

Case Studies:

Harnessing Hazard-Talk for Crisis Communication during the Noto Peninsula Earthquake

January 1, 2024 - A Paradigm of Innovation in Disaster Response

In the aftermath of the catastrophic Noto Peninsula Earthquake, the swift and efficient restoration of communication channels was paramount. With the local power grid compromised, mobile communication networks faced significant disruption, affecting the relay of crucial information and coordination efforts.

This case study highlights the pivotal role of Hazard-Talk, a robust communication tool, in navigating the challenges posed by the disaster, especially in fuel logistics and mobile base station support.

In the face of power outages across the region, maintaining mobile communication was critical. The cessation of power supply from *Hokuriku Electric Power* significantly hampered operations, rendering mobile base stations inoperative as disaster storage batteries were exhausted.

Amidst this crisis, *Japan BCP Co., Ltd.*, specializing in disaster recovery logistics, emerged as a beacon of resilience. The company's dedicated service in delivering fuel to generators at mobile base stations was instrumental in reinstating mobile network connectivity. Through their efforts, the downtime of mobile radio waves was significantly reduced, thereby enhancing communication flow in affected zones.

Innovative Use of Hazard-Talk:

Hazard-Talk played a crucial role in ensuring seamless coordination among response teams. Tanker trucks, pivotal in the delivery of emergency fuel, utilized Hazard-Talk for real-time communication with the command center, leveraging group calls for efficient information exchange among involved parties.

A standout feature of Hazard-Talk was its image-sharing functionality, "View," which facilitated instant location sharing via Google Maps with just a photograph. This capability proved invaluable when a tanker found itself stranded on disrupted terrain. The shared location allowed for swift assistance from nearby units, demonstrating the effectiveness of Hazard-Talk in crisis situations.

Uninterrupted Communication with N3 Access:

The geographic variance in cellular signal availability posed a significant challenge. However, the integration of Hazard-Talk with N3 Access, a mobile router capturing signals from all mobile carriers, ensured uninterrupted communication.

This setup guaranteed that as long as any mobile carrier had signal presence, communication channels remained open, enabling voice calls, image sharing, and precise location updates.

The utilization of Hazard-Talk during the Noto Peninsula Earthquake not only exemplified technological resilience in the face of natural disasters but also underscored the importance of innovative communication solutions in emergency response. By bridging the gap between responders and ensuring the continuous operation of critical infrastructure, Hazard-Talk has set a new standard in disaster management and response efficiency.





2. Facilitating Emergency Transport Solutions in Disaster Zones

Following the earthquake's devastation, which resulted in significant ground fissures, passage for disaster recovery vehicles became untenably obstructed. Prompted by a governmental directive, road construction firms, including industry leaders *Nippon Road* and *Maeda Road Construction Co., Ltd.*, were swift to act. Utilizing Hazard-Talk along with N3 access technology, they were able to reestablish passage-ways for critical disaster recovery operations.

The collaborative efforts were further enhanced through Hazard-Talk's group call feature, which proved indispensable for coordinating road repair and snow clearance activities.



3. Nationwide Collaboration in Restoring Water Infrastructure Post-Earthquake

In the aftermath of the Noto Peninsula Earthquake, communities faced critical disruptions to their water supply due to widespread damage to water and sewage pipes. This led to significant challenges in accessing drinking water and operating sanitation facilities over extended periods. To combat these issues, water bureaus from across the country stepped in to assist, supplementing the efforts of local teams that were overwhelmed by the scale of the disaster.

The task of locating and assessing the damage to the water pipes was streamlined using the "view" feature of HAZARD-TALK, which allowed for the efficient capture and sharing of images detailing the extent of the damage. Subsequent repair operations were coordinated through HAZARD-TALK's wireless communication capabilities, ensuring that teams could work effectively to restore essential services. HAZARD-TALK has become a tool of choice among water bureaus for its effectiveness in facilitating critical communication and coordination efforts during disaster recovery operations.



4. Facilitating the Deployment of Emergency Sanitation Solutions

In response to the critical disruption of sanitation services caused by burst water pipes, the *Ministry of Land, Infrastructure, Transport, and Tourism* (MLIT) mobilized various construction firms to deploy "temporary toilets" to affected areas. To efficiently manage this urgent task, a construction company leveraged Google Maps to track the positions of their teams tasked with delivering these essential amenities to the disaster-stricken zones. This innovative approach enabled the company's headquarters to remotely oversee the operation, allowing for effective "visualization" of the deployment process and ensuring timely assistance was provided to those in need.



5. Drone Surveillance Identifies Risks from Natural Dam Lakes and Supports Reconstruction Planning

In the wake of the Noto Peninsula earthquake, the emergence of "natural dams" formed by landslides posed a significant risk of causing further destruction in the form of landslides in downstream areas. A surveillance drone company played a pivotal role in assessing these dangers by employing drone technology to capture detailed images of the affected regions. To facilitate the creation of initial materials for a reconstruction support plan, the team utilized HAZARD-TALK equipped with N3 Access for seamless and efficient communication, ensuring that the survey and planning process was conducted smoothly and effectively.

6. Leveraging Hazard-Talk in the Recovery of Disaster-Affected Shrines

The Ishikawa Prefecture Shrine Agency implemented HAZARD-TALK and N3 Access to assess and aid in the recovery of shrines impacted by the Noto Peninsula earthquake. The intense tremors resulted in the collapse of numerous shrine structures and torii gates, prompting the need for a reliable communication tool. HAZARD-TALK, enhanced with N3 Access, was chosen to facilitate effective coordination among recovery teams, enabling them to ascertain the extent of the damage and organize the necessary support for these cultural landmarks.

