National Reports will be posted to the ICG/PTWS-XXXI website without TWFP contact details

NATIONAL REPORT

Submitted by Vanuatu

BASIC INFORMATION

(FILL IN SECTIONS 1-3 ONLY IF THERE IS A NEED TO COMMUNICATE OFFICIAL UPDATES.)

1. ICG/PTWS Tsunami National Contact (TNC)

The person designated by a Member State to an Intergovernmental Coordination Group (ICG) to represent his/her country in the coordination of international tsunami warning and mitigation activities. The person is part of the main stakeholders of the national tsunami warning and mitigation system. The person may be the Tsunami Warning Focal Point, from the national disaster management organization, from a technical or scientific institution, or from another agency with tsunami warning and mitigation responsibilities.

Name: Abraham Nasak
Title: Director
Organization: NDMO
Postal Address: PMB 9107, Port Vila, Vanuatu
E-mail Address: anasak@vanuatu.gov.vu
[redacted]

2. ICG/PTWS Tsunami Warning Focal Point (TWFP)

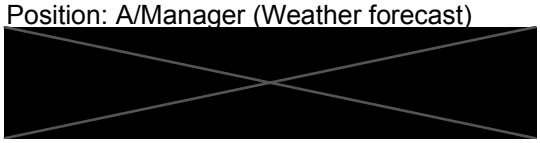
A 24 x 7 point of contact (office, operational unit or position, not a person) officially designated by the NTWC or the government to receive and disseminate tsunami information from an ICG Tsunami Service Provider according to established National Standard Operating Procedures. The TWFP may or not be the NTWC.

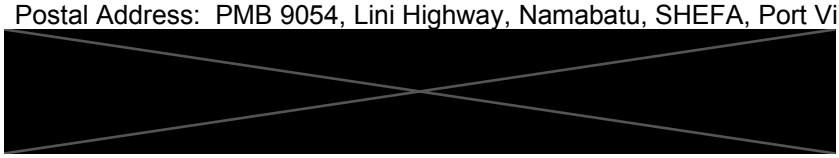
TWFP Agency name: Vanuatu Meteorology & Geohazards Department
(if different from NTWC agency)
TWFP Agency Contact or Officer in Charge *(if different from NTWC Agency):*
Name : Levu Antfalo
Position: Director
[redacted]

TWFP 24x7 point of contact (office, operational unit or position**, not a person**):

Name of office, operational unit or position: Weather forecast & Services Division
[redacted]

National Tsunami Warning Centre (if different from the above)
A centre officially designated by the government to monitor and issue tsunami warnings and other related statements within their country according to established National Standard Operating Procedures

NTWC Agency Name:
NTWC Agency Contact or Officer in Charge (person):
Name: Jerry Timothy
Position: A/Manager (Weather forecast)


3. Tsunami Advisor(s), if applicable
(Person, Committee or Agency managing Tsunami Mitigation in country)
Name: John Junior Niroa / Dan Tari
Title: Mr.
Postal Address: PMB 9054, Lini Highway, Namabatu, SHEFA, Port Vila


4. Tsunami Standard Operating Procedures for a Local Tsunami
The SOP's mentioned here are subjected to change by mid-2025 once the review of the current SOP is completed and endorsed. Two messages were usually issued, information & advisories.

Tsunami Information
Tsunami Information bulletin shall be issued once only and shall cover events of magnitude ranging from 5.0 to 6.9. So, an earthquake bulletin will be issued containing earthquake information for an earthquake with magnitude ranging from 5.0 to 6.9.

Tsunami advisory
1) The depth of the earthquake is estimated to be no more than 50 kilometers with magnitudes of 7.4 or more and within the area bounded by 11S165E 22S165E 11S172E and 22S172E.
2) The depth of the earthquake is estimated between 0 to 10 km with magnitudes of 7.0 or more within the area bounded by 11S165E 22S165E 11S172E and 22S172E.
3) The Tsunami Advisory issued shall be based on the unanimity of the earthquake parameters determined by both the VMGD local Seismic network and the earthquake parameters provided by the PTWC in the content of the tsunami threat messages or bulletins.

5. Tsunami Standard Operating Procedures for a Distant Tsunami

- *PTWC identifies and characterizes tsunamigenic events while the monitoring of potential Tsunami waves are done nationally.*
- *The threshold or criteria for declaring a potential tsunami emergency would happen if the following criteria are met;*
    1) Magnitude of 8.0 or more

2) The Tsunami Advisory issued shall be based on the unanimity of the earthquake parameters determined by both the VMGD Seismic3 local network and the earthquake parameters provided by the PTWC in the content of the tsunami threat messages or bulletins. The tsunami advisory shall be issued three hours prior to the arrival of the waves to any island of Vanuatu.

- *The organization that acts on the information provided by the agency responsible for characterizing the potential tsunami threat is NDMO.*

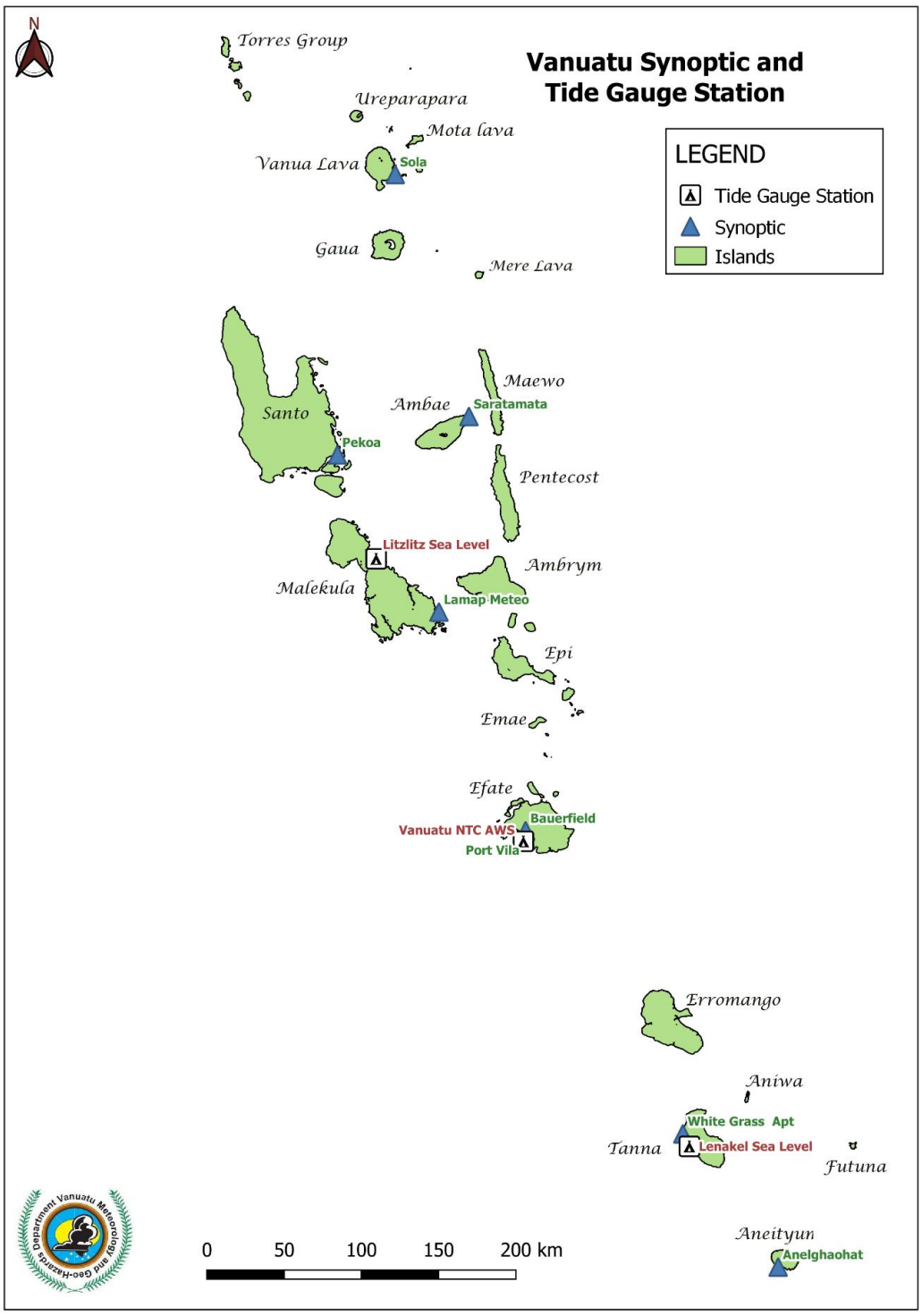
- *The tsunami information (warning, public safety action, etc) is disseminated by means of Media outlets, SMS, email, website, social media and subscribers and public. The advisory goes to the concerned citizens and everyone in the targeted area who are going to be affected*

- *The emergency situation will be terminated by;*
  The cancellation of the Tsunami bulletins which shall be based on the following:
  1. *For Local Tsunami, the tsunami advisory shall be cancelled three hours after the occurrence of the event. This means that advisories shall run for three hours.*
  2. *For Regional Tsunami, the tsunami advisory shall be cancelled three hours after the forecast of the wave arrival time. This means that the advisories shall run for 6 hours.*
  3. *The wave heights are recorded to be less than 1.0 metre.*

- *For Distant Tsunami Procedures:*
  The actions taken in response to tsunami bulletins issued by PTWC, during the intersessional period were;
  1. *Check if Vanuatu is included the pool of countries in the danger zone*
  2. *If yes, average data from the two systems, VMGD Seiscomp5 (local) and USGS/CISN Display and continuously monitor tide gauges after the epicenter to the tide gauge that will receive the first wave*
  3. *If not, a message of " No Tsunami Threat " will be issued and "all clear".*

6. National Sea Level Network

Please include a table with position and description of stations/sensors, and a map.



7. Information on Tsunami occurrences

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Please find attached a report on the effect of the Tonga Hunga Ha' apai volcanic eruption on Vanuatu coastlines.

8. Web sites (URLs) of national tsunami-related web sites

Our website URL for Tsunamis: Warnings | VMGD

9. Summary plans of future tsunami warning and mitigation system improvements.

a. Completing the Tsunami SOP
b. Increase the tidal observations (at most 4 more in the next two years)
c. Upskill our seismic and volcano data analysts on Seiscomp5
d. Levelling up the Geohazards division into a department in order to be a 24/7 operation centre for earthquake & Volcano

NATIONAL PROGRAMMES AND ACTIVITIES INFORMATION

10. EXECUTIVE SUMMARY

Please provide a brief statement of no more than one page addressing all items discussed in the Narrative section of the National Report (below);

Title: 2025 UNESCO-IOC ICG/PTWS National Report on Capacity Assessment of Tsunami Preparedness – Vanuatu

Introduction:

This report assesses Vanuatu's capacity to prepare for and respond to tsunamis, aligned with UNESCO-IOC guidelines. It evaluates institutional structures, technical capabilities, policies, and community engagement to identify strengths and areas for improvement.

Data was collected through a structured survey completed by Vanuatu Meteorology & Geohazards Department, covering hazard assessment, warning systems, policies, and public awareness.

Detailed Findings:

1. **Institutional Roles:**
   - The NTWC and TWFP are operational, with clear roles in threat assessment and warning dissemination.
   - A Tsunami Ready Focal Point (TRFP) is deemed necessary; so the director has been nominated to take up this role..

2. **Technical Capacity:**
   - Real-time monitoring is effective, but tsunami modeling and probabilistic hazard assessment capabilities are lacking.
   - Training needs include software analysis and multi-hazard risk assessment.

3. **Community Preparedness**:
   - Evacuation drills and awareness campaigns are conducted regularly, but materials and infrastructure require enhancement.
   - The TRRP is partially implemented, with communities expressing interest but facing funding constraints.

4. **Recommendations:**
   - Conduct comprehensive hazard and risk assessments.
   - Strengthen policies for prevention and rehabilitation.

- Secure funding for TRRP implementation and infrastructure development.
- Enhance international collaboration for technical support and capacity-building.

5. **Conclusion:**
   Vanuatu's commitment to tsunami preparedness is evident, but systemic challenges remain. Addressing these through targeted actions and partnerships will bolster the nation's resilience against future tsunami threats.

6. **Appendices:**
   - Survey responses and contact details for key personnel.
   - List of participating institutions and communities.

This summary provide a clear, structured overview of the report's contents, emphasizing actionable insights and priorities for Vanuatu's tsunami preparedness efforts.

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11. NARRATIVE

Detailed description of innovations or modifications to National tsunami warnings procedures or operations since last National Report, tsunami research projects, tsunami mitigation activities and best practices (especially in preparedness and emergency management), tsunami exercises, as well as public education programmes or other measures taken to heighten awareness of the tsunami hazard and risk.

There has been a lot of work to review our current Tsunami SOP by JICA and JMA with VMGD after the cataloguing of our past earthquake events giving new information to realise the new Tsunami SOP. Work is also being carried out to factor in the non-seismic triggers into our New SOPs as well. There are changes in the management in the last four months, thus a couple of changes in the focal points for import roles in the last national country report. See the updated country report (below) to track the changes mentioned.

1. The 2025 UNESCO-IOC ICG/PTWS National Report on Capacity Assessment of Tsunami Preparedness for Vanuatu provides a comprehensive evaluation of the country's current capabilities, challenges, and future plans related to tsunami preparedness and disaster risk reduction. The report highlights key findings and outlines areas requiring improvement to enhance resilience against tsunami threats.

Key Findings:
Institutional Framework:

a. Vanuatu has designated a Tsunami National Contact (TNC), National Tsunami Warning Centre (NTWC), and Tsunami Warning Focal Point (TWFP), with Jerry Timothy serving as the primary contact.
b. The NTWC operates 24/7 and utilizes both international and national seismic and sea-level data for threat assessments.

Hazard and Risk Assessment:

a. No formal tsunami hazard or risk assessments have been conducted, though the country rates its capacity to undertake such assessments as "Good."
b. Priority areas for improvement include probabilistic hazard assessment, inundation mapping, and evacuation planning.

Policies and Plans:

a. National policies for tsunami preparedness and emergency response are multi-hazard but lack standalone policies for prevention and rehabilitation.
b. A Tsunami Support Plan exists, but it is not fully integrated with hazard and risk assessments.
c. We will be elevating the geohazards division into a department under the Ministry of Climate Change by 2026.

Detection and Warning Systems:

a. Vanuatu relies on Tsunami Service Providers (TSPs), for Vanuatu its PTWC and its own threat assessments.
b. The country has real-time seismic and sea-level monitoring capabilities but still lacks tsunami modeling software, a great need for VMGD.

Dissemination and Public Awareness:

a. Tsunami warnings are disseminated via email, SMS, radio, Common Alert Protocol (CAP), and social media, with a last-mile response time of 15–30 minutes.
b. Public awareness activities are conducted annually, including World Tsunami Awareness Day and school outreach programs.

Evacuation Infrastructure:

a. Evacuation shelters and routes are identified, but infrastructure is not fully integrated into evacuation plans.

Challenges and Needs:

a. Limited funding and technical support hinder the implementation of the UNESCO-IOC Tsunami Ready Recognition Program (TRRP).
b. Key areas for support include hazard assessment tools, evacuation planning, and capacity-building initiatives.
c. Old (>9 years) Seismic infrastructure, 8/24 stations currently working

Future Plans

a. Review and update the Tsunami Support Plan and integrate disaster risk reduction (DRR) into urban planning.
b. Develop tsunami-specific components in building codes and expand evacuation route planning.
c. Seek international support for research, funding, and technical expertise to enhance tsunami preparedness.

Conclusion:

Vanuatu has established foundational systems for tsunami preparedness but faces significant gaps in hazard assessment, policy integration, and infrastructure. Strategic investments and international collaboration are essential to building a resilient and proactive tsunami risk management framework.

Date: 9th April 2025 Name: Levu Antfalo