

Tonga – Volcanic Eruption/Tsunami

ETC Situation Report #2

Reporting period: 21 – 25 January 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 supporting the response to the eruption of the Hunga-Tonga-Hunga-Ha-apai underwater volcano and subsequent tsunami which hit Tonga on 15 January 2022.

Highlights

- Both telecommunications service providers in Tonga—Digicel and the Tonga Communications Corporation (TCC)—have restored limited voice, SMS, and internet services in country. Challenges remain with capacity of the networks to support the needs of the response community and the population of Tonga.
- The ETC is supporting the response in Tonga by addressing communications gaps for government and responders until national telecommunications providers have fully recovered, and the damaged undersea communications cable is repaired. Solutions include deployment of communications equipment from Fiji via a landing stage in Brisbane, Australia, set up as part of regional preparedness actions.
- Due to measures put in place by the government of Tonga to prevent any cases of COVID-19 in country, this response will be a ‘no contact’ operation. Only equipment is being deployed, to be operationalized using national capacity.



Damage caused in Tonga's capital, Nuku'alofa, by the volcano eruption and subsequent tsunami on 15 January 2022. Photo: © UNICEF/Consulate of the Kingdom of Tonga.

Situation overview

The first flights to deliver international humanitarian assistance to Tonga arrived from Australia and New Zealand on 20 January, five days after the large eruption of the Hunga-Tonga-Hunga-Ha'apai volcano and subsequent tsunami on 15 January. The Government of Tonga is coordinating the distribution of relief items throughout its island communities and continues to conduct damage assessments and aerial surveys of Tonga. The government response is coordinated through the National Emergency Operations Centre (NEOC) on Tongatapu.

Communications in Tonga

The specialized ship, [CS Reliance](#), has departed from Papua New Guinea (PNG) to repair the fibre optic undersea communications cable which was severed in two locations during the volcanic eruption. The cable links Tonga with the rest of the world, and its own islands. CS Reliance will stop in Samoa on the way to pick up additional supplies, including a repeater to assist in damage assessments near a break

in the cable. The rate of repair will depend on weather and seismic conditions. The estimated arrival of Reliance into Tonga is 30 January.

The Tonga National Emergency Management Office (NEMO) confirmed that limited voice, SMS, and internet services have been restored by both telecommunications service providers—Digicel and Tonga Communications Corporation (TCC)—since 22/23 January. Due to congestion of the service, Digicel has restricted its network to international and domestic calls made by other Digicel phones only.

Inter-island communication remains a challenge. Limited phone connections are now re-established with the northern islands of Niuatoputapu and Niuafu'ou. Satellite and HF radio communication has been re-established with Vava'u, Niuafu'ou and Ha'apai island groups while government plans are underway to set up a HF radio station on Niuatoputapu.

The government has confirmed five priority island groups in Tonga to establish reliable connectivity: Tongatapu, Vavu'a, Ha'apai, Niuatoputapu and Niuafu'ou.

ETC Activities

Coordination

The ETC coordinator in the Pacific continues to liaise with local, regional, and global partners to support the response in Tonga. The ETC response priority is to bridge the communications gaps for government and responders—including connectivity and voice services—until national telecommunications providers have fully recovered, and the damaged undersea communications cable is repaired. Solutions include deployment of communications equipment from Fiji via a landing stage in Brisbane, Australia, set up as part of regional preparedness actions.

Due to measures put in place by the Government of Tonga to prevent any cases of COVID-19 in country, this response will be a 'no contact' operation. Only equipment is being deployed, to be operationalized using national capacity. There is a three-day quarantine period in place for any goods shipped into Tonga, in line with the 'no contact' policy.

Communications equipment & services

The Asian Development Bank (ADB) office in the Tongan capital of Nuku'alofa is offering access to basic internet services via its backup satellite link for those involved in the response. Responders can contact Pacific.ETC@wfp.org for referral to ADB staff.

Regional preparedness partner, the University of the South Pacific (USP), is collaborating with the ETC to deploy VSAT satellite connectivity equipment to the USP campus in 'Atele, Nuku'alofa, to support the government response and wider efforts by the response community. The USP VSAT equipment is currently in transit from Fiji to Tonga (via Australia).

The ETC is deploying three portable satellite data terminals (BGANs) to Tonga to provide internet connectivity and voice services, which can support assessments or a limited number of users. Télécoms Sans Frontières (TSF) is supporting the response with SIM card credit to equip the three BGAN satellite terminals. The BGANs will be received by the Tongan NEMO on arrival in Tongatapu.

The ETC has dispatched three World Food Programme (WFP) satellite phones which will be credited with free airtime by Iridium. The International Telecommunication Union (ITU) is coordinating with Iridium to provide the free airtime. The satellite phones will be issued to government personnel in Tonga, when received.

Six additional satellite phones are being prepared for shipment to Tonga by ITU in Geneva, Switzerland, to be used by Tongan government staff supporting the response. These also include free airtime provided by Iridium.

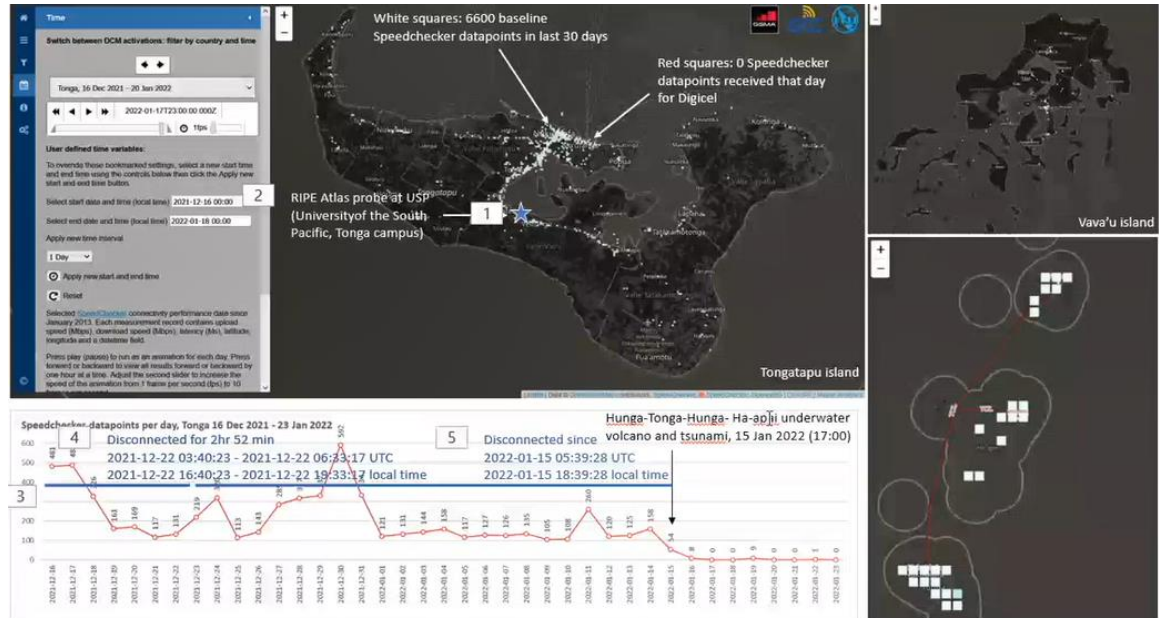
ITU continues to work with the satellite group, Kacific, to potentially support the government of Tonga with satellite communications services.

Intelsat and the ITU regional office in the Pacific are working to operationalize their satellite connectivity equipment in Tonga to provide connectivity services for the government. Intelsat and ITU are working with the Tongan Ministry of Communications to strengthen staff capacity on the ground to support this activity.

Following a request from NEMO, the ETC is exploring options to support the government response with Unmanned Aircraft Systems (UAS) to conduct damage assessments.

Mapping

Through its [Disaster Connectivity Map \(DCM\)](#), ITU continues to monitor the status of connectivity in Tonga. Only one data point was detected over a four-day period from 20-23 January (data point in Nuku'alofa). This is compared to a daily average of approximately 150 data points before the eruption occurred on 15 January (see bottom right of the chart below). Further, the [RIPE Atlas probe](#) based in the USP campus in Nuku'alofa has remained disconnected since the eruption. ITU is updating the DCM once a day. For reference, the areas shown in red indicate the recent presence of connectivity while the areas shown in white indicate baseline connectivity data mapped before the emergency.



Information

WFP has sent an expression of interest to partners to establish the need for shipping assistance to Tonga. WFP encourages partners to keep in touch with the logistics unit when the need for equipment shipping arises. WFP is able to confirm with partners when flights are available from Australia and New Zealand and explore options to chart flights based on needs and minimum cargo requirements.

Challenges

There are substantial logistical challenges in reaching remote and outlying areas of Tonga with existing assets to assess damage and assist affected populations, as well as shipping communications equipment internationally by air or sea.

Severely damaged communications systems have hampered capacity to conduct rapid assessments, and impacted on establishing communication with the Tongan NEMO.

Tonga has very strict COVID-19 protocols that need to be adhered to, including a three-day quarantine for incoming communications equipment.

Funding

As there is no funding appeal, the ETC and partners are using existing communications equipment in stock and in-kind contributions from partners to support the response in Tonga.

Meetings

A Global ETC Joint teleconference will take place on **Friday 28 January 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 informations or to be added or deleted from the mailing list please contact:

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