

IOC Circular Letter No 2984
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IOC/VR/BA/ah
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- To : Tsunami National Contacts (TNCs),
National Tsunami Warning Centres (NTWCs), and
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the Pacific Tsunami Warning and Mitigation System (ICG/PTWS)
- C.c. : Official National Coordinating Bodies for liaison with the IOC
Permanent Delegates/Observer Missions to UNESCO, and
National Commissions for UNESCO of IOC ICG/PTWS Member States
Directors of UNESCO and IOC Regional Offices in the Asia/Pacific Region
Permanent Observers to ICG/PTWS
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Director, Northwest Pacific Tsunami Advisory Center (NWPTAC)
Director, South China Sea Tsunami Advisory Center (SCSTAC)
Director, International Tsunami Information Center (ITIC)
ICG/PTWS Officers
ICG/PTWS Steering Committee

**Subject: ‘Hunga Tonga Hunga Ha’apai’ Volcano Permanent Monitoring and
Warning Procedures of the Pacific Tsunami Warning Center, 2024**

The massive explosion of the Hunga Tonga-Hunga Ha'apai (HTHH) volcano in Tonga on 15 January 2022, which generated a tsunami causing widespread damage locally, regionally and throughout the Pacific, was an unprecedented event for the Pacific Tsunami Warning Center (PTWC) whose warning procedures and products were designed for earthquake-generated tsunamis, accounting for almost 90% of past tsunami events worldwide.

The impact of the HTHH volcanic explosion and tsunami has led the Intergovernmental Coordination Group (ICG) for the Pacific Tsunami Warning and Mitigation System (PTWS) to establish a [Task Team](#) on Hunga-Tonga Hunga-Ha'apai (HTHH) Volcano Tsunami Hazard Response to address the possibility of future tsunamis originating from additional volcanic eruptions or associated processes at the HTHH. The Task Team was requested to prepare an Interim Volcanic Tsunami Alert Procedures Implementation Plan with a focus on the HTHH Interim Products and Procedures.

Version 1.1 of the Implementation Plan was disseminated by [IOC Circular Letter 2882](#) of 16 March 2022. It describes interim Standard Operating Procedures (SOPs) for responding to the possibility of future tsunamis originating from additional volcanic eruptions or associated processes at the HTHH. Effective from 15 March 2022, the SOPs are being implemented by the Pacific Tsunami

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Warning Center acting as a Tsunami Service Provider (TSP) in the Pacific Tsunami Warning and Mitigation System (PTWS).

Then the Task Team developed the Hunga Tonga–Hunga Ha`apai Volcanic Tsunami Hazard Response: PTWC Interim Procedures and PTWS Products User's Guide (version 1.3), which was reviewed by the ICG/PTWS Steering Committee, approved by the Chair of the ICG/PTWS on 25 July 2022, and disseminated through the [IOC Circular Letter 2902](#) on 17 August 2022.

In September 2023, the ICG/PTWS at its thirtieth session (Nuku'alofa, Tonga) [decided](#) to establish: (i) permanent HTHH monitoring and warning procedures based on the interim products and procedures in use by PTWC since March 2022; and (ii) a Task Team on Tsunami Generated by Volcanoes (TGV) to further explore options for developing alternative warning strategies for tsunamis generated by volcanoes. The Task Team on HTHH Volcano Tsunami Hazard Response was dissolved.

By this Circular Letter, I am now sharing with you the permanent PTWC Procedures and PTWS Products User's Guide (Hunga Tonga – Hunga Ha`apai Volcanic Tsunami Hazard Response) available as [IOC Technical Series, n° 188](#). The IOC Secretariat (c/o Mr Öcal Necmioğlu, technical secretary for ICG/PTWS, at o.necmioglu@unesco.org) remains at your disposal to answer your comments and questions on this document.

With my assurances of the highest consideration, I remain.

Yours sincerely,

[signed]

Vladimir Ryabinin
Executive Secretary

Enclosure: *Hunga Tonga–Hunga Ha`apai Volcanic Tsunami Hazard Response: PTWC Procedures and PTWS Products – User's Guide (Version 1.6, 28 December 2023)*