

Country

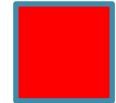


Webinar:
Lessons Learnt during
Exercise IOWave 2025

16 - 17 December 2025

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Scenarios Exercised



Sunda Trench (25 Sept)



Makran Trench (15 Oct)



AFP
AUSTRALIAN FEDERAL POLICE



DFES
Department of Fire & Emergency Services



Fani Maore Volcano (25 Oct)



Sumatra Trench (05 Nov)



**Note that Australia took part in all scenarios due to its role as TSP for the Indian Ocean. The above is the national exercise only*

Exercise Participants



Staff within national, state and territory government organisations which are responsible for responding to tsunami hazards and disasters participated.

These included:

- Western Australian Department of Fire and Emergency Services (DFES)
- Northern Territory Emergency Services (NTES)
- Indian Ocean Territories Administration (IOTA)
- Australian Federal Police on the Cocos-Keeling and Christmas Islands
- National Emergency Management Agency (NEMA)
- Australian Broadcasting Australia (ABC) Emergency
- The Bureau of Meteorology (BoM) and Joint Australian Tsunami Warning Centre (JATWC)

National Tsunami Warning & Mitigation System

Australia's Tsunami Warning System

The Joint Australian Tsunami Warning Centre (JATWC) is the NTWC for Australia and a TSP for the IOTWMS: a joint collaboration between Geoscience Australia and the Bureau of Meteorology. The JATWC detect tsunami events, and issues tsunami bulletins, watches, and warnings.

Upon confirmation of a tsunami threat, staff within the BoM will be activated. State based BoM teams will brief state emergency services. Emergency services are responsible for the issuance of public information, emergency alerts, and evacuation orders.

The JATWC maintains up-to-date information on its website, mobile app and 1300 tsunami phone for the public to access and also responds to media enquiries during a tsunami event. Media organisations are a key channel for alerting the public via coverage of the event and redistribution of emergency information.

What initiatives are used to help prepare at-risk communities?

Disaster preparedness material (which includes tsunami) is to be published by the Federal government in multiple languages. These materials encourage familiarity with where to find tsunami warnings, and what to do in a tsunami. The need for greater in-language warning materials for CALD and First Nations communities on the coast is a learning from this year's IOWave25 exercise.



National Organisation of Exercise IOWave25



How was it planned?

- *Working group stood up through the Australian Tsunami Advisory Group (ATAG).*
- *The Bureau of Meteorology coordinated planning.*

How was it executed?

In a collaborative desktop format online comprised of 3 stages, 3 debriefs, and a hot debrief.

- ***Stage 1** - hours 0-1 of the tsunami, including initial earthquake notification, first waves at Christmas Island, and activation of staff.*
- ***Stage 2** - hours 1-12, where first waves would have reached most of the Western Australian shoreline. Agencies would be heavily involved in response, evacuation and maintaining situational awareness.*
- ***Stage 3** - hours 12+, including weeks and months after the tsunami. Primarily focused on the cancellation of warnings and recovery.*

Following the exercise was an immediate hot debrief. A cold debrief was held 2 weeks later. Participants could also submit feedback and observations via a QR code form.

Lessons Learnt

What worked well?

- Format of the exercise allowed for investigation of the latter stages of an event which delivered recommendations that would have likely been missed by a functional exercise

Areas of improvement?

- Consideration of having resources available to support participants if they experience psychological impacts or any concerns during and after the exercise.
- Understanding of tsunami risk to the Indian Ocean Territories
- De-escalation processes for tsunami warnings
- In-language messaging (First Nations and CALD)
- Managing fatigue of staff/first responders
- Incorporation of tide information into tsunami warnings/forecasts
- Inundation mapping and public evacuation planning
- Organise and run the exercise earlier in the year to increase agency participation
- Need for disaster funding mechanism for Indian Ocean Territories

How can more at-risk communities be involved in future exercises?

- Need for greater inundation mapping to support creation of inundation/evacuation zones.

Images



Australian national IOWAVE25 exercise was a desktop exercise, performed as a hybrid virtual meeting made up of 3 1 hour break out sessions separated by briefing/debrief sessions. One of the debrief sessions is shown here.

Observations were captured during the exercise by participants filling out a virtual form as they went with guidance provided before each breakout session.

THANK YOU