Tonga: Hunga Tonga–Hunga Ha'apai Volcano

Global ETC Teleconference #17

Date: 26/10/2022 Time: 06:00 UTC

All information related to ETC operations can be found on the website:

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

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

Pacific.ETC@wfp.org

Attendance

Chair	Omar Namaoui	Algeria
Government of Luxembourg	Gilles Hoffmann	Luxembourg
ITU	Paul Hamilton	Geneva
NORCAP	Godefroy Asiamuah	Tonga
WFP	John Dovale	Fiji
	Mufaro Masuka	UAE
	Oscar Caleman	Thailand

Agenda

1. Disaster update
2. Global ETC update
3. AOB

Action point: N/a

Minutes

1. Disaster/general update

- Currently, domestic air travel in Tonga is varied. Lulutai Airlines operates daily flights to the island groups of Vava'u and Ha'apai. Occasional flight rescheduling may occur, varying from hours to a full day. Other flights operate to the remote islands of Niuafo'ou and Niuatoputapu. Flights to Niuafo'ou island group are scheduled once a month and flights to Niuatoputapu island group are scheduled twice a month. Flight availability is based on passenger demand.
- Digicel data connectivity services shuts down daily between 0100 and 0700 on the islands of Vava'u and Ha'apai. The Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change, and Communication (MEIDECC) and other partners rely on the Starlink and the emergency.lu Very Small Aperture Terminal (VSAT) systems for internet connectivity.
- Internet Service Provider (ISP) data connectivity services in the outer islands of Tonga are still down until the damaged section of the submarine Tonga Domestic Cable Extension (TDCE) is fully repaired. The estimated date for the domestic fibre cable remediation is April 2023. A team is currently on the ground (October) to conduct another assessment on the domestic fibre cable in Ha'apai. Once restored, the domestic fibre cable will directly affect all current ETC response activities and will lead to eventual ETC connectivity services decommissioning.

2. Global ETC update

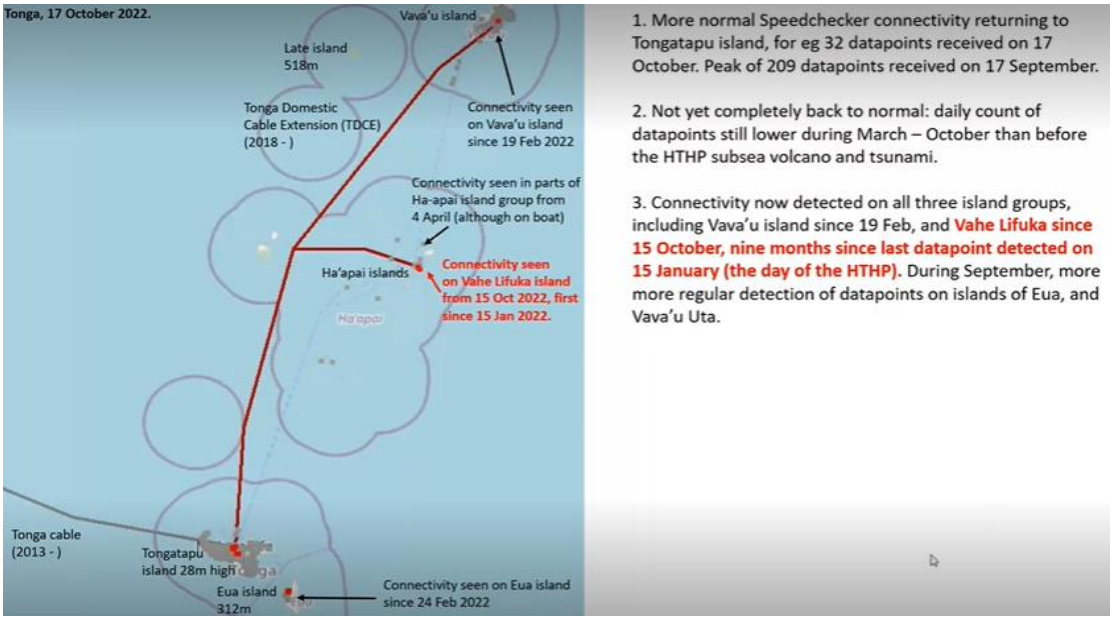
- The four Uninterruptable Power Supply (UPS) systems to stabilise the power supply to the emergency.lu VSATS have been deployed and installed on the islands of Vava'u and Ha'apai. The emergency.lu VSATs supply internet **connectivity services** in the two MEIDECC Emergency Operations Centres (EOC).
- Two MEIDECC staff on Vava'u and Ha'apai have been trained to take over the maintenance of the two emergency.lu VSAT systems. The ETC will provide technical backstopping to MEIDECC.
- The **High Frequency (HF) equipment** from manufacturer Barrett Communications in Australia was cleared by national authorities and is currently being inspected by ETC/MEIDECC. The inspection report will be shared by 28 October. The inspection report will aid in finalizing the deployment plan per location.
- The **Very High Frequency (VHF) systems,** Information Communication Technology (ICT) systems toolkits, other **HF** and **VHF accessories** arrived in Tonga on 14 October. MEIDECC has already been informed. They expect the clearance of equipment to take a maximum of two weeks.
- Following a meeting between the ETC and MEIDECC, the **HF radio** training is scheduled for 28 November to 1 December. The aim of the training is to boost the skills and capacity of MEIDECC and the National Emergency Management Office (NEMO) so that they can participate in the deployment of the HF radio solution and ensure sustainability of the solution in the long-term.

- The ETC has requested MEIDECC to expeditiously clear any equipment received in-country, going forward. This follows the delayed clearance of some VHF systems equipment, which took a month. There is a need to fulfil activities within funding timeframes and the availability of the Stand by Partner (SBP) support, which is also time bound. The ETC wants to ensure that all received equipment is cleared before the end of the year. This will aid in finalising training schedules and field deployment plans for 2023.

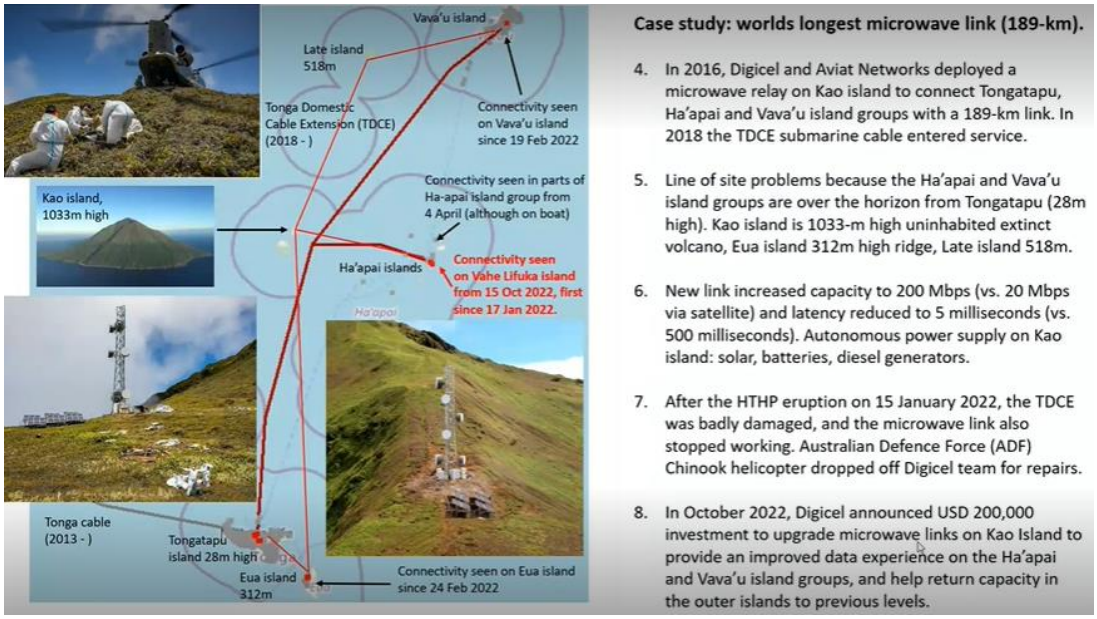
3. Partners update

International Telecommunication Union (ITU)

- **Disaster Connectivity Mapping (DCM):** ITU continues to share insights on the status of connectivity in Tonga by mapping connectivity data points detected. The DCM database continues to receive live inputs twice daily.
- Connectivity data points have been detected on Vahe Lifuka Island (within Ha'apai) on 15 October. This is nine months later since previous datapoints, detected on 15 January (the day of the volcanic eruption).



- In 2016, Digicel and Aviat Networks deployed the world's largest microwave relay (189 kilometre) stationed on Kao Island. It connects the islands of Tongatapu, Ha'apai and Vava'u. It supplied data connectivity since 2016, with a capacity of 200Mbps, running on an autonomous power supply (solar, batteries, diesel generators) on Kao Island. The TDCE was only deployed in 2018. After the Hunga Tonga–Hunga Ha'apai (HTHH) eruption on 15 January 2022, the TDCE was extensively damaged, and the microwave link also stopped working. In February 2022, an Australian Defence Forces (ADF) helicopter dropped off a three person Digicel team for repairs on the microwave link. In October, Digicel announced an investment of US$200,000 to upgrade the microwave link on Kao Island for improved data experience on the islands of Ha'apai and Vava'u. Once operational, the microwave data connectivity link can be an interim solution before the repair of the TDCE submarine cable scheduled to be operational by April 2023.



4. AOB

- N/A

The next teleconference meeting will be held on Wednesday 23 November 2022.

Acronyms

ADF	Australian Defence Forces
DCM	Disaster Connectivity Mapping
ETC	Emergency Telecommunications Cluster
EOC	Emergency Operations Centres
HF	High Frequency
ICT	Information Communication Technology
ITU	International Telecommunication Union
MEIDECC	Tonga Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change, and Communication
NEMO	National Emergency Management Office
SBP	Standby Partner
TDCE	Tonga Domestic Cable Extension
HTHP	Hunga Tonga–Hunga Ha'apai
VHF	Very High Frequency
VSAT	Very Small Aperture Terminal
WFP	World Food Programme

Minutes: Mufaro Masuka, Global ETC Operational Information Management Officer