Emergency Response + Crisis Preparedness Interview with the Central Emergency Operations Centre

For many, Taiwanese and foreigners alike, the April 3, 2024 earthquake was the first time they had felt such a powerful earthquake which left a lasting impression. While the emergency response of the local authorities was exemplary and the aftermath showed that Taiwan is well prepared to deal with such natural disasters, we were reminded that emergency preparedness concerns us all.

In the first hours after the earthquake, the Trade Office of Swiss Industries started its crisis management. Initially, we tried to reach all Swiss citizens registered in Hualien, Taitung and Yilan counties to ensure that all Swiss nationals in the affected area were safe and sound. Over the next few days, we were in constant exchange with our headquarters in Bern regarding Swiss tourists in the affected region.



One of the most important sources of information we relied on was the local authorities; especially Mr. Ming-Yuan Shih Chief of the Director-General's Office of the National Fire Agency (NFA) who operates the Central Emergency Operations Centre (CEOC). The CEOC was very well informed, thanks to its well-structured emergency response system and well-coordinated network, and communication was smooth and effective. Thanks to the CEOC, we were able to account for all Swiss in a very timely manner. A huge thank you to the authorities and rescue services involved for their invaluable work!

In the aftermath of the earthquake, the Trade Office of Swiss Industries, along with offices from other European countries, had the privilege of visiting the CEOC and witnessing firsthand how the NFA coordinates the efforts of all emergency services involved in a disaster. In addition to the CEOC in Taipei and its four backup locations across the island, each major city has its own Emergency Operations Center (EOC), for a total of 22 EOCs in Taiwan.

The interview below may provide valuable insights regarding your own crisis preparedness, and we would like to remind our Swiss citizens of their responsibilities under the Swiss Abroad Act, as well as the guidance provided by <u>FDFA and the Trade Office of Swiss Industries</u>.

Interview with Mr. Shih, Ming-Yuan

Chief of the Director-General's Office of the National Fire Agency (NFA)

Can you briefly describe to the emergency response mechanisms in Taiwan? What is the role of the CEOC and what are the responsibilities of the EOCs?

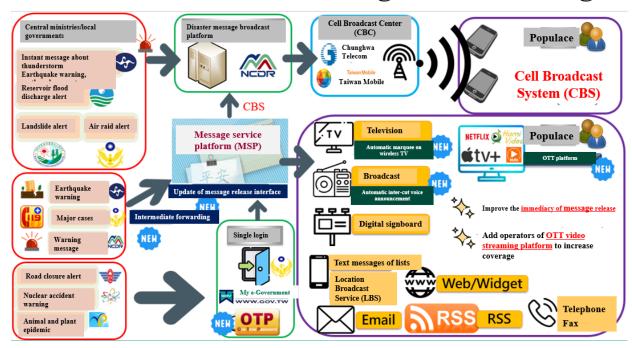
According to the Disaster Prevention and Rescue Act, Taiwan's disaster prevention and rescue system is divided into three levels: the central level, the municipal level and the township level. All disasters are handled under local responsibility but the central disaster management authorities maintain a 24-hour rotation of 17 personnel to monitor disaster information and assist local governments in emergency response. When a disaster occurs or is imminent, the central disaster management authority establishes the Central Emergency Operations Center (CEOC). Their tasks include the supervision, coordination and communication among relevant organizations on national and different local levels, collecting, assessing and processing disaster information and coordinating cross-jurisdictional support.

How are people in affected areas alerted in case of an earthquake or other serious disaster? What do you recommend in order to ensure to receive important alerts or information from the authorities?

The graphic below shows the system in more details, but it is quite complicated, so let me explain it. The National Fire Agency (NFA) has established the Message Service Platform (MSP), which provides disaster information services on various channels such as mobile SMS, the Cell Broadcast Service (CBS), TV and radio (for English radio find ICRT FM.100) broadcasting and digital billboards. This communication system can be used for severe weather alerts, landslide warnings, flood risks, road closures, evacuation instructions, and essential lifeline updates, ensuring diverse, timely, comprehensive information services for the public. It can either be addressed to the public nationwide, or only of specific areas affected.

To ensure that you receive important alerts from the Taiwanese authorities, we recommend downloading the "Readiness TW e-APP" (消防防災e點通), which provides the information in 17 languages (incl. Mandarin, English, German and French). The APP can be downloaded from the Apple Store (for iPhones) and the Play Store (for Android phones) and the service of the APP is also available on https://bear.emic.gov.tw/MY/. Alternatively, the Taipei City Government published a "Disaster Preparedness" Manual available as a PDF for download.

Architecture for Transmitting Disaster Messages



All involved rescue services did an amazing job and thanks to the well-established system, Taiwan managed to limit the number of casualties for such a big event. Congratulations! Are there lessons that the NFA drew from the earthquake response? Are there things you could have done even better?

We did take many valuable lessons from the events in April, let me summarize a few of them:

- As people were stranded due to road blockages in the mountainous areas of Hualien, we needed drones that are better suited for weather resistance (rain and wind), and nighttime aerial reconnaissance capabilities.
- 2. As communication disruptions persist in the disaster-affected areas of Taroko National Park, the Ministry of Digital Affairs will deploy personnel and communication equipment via helicopters to establish network communication channels. And further efforts like a multi-satellite communication system and mobile communication platform vehicles shall guarantee better emergency communication channels.

- The earthquake warning system by the Central Weather Bureau underestimated the earthquake's
 magnitude, resulting in an insufficient warning coverage. The alert was only sent out in twelve
 counties and cities. The criteria for issuing real-time earthquake alerts will therefore be reevaluated.
- 4. At the peak of the disaster, road and communication disruptions left 705 people stranded and 18 people were reported missing. To address this, in mountainous regions we will take the following measures:
 - enhance <u>communication</u> systems and <u>backup power</u> equipment
 - establish <u>emergency shelters</u>
 - implement visitor tracking systems and personal location devices
 - create a park disaster warning mechanism for early activation of closure measures
 - ensure accommodations have sufficient food, water, power, and communication equipment
 - improve <u>safety features</u>, <u>adding evacuation facilities</u>, <u>and installing smart monitoring and</u> warning systems

Access to knowledge about potential risks and being prepared for an emergency are crucial. What do you think foreigners living in Taiwan should know?

Taiwan is located in a high-risk disaster zone and frequently experiences natural disasters such as typhoons, earthquakes, floods, and landslides. To strengthen disaster preparedness among the public, it's essential to discuss emergency plans with family members and start preparing emergency kits, home safety supplies, and disaster-resistant food. These measures can help mitigate the impact and losses caused by natural disasters.

The NFA runs an APP called *"Readiness TW e-APP"* (消防防災e點通). Can you explain how the APP can support people with their emergency preparedness and in the event of a disaster?

The APP can support people in several aspects to insure emergency preparedness in the event of a disaster :

- 1. Disaster response information
 - The APP will be updated with the latest news by all government agencies and also clears up rumors and fake news. It provides a fast and reliable source of information in case of emergency. The APP also gives an overview of what should be prepared in an emergency shelter kit.
- 2. 7 types of disaster evacuation instructions
 - The APP provides specific evacuation information for typhoons, heavy rain, tsunamis, landslides, flooding, volcano eruption and earthquakes. It instructs you on how to react in the first minutes, but also explains how to best prepare for each one of them.
- 3. Evacuation shelter inquiry and guidance
 - The APP allows to search for the fastest route to the closest shelter or hospital as well as for the route with no disaster hindrance.
- 4. Disaster prevention map
 - We highly recommend for everyone two personalize their own disaster prevention map, where you can save the closest shelter, hospitals, and potential ad hoc facilities to ensure food and material supply and well as medical care.
- 119 report
 - The APP allows you to make a direct police report (only available in mandarin so far).
- 6. Disaster information alerts

The APP also updates users with disaster alerts, which can also be customized on the website (you

In case an evacuation becomes necessary, it is recommended to have a "go bag" or "grab bag" ready at home. What do you recommend to have in such a bag?

1. Emergency Food and Water:

Prepare drinking water, biscuits, chocolate, emergency food, and vacuum-sealed ready-to-eat meals. Families with infants should also include powdered formula or canned baby food.

2. Medical and Hygiene Supplies:

Include iodine, cotton swabs, gauze, a thermometer, masks, hand sanitizer, tissues, wet wipes, sanitary pads, and necessary medications (pay attention to expiration dates and storage instructions).

3. Cold Weather Clothing:

Pack lightweight jackets, underwear, socks, towels, gloves (rubber gloves), raincoats, small blankets, and hand warmers. If possible, bring a compact sleeping bag. Families with infants should remember to pack diapers, and it's a good idea to keep a baby carrier accessible.

4. Valuables:

Make copies of your ID, health insurance card, and bank passbook. Also, carry some cash (preferably in small denominations) for use at public phones or vending machines.

5. Footwear:

When evacuating, remember to wear shoes to protect against sharp objects like broken glass or debris.

6. Other Items:

Consider additional items like a whistle, disaster maps (available from local fire departments or government websites), a portable radio, flashlight, batteries, lighter, Swiss army knife, portable charger, and pet supplies (if you have pets).

And is there any way we can put all this newly gained knowledge into practice?

Actually, there is! On September 20th 2024, at 9:59 am we will start a nationwide emergency preparedness test. This means that all the tools mentioned above to inform the public about an emergency will be put into action. TV and radio broadcasts will be interrupted for an emergency alert, the "Readiness TW e-APP" (消防防災e點通) alerts and the Cell Broadcast System (CBS) alerts will be activated.