Indonesia

Scenarios Exercised:

- ☑ Sunda Trench (25 Sept)
- ☑ Makran Trench (15 Oct)
- ☑ Fani Maore Volcano (25 Oct)
- ☑ Sumatra Trench (05 Nov)

Zoom Meeting and Youtube Live

National Tsunami Warning & Mitigation System

The process begins with data collected by the Earthquake Monitoring System and the Sea Level Surface Monitoring System, primarily overseen by BMKG (Meteorological, Climatological, and Geophysical Agency) with contributions from BIG and BRIN for sea level monitoring. This data is then fed into the Processing System, which uses an Earthquake Processing System and a Tsunami Processing System to generate Earthquake Information and a Tsunami Early Warning. The warning is then distributed via the Dissemination System using Multimode Dissemination. Finally, the information moves from the structural to the cultural level, reaching numerous Stakeholders including key agencies like BNPB, BPBD, and various ministries who further relay the warning to the Coastline Communities at Risk. The local government or BPBD has an authority to issue the calling for evacuation.

There are many initiative programs for tsunami community preparedness including Tsunami Ready Community, Earthquake and Tsunami Field School (SLG - BMKG), Disaster Resilient Villages (Destana - BNPB), Disaster Resilient Family (Katana - BNPB), Disaster Preparedness Villages (KSB - Kemensos)

National Organisation of Exercise IOWave25

- Type of exercise was Table-Top Exercise, Communication Test, evacuation drill, functional exercise, and full scale exercise.
- BMKG Headquarter as the main facilitator delivered scenario and inject (Sumatra Trench) directly.
- BMKG conducted a test of the backup system in Bali to disseminate a tsunami early warning test for the Sunda Trench scenario.
- BMKG as the TSP participated on all of the scenario including Makran Trench and Fani Maore Volcano
- There are 4 tsunami bulletins (PDT-1, PDT-2, PDT-3, PDT-4) that disseminate via SMS, email and WRS New Generation.
- The exercise is held with hybrid scheme, Online (Zoom Meeting and YouTube Live) and Offline.
- All scenarios / injects was responded by all executors directly by action or metacard;
- For locations that were assisted by a facilitator, the scenarios was enriched by the facilitator for each location, and was responded with specific actions.
- For this exercise, there are 16 Tsunami Ready communities whose participated and there are several communities that have not yet implemented the Tsunami Ready Program but have taken the initiative to participate in the IOWave25 exercise.
- The exercise was used to evaluate tsunami ready indicators namely the indicators of Tsunami Ready evacuation map and the plan, receiving warning, and distributing information.
- Exercise was involved by several critical infrastructures (Nusawiru Airport) and private sector such as PT. Krakatau Sarana Property, PT. Putera Pacitan Indonesia Sejahtera, PT. Solusi Bangun Andalas, and Bencoolen Mall.

Exercise Participants

For Sunda Trench scenario on 25 September: 30 DMOs, 11 TR Communities, 12 Local Offices, 2 National Media, 1 Local Media, 23 Local Governments, SAR, Local Communities, Schools, University, Critical Infrastructures and private sector participated with **4.767 participants** from 9 Provinces**.**

For Northern Sumatra Trench scenario on 5 November: 63 DMOs, 5 TR Communities, 13 Local Offices, 3 Medias and 11 Local Governments, National Army, Police, SAR, Ministry of Communication and Digital Information (Komdigi), Local Communities, Schools, University, Critical Infrastructures and private sector participated with **201.852 participants** from 14 Provinces.

Lessons Learnt

Based on the tsunami early warning test dissemination for Sunda Trench scenario conducted by BMKG using the backup system in Bali, it can be concluded that the backup system's capacity is already on par with that of the headquarters. In the next exercise, it would be better to involve the Earthquake Early Warning System which is currently being developed in Indonesia. The WRS New Generation proved to be the most effective and reliable dissemination channel during the drill Optimized local networking by using sms blast Need to involve more stakeholders on the next exercise (such as: network providers) Need to find more alternative communication modes for communication test. More optimize official government apps. Some training locations require the use of the most appropriate and pre-planned scenarios. This allows participants flexibility and increases enthusiasm. IOWAVE is also used to facilitate several areas that wish to participate in training but do not use the scenarios set out in IOWave by considering the tsunami potential that best suits previous studies. Some areas experienced internet access problems which made it difficult to coordinate and provide tsunami early warnings, although this did not dampen their intention to continue their participation. Due to the need for tsunami certainty, some areas have SOPs for activating sirens based on updated bulletins (bulletin 2), not the first bulletin sent by NTWC.

Organisation Logo(s)

BMKG BNPB KOMDIGI

Further Information:

Please send to ICG/IOTWMS Secretariat (iotwms@unesco.org) :

1. Videos of activities undertaken in IOWave25
2. Links to online media related to news and coverage of IOWave25
3. Links to social media (X, Instagram, Facebook, Linkedin) related to IOWave25

Link of IOWave25 Documentation:
https://drive.google.com/drive/folders/1tDkzGxcRWXkzrkDk8mBUgREsIJBxvMgh?usp=sharing

Link of Social Media:
https://www.instagram.com/mitigasihindiapasifik?igsh=MTlxdXczeXd3bzJsOA==