



INTERGOVERNMENTAL OCEANOGRAPHIC COMMISSION
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اللجنة الدولية الحكومية لعلوم المحيطات
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IOC Circular Letter No. 2530

(Available in English only)

IOC/WWW/TA/ei

16 July 2014

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 the IOC of ICG/IOTWS Member States
Permanent Delegates/Observer Missions to UNESCO of ICG/IOTWS Member States
Directors of UNESCO and IOC Regional Offices in the Indian Ocean Region

**Subject: Announcement of IOTWS Indian Ocean Tsunami Exercise (IOWave14)
on 9 and 10 September 2014**

At its 9th Session held in Jakarta, Indonesia in November 2012, the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWS) decided to organise an Indian Ocean Wave Exercise (IOWave14) in the second half of 2014 and established a Task Team to plan and conduct the exercise. At its recent intersessional meeting held in Hyderabad, India on 27 June, the Task Team decided to conduct the IOWave14 exercise on 9 and 10 September 2014. This letter provides details of the IOWave14 exercise in which all IOTWS Member States are encouraged to participate to the extent possible.

IOWave14 will simulate Indian Ocean countries being put in a Tsunami Warning situation and require the National Tsunami Warning Centre (NTWC) and (optionally) the Disaster Management Organisation (DMO) in each Member State to implement their Standard Operating Procedures (SOP). The exercise will comprise two scenarios on successive days, one in the eastern Indian Ocean and the other in the north-western Indian Ocean. The first scenario simulates a magnitude 9.1 earthquake south of Java, Indonesia and the second scenario simulates a magnitude 9.0 earthquake in the Makran Trench south of Iran and Pakistan. Both scenarios will generate simulated tsunami waves travelling across the whole Indian Ocean basin. The South of Java scenario will commence at 0000 hours UTC on 9 September and the Makran Trench scenario will commence at 0600 hours UTC on 10 September. Member States are invited to participate in either or both events, which will run in real time. Regional Tsunami Service Providers in India, Indonesia and Australia will make exercise bulletins and detailed tsunami threat advice available on their password-protected websites during the events, and will send Notification Messages to National Tsunami Warning Centres as the data is updated during the events. An IOWave14 Exercise Manual will be distributed in the near future with further details of the exercise scenarios and the exercise evaluation to be conducted afterwards.

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TOGO

Guiding principles for the planning and conduct of Exercise IOWave14 are listed in Annex 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 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 are recommended to 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 the RTSPs.

In order to ensure that the commitment of participating Member States is fully coordinated, we seek your nomination of a **National Contact for Exercise IOWave14** 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 IOWave14 Exercise Manual.

I would be grateful if you could provide the details of your National Contact for Exercise IOWave14 **by 31 July 2014** to the ICG/IOTWS Secretariat by email (iotws@unesco.org) or fax: +61-8-9263 2261). I would also encourage you to disseminate copies of this letter to the appropriate organisations and authorities within your country.

Yours sincerely,

[signed]

Wendy Watson-Wright
Executive Secretary, IOC

Annex: Guiding principles for the planning and conduct of Exercise IOWave14

ANNEX

Guiding Principles for IOWave14 Exercise

1. The exercise will allow each IOTWS Member State to simulate 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 two exercise scenarios are:
 - Scenario 1 starting at 0000 UTC on Tuesday 9 September 2014: Magnitude 9.1 earthquake South of Java, Indonesia. The simulated tsunami will take approximately 10 hours to travel from its source to the coasts of Iran and Pakistan, and 12 hours to travel to the southern coast of South Africa.
 - Scenario 2 starting at 0600 UTC on Wednesday 10 September 2014: Magnitude 9.0 earthquake in the Makran Trench south of Iran and Pakistan. The simulated tsunami will take approximately 11 hours to travel from its source to the western coast of Australia.
3. Exercise bulletins and detailed tsunami threat advice will be generated in real time by the IOTWS Regional Tsunami Service Providers (RTSPs India, Indonesia and Australia) and made available on their password-protected websites. Notification Messages will be sent to the national Tsunami Warning Focal Points (TWFP) by the RTSPs as the data is updated during the events.
4. Both exercise scenarios will be conducted in real time. The scenario start times have been chosen to be more convenient for the "near field" (i.e. local) Member States for each scenario.
5. All Member States are strongly encouraged to participate to the extent possible in their country, particularly for the scenario that is more "near field" for them. Note that it may be very worthwhile to participate in both scenarios if possible, because SOP issues picked up on the first day can be corrected and exercised again on the second day, and because the tsunami arrival times will vary for each scenario.
6. Due care should be taken not to inadvertently alarm the public.
7. Participating Member States are requested to share information following the exercise regarding the procedures applied and the lessons learned, via the Exercise Evaluation (details to be provided in the Exercise Manual). The outcomes and performance measures to be reported will include at a minimum:
 - Communications media (GTS, fax, email, SMS etc) on which Notification Messages were received, and their elapsed time of arrival
 - What assessment tools were used for decision making about evacuations
 - How the DMO and public (if applicable) were notified and instructed
 - Elapsed time until the public was notified and instructed (if applicable)
 - Feedback from stakeholders regarding their own performance and the performance of their information providers
 - Media response (if applicable)