

Article Overview

Tonga's fiber optic network relies on the Tonga Cable System connecting the islands to Fiji, with 85% household coverage and ongoing efforts to improve resilience and speed.

Tonga Cable System Overview

The Tonga Cable System is an 827-kilometer submarine fiber-optic cable linking Tonga to Fiji, where it connects to broader international networks. It was first activated in 2013, with landing points at Sopo in Nukunono, Tonga, and Suva, Fiji. An extension to the Ha'apai and Vava'u islands was commissioned in April 2018 to improve domestic connectivity. The project was funded by the Asian Development Bank and the World Bank .

Coverage and Internet Usage

By 2026, Tonga has achieved 85% fiber optic coverage across households, with internet penetration reaching 78%. The average broadband speed is 45 Mbps, supporting e-commerce, remote work, e-learning, and e-health services. The digital economy now contributes approximately 18% of Tonga's GDP. The government aims to expand coverage to 90% and increase speeds above 50 Mbps while ensuring affordable access to bridge digital divides .

Vulnerabilities and Disruptions

Tonga's fiber optic network is highly vulnerable to natural disasters. The 2022 Hunga Tonga-Hunga Ha'apai volcanic eruption and subsequent earthquakes caused major cable disruptions, severing internet access and requiring satellite communications as a temporary backup . Repeated cable breaks, including a recent 41-kilometer cut near Nukunono, highlight the risks of relying on a single fragile connection. Repairs are logistically challenging, often requiring specialist ships deployed from distant locations, which can take weeks to restore service .

Future Plans and Resilience

To address these vulnerabilities, Tonga is exploring hybrid connectivity solutions, including satellite broadband, and planning a second international submarine cable project co-funded by Australia and New Zealand. These initiatives aim to provide redundancy, improve reliability, and ensure that remote islands maintain connectivity even during natural disasters . Despite the high costs and ongoing maintenance challenges, these efforts are critical for sustaining Tonga's digital economy and social services.

Summary

Tonga's fiber optic communication infrastructure has significantly improved connectivity and economic opportunities, but it remains highly susceptible to natural hazards. Ongoing investments in network expansion, speed enhancement, and hybrid solutions are essential to ensure resilient, reliable, and inclusive internet access for all islands.

Elon Musk's satellite Internet venture is helping to restore connectivity to the Pacific Island nation of Tonga, according

A colossal volcanic eruption in January 2022 ripped apart the underwater cables that

Tonga is once again experiencing a digital blackout following a new break in its domestic

In January 2022, the eruption of the Hunga Tonga-Hunga Ha'apai volcano damaged the only subsea fibre cable

In 2022, a natural disaster severed Tonga's digital connection to the outside world, and chaos ensued. The rest of the

Former satellite facilities operated by the two major local networks, Tonga Communications Corporation and Digicel

An undersea fiber-optic cable network is banishing Tonga's long-standing isolation and

Tonga Cable System is a submarine fiber-optic cable system connecting Tonga with Fiji, where it connects to other international

An undersea fibre-optic cable which connects Tonga to the rest of the world was severed during the eruption of a

Satellite technology in particular is in widespread use across Tonga and plays an important part in giving the more

A volcanic eruption in the South Pacific Ocean in January 2022 caused a tsunami and

Tonga is among the most remote countries in the world, with a population spread across dozens of small islands. The World Bank is

After a huge volcanic eruption severed the island country's lone connection to the global internet, a difficult repair job,

Tonga Cable Limited (TCL) owns and manages the fibre-optic submarine cable, connecting Tonga to Fiji,

Cable fault in Tonga could sever the nation from the rest of the world for weeks Amid the 7.6-magnitude quake, the

Country code (Top level domain): .to Broadband internet communication is provided by the Tonga Cable System that went online in

Web: <https://bssoda.pl>

