be an effective tool for evaluating the readiness of the IOTWS and for identifying changes that can improve its effectiveness. I trust that you and the relevant authorities in your country will support his initiative.

I would be grateful if you could provide the details of your National Contact for Exercise IOWave09 **by 7 September 2009** 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



Patricio Bernal
Assistant Director-General, UNESCO
Executive Secretary, IOC

ANNEX 1

Guiding Principles for IOWave09 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 discretion) the National Disaster Management Organisation (NDMO) to implement their Standard Operating Procedures (SOP).
2. The exercise scenario will simulate and replicate the earthquake parameters of the Magnitude 9.2 earthquake which occurred off the coast of Aceh on 26th December 2004. 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 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. A most conservative approach may be best as this is the first Indian Ocean-wide exercise of its kind.
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);
 - 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.