

Vanuatu – earthquake and cyclones emergency [FINAL]

ETC Situation Report #7

Reporting period: 03/03/2023 to 22/04/2023

The World Food Programme (WFP) led 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 supported the emergency response to Tropical Cyclones Judy and Kevin which hit Vanuatu on 1 and 3 March 2023, which occurred on 3 March 2023. The ETC responded from 3 March until 22 April 2023.

Highlights

- Led by the WFP Multi Country Office (MCO) for the Pacific, the ETC delivered ICT support to Vanuatu following the impact of Tropical Cyclones Judy and Kevin (both of Category 4 intensity) which made landfall over Vanuatu on 1 and 3 March. As part of WFP’s contribution to the response, the ETC in the Pacific engaged with the Government of Vanuatu’s National Disaster Management Office (NDMO) and the Office of the Government Chief Information Office (OGCIO) to assess the situation and mobilise support to meet the ICT needs of the emergency response.
- On 9 March, WFP rapidly supported and collaborated with Vanuatu government responders by deploying an ETC Officer to help assess communications and connectivity needs across the affected islands. Deployed in the initial response were three push-to-talk (PTT) satellite phones to enable voice service communications, and one Broadband Global Area Network (BGAN) terminal to provide back-up connectivity for the planned ETC assessments. On 17 March, WFP through the Pacific Humanitarian Team (PHT) brought in a second ETC Officer who arrived in Vanuatu to support assessments on communications and connectivity needs, install data connectivity terminals, and train NDMO technicians on the delivery of communications services.
- On 11 and 18 April, a Starlink satellite data terminal was installed by the government with the support of the ETC at the Penama Provincial Emergency Operations Centre (PEOC) on Ambae Island and Tafea PEOC on Tanna Island. The data connectivity services enable users to communicate with the National Emergency Operations Centre (NEOC) at the NDMO headquarters in Port Vila. The system serves as a critical tool for communications between responders in emergencies.



The ETC installs a Starlink satellite data device at Tafea PEOC, Tanna Island, for use in communication between PEOC and the NDMO HQ in disaster response. Photo: WFP/ETC

- As the initial emergency response is transitioning to the recovery phase, the WFP-led ETC phased out its immediate support to the government of Vanuatu's emergency response on 22 April. All remaining activities were handed over to the NDMO and OGCI. WFP, through the ETC, will continue to engage with partners on further needs, such as capacity building of staff.

Communications in Vanuatu

On 1 and 3 March 2023, Tropical Cyclones Judy and Kevin—both category 4 intensity—caused widespread destruction across Vanuatu's islands, including impact on communications infrastructure. Over 251,000 people (80% of the population) were affected. The national authorities in Vanuatu declared a six-month state of emergency on 5 March.

The two Mobile Network Operators (MNOs) in Vanuatu—Digicel and Vodafone—continue to restore their connectivity services in all areas impacted by the cyclones. By 22 April, Vodafone confirmed 90% service restoration in Port Vila, 77% in Shefa Island and 100% in Malampa—all areas are recovering from 50%¹ service recorded two days after the cyclones. Digicel has restored connectivity to an average of 90% across Vanuatu's urban settlements spread across the different islands. The status of GSM and 3G connectivity are yet to be ascertained on other islands, especially for the remote settlements.

Nationwide, average mobile network coverage is now estimated to have been restored to 95% of the baseline level prior to the cyclones, after an initial drop of approximately 50%.

The Disaster Connectivity Maps (DCM) campaign initiated by the International Telecommunication Union (ITU) on 5 March tracked mobile network and data connectivity across the 13 islands until 24 March. Data tracking was discontinued as data connectivity had stabilised; matching baseline levels recorded before the cyclone's disaster.

FM and AM broadcast radio coverage was restored by 7 March and is functional for all three radio broadcasters in all urban centres across the islands. Vanuatu's High Frequency (HF) and Very High Frequency (VHF) radio networks, which were established with support from the Government of Australia following Tropical Cyclone Harold in 2020, also remains functional following the cyclones.

The ETC conducted a market assessment for solar solutions to be installed at the PEOCs to provide power back-up for uninterrupted data connectivity. Vanuatu continues to experience a limited power supply—the national grid infrastructure is still being repaired and does not extend across the whole country.

ETC Activities

Coordination

Led by the WFP MCO in the Pacific, the ETC engaged with the Vanuatu government through the NDMO and the OGCI to assess the situation and mobilise resources to meet the ICT

¹ Based on open-source data from IODA, Cloudflare, and Google.

needs of the emergency response. The ETC supported the NDMO national cluster system, which coordinates humanitarian interventions through nine national clusters—Shelter, Education, Food Security & Agriculture, Gender & Protection, Health & Nutrition, WASH, Emergency Telecommunications, Logistics and Displacement & Evacuation Centre Management.

Two telecommunications specialists from WFP FITTEST² were deployed as the ETC in support of the government-led emergency response. The first technical specialist arrived in Vanuatu on 9 March and supported government responders until 28 March. The second mission started on 17 March and ended on 22 April, after having supported the deployment and installation of connectivity solutions at two priority PEOCs.

Emergency telecommunications support to the government of Vanuatu's emergency response was phased out with the end of the ETC Officer's mission on 22 April. The Pacific ETC Coordinator hosted by WFP in Suva, Fiji, will continue to engage with partners and the government of Vanuatu authorities on other needs that may arise, such as training and capacity building of staff.

Telephony

Immediately following the disaster, three satellite phones—issued in 2020 by the ETC to the Vanuatu NDMO as part of the emergency response to Tropical Cyclone Harold—were pre-configured and activated for use by government responders to communicate in coordinating the response.

Three additional satellite phones and six SIM cards with prepaid airtime were dispatched from the WFP Pacific MCO in Fiji to Vanuatu to support communications and connectivity for the NDMO in post-cyclone assessment and response.

By 4 April, the national telephone services were largely restored, reducing the need for satellite phones to support the response. On 12 April, the satellite phones were returned to the WFP MCO in Fiji, where they will be part of the stock of prepositioned equipment for future emergencies.

Data connectivity

BGAN terminal

One BGAN terminal was deployed on 9 March to provide back-up data connectivity support for the planned ETC assessments across the impacted islands. The BGAN was deployed from the prepositioned emergency stock in the WFP MCO in Fiji. ITU provided the pre-paid SIM card to activate the BGAN terminal services.

Satellite data connectivity

On 9 March, WFP supported the government of Vanuatu responders by deploying an ETC Officer to assess the communications and connectivity needs across the affected islands. The NDMO confirmed that three provinces—Malampa, Penama and Torba—had limited access to internet connectivity at the PEOC. This challenge hampered communications between the NDMO's NEOC in Port Vila and the PEOCs.

² WFP's Fast IT & Telecommunications Emergency & Support Team (FITTEST)

By 16 March, a second ETC Officer arrived in Port Vila to assess and support ICT needs. On 19 March, the ETC conducted an ICT assessment on Tongariki Island in Shefa Province, identified as one of the priority areas by the NDMO. The assessment found that 3G connectivity was very slow and not all mobile networks were available in the area visited. It was confirmed that the Starlink satellite service had good coverage on the island.

Following assessments on Tongariki Island, the Vanuatu NDMO led the development of an expanded data connectivity services plan for the various islands.

The installation of a Starlink device at each of the five PEOCs, based in each affected provinces of Shefa, Tafea, the Shepherd Islands, and parts of Penama and Malampa Provinces, was recommended to enable communications between the PEOCs and the NEOC headquarters in Port Vila.

On 30 March, the Government of Vanuatu received 10 Starlink terminals from Starlink. The terminals are on loan from Starlink to facilitate communications in the emergency response. The ETC pre-configured and activated all supplied terminals. Further, the ETC trained two NDMO ICT staff on how to configure, activate, and use the Starlink terminals and prepared a Starlink installation guide for technicians and a user guide for the Vanuatu national clusters. The user guide is available in English, French and Bislama.

On 11 April, the joint ETC and government responders team travelled to Ambae Island and installed a Starlink satellite data terminal at the Penama PEOC, at the request of the NDMO. The data connectivity service has been activated, enabling users to communicate with the NEOC at NDMO headquarters in Port Vila.

The mission trained six staff at the Vanuatu Meteorology and Geo-Hazards Department on the configuration, activation, and use of Starlink satellite data devices on 17 April. The presentation was part of the capacity building and skills transfer from the ETC to Vanuatu government staff, in support of the ongoing emergency response and improving future resilience to disasters.

On 18 April, the mission travelled to Tanna Island and installed a Starlink satellite data terminal at the Tafea PEOC. The data connectivity service is activated, enabling users to communicate with the NEOC in Port Vila. A power generator was also installed during the mission to act as a power back-up for the newly installed Starlink satellite data device.

To facilitate the installation of data connectivity terminals at the remaining three PEOCs, NDMO technicians were trained on configuring, activating, using, and maintaining the Starlink terminals.

Services for communities

On 23 March, the ETC assessed four evacuation centres managed by the International Organization for Migration (IOM) on the island of Efate in Shefa Province. The assessment focused on the availability of connectivity and power to charge devices, as well as the availability of radio broadcast as a source of information for affected communities staying at the centres.

The ETC assessment found that GSM and 3G data connectivity are available from national service providers in all four evacuation centres. Power is available in the centres, and FM/AM radio from the national broadcasting service is also functional across all four sites.

Dashboard

See the [ETC Dashboard](#) for an overview of all ETC activities and services in this response.

Funding

ETC funding for the emergency response in Vanuatu was allocated through the WFP MCO for the Pacific based in Fiji, which is funded by USAID's Bureau for Humanitarian Assistance (BHA).

Under the WFP Pacific MCO, ETC response activities were allocated resources for a period of three months.

Challenges

Access to some of the islands in the most affected areas was difficult as all modes of transport were limited.

Electricity remains in short supply, but restoration is ongoing in parts of the country. Fuel-powered generators are in high demand, and it was challenging to procure this equipment on the local market.

Meetings

Global ETC Partners were informed of the ETC closure in Vanuatu during the Global ETC Joint Teleconference on Thursday 27 April 2023.

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

www.etcluster.org/emergency/vanuatu-earthquake-and-cyclones-judy-and-kevin

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

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