

Customer Case Study



XpertEye: A helping hand for Sendai City in Tsunami and disaster risk management

AMA is excited to present a compelling use case, highlighting how our remote assistance solution can play a pivotal role in disaster readiness for the city of Sendai, Japan, in anticipation of future natural disasters. This use case can serve as a highly valuable reference for local governments and numerous other stakeholders.

Background

Sendai, a city located on the Pacific coast of the Tohoku region in Japan, has a history of repeated earthquakes and tsunamis, notably the 2011 Tohoku earthquake. With the looming threat of potential tsunamis, the city is focused on enhancing its disaster preparedness capabilities. Some of these include the construction of seawalls, evacuation towers, and the establishment of evacuation routes and signage.

The city has 13 dedicated tsunami evacuation facilities where individuals can seek refuge. Each facility is capable of accommodating between 100 and 200 refugees. In the event of a tsunami, there is a pressing need for an efficient communication solution to provide assistance within the shelters.



The city of Sendai, through its innovation platform Sendai Bosai-Tech, which focuses on creating and promoting businesses related to disaster prevention, accepted AMA's proposal to bridge the communication gap between disaster victims and rescue teams.

Challenges

There is a need for a more practical and user-friendly communication system that can provide support and facilitate effective communication for refugees in evacuation centers, ensuring their safety and facilitating their rehabilitation.

- Disaster prevention and control center's teams have a hard time assessing the situation in the many shelters around the city
- Accurate and timely information gathering is crucial to provide help and not leave anybody alone
- The traditional communication infrastructure may be severely impacted or disrupted, making it difficult to connect with emergency services quickly
- One specific challenge is the complexity of the usage of existing «IP radio equipment» (used to exchange voice messages) in each shelter for communication, as they may not be convenient to support individuals staying in the shelter for a few days



Solution

To address these challenges in the evacuation centers, AMA proposed a Proof of Concept to check evacuees' understanding of the situation using XpertEye remote assistance. Rescue operators utilized an IP transmitter to obtain the phone numbers of individuals inside the shelter. Evacuees were then sent a link on their smartphones, enabling them to participate in a video call. This allowed for a better understanding of the evacuation center's situation and facilitated remote support effectively.

*Rescue operators
guiding evacuees
from the headquarters*



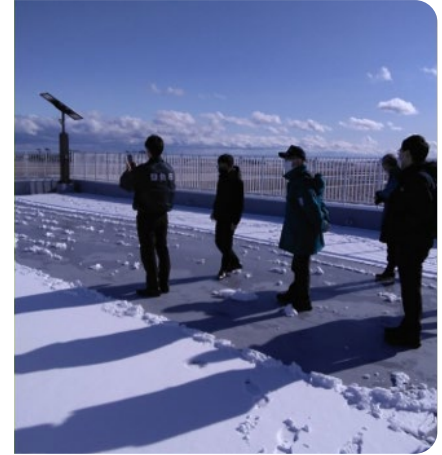
Key benefits



Answering the IP radio after receiving the XpertEye invitation link



Remote guidance for the installation of a gas stove



Visual damage confirmation of the area around the shelter

- **Seamless communication:** XpertEye establishes a reliable and uninterrupted communication channel between victims, rescue teams, and support networks, enabling swift and accurate information exchange
- **Shelter accommodation assistance:** The solution provides real-time guidance and information on available spaces, safety protocols, and necessary resources to ensure refugees' well-being. For instance, operators at the headquarters can confirm the number of evacuees and their health status, guide them on the safe usage of power set stoves, point out the location of life jackets and blankets, and many more
- **Situation awareness:** Real-time video communication provides crucial information on the damage around the shelters
- **Rapid response:** The real-time nature of our XE aR solution allowed rescue teams to respond promptly to victims' requests, ensuring a faster and more efficient rescue operation
- **Emotional support:** The ability to connect with people and see their faces in a video call provides victims with a sense of reassurance and emotional support during an incredibly challenging time

Evacuee user experience:

- Easy-to-use SMS link
- User-friendly browser interface without hassle
- Face-to-face video calls with disaster prevention staff provided relief

Disaster response headquarters user experience:

- Simple and intuitive configuration
- Clear pointers for giving directions
- Screen sharing feature eliminates evacuee anxiety
- Versatile system applicable to various fields and use cases

Conclusion

The demonstration test confirmed that XpertEye's simple, easy-to-use solution enables the city of Sendai to strengthen its ability to respond to natural disasters by establishing robust communication channels, enabling effective coordination, and optimizing resource allocation.

The next steps will be extending the use of XpertEye to other departments such as emergencies, municipal property management, equipment inspection work, equipment fault reporting, and auditing.

Contact us today to learn how to bolster your city's disaster readiness with remote assistance.