



# Disaster Risk Reduction (hereafter referred to as DRR) Utilizing Technology

## [Background]

In Sendai City and Tohoku Area, there are many citizens, governments, and companies who have experienced the Great East Japan Earthquake, who understand the difficult situation and the importance of disaster prevention and have a strong desire to contribute to disaster prevention.

## [Response]

To curate a place that allows the continuous creation of new solutions to tackle disaster risk reduction challenges that combine DRR, technology and business; while promoting DRR projects from an industrial perspective.

### 1 BOSAI-TECH Innovation Creation Promotion Initiative

Following compilation of "Sendai Economic Growth Strategy 2023" in March 2019, it is intended to create cooperation between ICT enterprises and private sector companies, etc. and promote innovation in a wide range of fields, and to vitalize local industries by creating disaster prevention-related industries through "BOSAI × IT" (BOSAI-TECH) and field testing of drones, etc.



### 2 Sendai BOSAI-TECH Innovation Platform

With participation by companies, groups, human resources, etc. active in the respective fields of disaster prevention, technology and business, Sendai BOSAI-TECH Innovation Platform serves as a platform for continuously generating new solutions and initiatives for addressing various disaster prevention issues through cooperation between industry,

academia and government. Through this platform, in addition to supporting the creation and growth of new disaster prevention initiatives in participating companies, it is intended to extend initiatives to the city, the rest of Japan and overseas and thereby realize the ideal of the "Sendai Framework for Disaster Risk Reduction".



## Example

### Tsunami Evacuation Announcement Drone Operation

The Tsunami Evacuation Announcement Drone Operation was developed as a new broadcasting method used to issue tsunami evacuation warnings and has been in full-scale operation since October 2022.

In this initiative, as tsunami warnings, etc. are being made, evacuation announcements will be carried out simultaneously by drones equipped with speakers, etc. that have been preprogrammed to fly along predetermined routes. This process

is conducted entirely automatically with no manual operation needed. This is a world-first initiative in two aspects, i.e. "tsunami evacuation announcements by automatically operated drones" and "maneuvering of drones using a designated LTE communication network".

Through the realization of this system, it is anticipated that an effective tsunami evacuation announcement network catering to visitors of eastern coastal area will be established.



## Others



▲ Outdoor Speaker Installations × Voice Digitization



▲ Evacuation Centers × Digital Reception / Regional BWA



▲ High Risk Reservoir × Remote Monitoring System