

Tonga: Hunga Tonga–Hunga Ha'apai Volcano

ETC Situation Report #12

Reporting period: 26 August – 30 September 2022

The ETC in the Pacific was activated in 2016 under the structure of the Pacific Humanitarian Team (PHT) to support telecommunications preparedness in the region. The ETC in the Pacific is currently supporting the response to the eruption of the Hunga-Tonga-Hunga-Ha-apai (HTHH) underwater volcano and the subsequent tsunami which hit Tonga on 15 January 2022.

Highlights

- The ETC facilitated an Uncrewed Aircraft System (UAS) training programme from 26 to 30 September to build the capacity of five response personnel in Tonga with Remotely Piloted Aircraft Systems (RPAS) licenses for post disaster assessment.
- The emergency.lu VSATs deployed in the Vava'u and Ha'apai island groups are undergoing emergency maintenance after a heavy rainstorm caused electrical outages at the Emergency Operations Centres (EOCs).
- The Tongan government confirmed the domestic section of undersea communications cable in Tonga will be repaired by 30 April 2023, revised from 30 September 2022.



The ETC facilitates drone training for government responders in Tonga. Photo: WFP/John Dovale

Situation overview

The Government of Tonga estimates that loss and damage caused by the volcanic eruption and subsequent tsunami equates to approximately 36.4 percent of Gross Domestic Product (GDP). The reconstruction of homes, public infrastructure, and government facilities damaged by the eruption is a priority.

Tonga's international borders re-opened on 1 August. Currently, five flights operate per week, two from New Zealand, two from Fiji and one from Australia. COVID-19 requirements remain in place for all travellers, including vaccinations.

Communications in Tonga

The domestic section of undersea fibre-optic cable was severed during the volcanic eruption. Although the repairs were initially estimated to be carried out by 30 September

2022, the replacement cable is still under manufacture and the new estimated date of repair is 30 April 2023. Until then, responders and affected communities on the outer islands of Tonga—including the Vava’u and Ha’apai groups—will rely on alternative means of communications.

ETC Activities

Coordination

The ETC in the Pacific continues to work with the Tongan Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communications (MEIDECC) and the National Emergency Management Office (NEMO) for the emergency telecommunications response in Tonga.

The ETC Coordinator for the Pacific travelled to Tonga from 26 September to 1 October to facilitate the Uncrewed Aircraft System (UAS) training programme and to support ongoing activities on the outer islands of Ha’apai and Vava’u.

Data connectivity

The emergency.lu VSATs deployed in Vava’u and Ha’apai are undergoing emergency maintenance after a heavy rainstorm caused electrical outages at the Emergency Operations Centres (EOCs). The ETC, Government of Luxembourg, and the Tongan government are coordinating to resolve the issue.

Although connectivity has been restored in the EOC in Ha’apai, the satellite terminal continues to experience electrical power challenges, and the second VSAT in the EOC in Vava’u is out of service.

Four Uninterruptible Power Supply (UPS) systems to stabilise the power supply to the VSAT satellite terminals arrived in country on 27 September. Once installed, the UPS systems will provide a stable and regulated power supply to mitigate against the impact of similar damage. The UPS system will also allow MEIDECC to actively monitor fluctuations in power and receive alerts ahead of time.

Restoration work began on the VSAT terminals on 28 September and is scheduled for completion in early October.

Radio communications

Site assessments are planned for the deployment of HF and VHF radio communications systems in six island locations—Tongatapu, ‘Eua, Ha’apai, Vava’u, Niuatoputapu, and Niuafu’ou. The existing VHF coastal radio network will be augmented while a new HF radio network will be established.

The HF radio equipment arrived in country on 22 September. Coordination with MEIDECC is ongoing to finalize clearance procedures.

The HF radio training has been rescheduled to take place in November. The aim of the training is to boost the skills and capacity of MEIDECC and NEMO so they can participate in

the deployment of the HF radio equipment and ensure long-term sustainability of the solution.

The VHF radio system equipment will arrive in Tonga in October. MEIDECC is preparing for clearance of the equipment on arrival.

Uncrewed Aircraft System (UAS)

The UAS training programme was held from 26 to 30 September. For the first time, there are now five response personnel in Tonga with Remotely Piloted Aircraft Systems (RPAS) licenses issued by the Drone Trust New Zealand, which is recognized in Tonga. Staff are from the Ministry of Communications (2), NEMO (1), Geological Services (1) and the Tonga Civil Aviation (1). The certified drone pilots will work as part of a capacity building taskforce to conduct post disaster assessments and support other organisations engaging in UAS technology in Tonga.

Additional Information

See the [ETC Dashboard](#) for an overview of service locations.

The International Telecommunication Union (ITU) is mapping the status of connectivity in Tonga via the [Disaster Connectivity Map \(DCM\)](#).

Funding

The ETC and partners are using existing communications equipment in stock and in-kind contributions from partners to support the response in Tonga.

On 15 February, funding of US\$250,000 was confirmed from the Central Emergency Relief Fund (CERF) to support the ETC in the response to the volcano eruption and subsequent tsunami in Tonga. This funding is extended until October 2022.

A contribution of US\$217,000 was received from the Government of Japan to support the response. This funding is extended to March 2023.

Challenges

Logistical challenges continue to impact the timely shipment of equipment to Tonga, including disruptions in global supply chains, issues with import levies, and the availability of flights for cargo.

Meetings

A Global ETC Joint teleconference will take place on **Wednesday 26 October 2022 at 06:00 UTC**.

Contacts

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All information related to the ETC response in Tonga can be found on the website:

www.etcluster.org/emergency/tonga-volcanic-eruptionsunami

For more information or to be added or deleted from the mailing list please contact:

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