Horn Array speaker system

Voice Evacuation PA system

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Hazard

Earthquake Tsunami Land Slide Cyclone Storm Surge Flood Drought Volcano Wild Fire Tornado Heat Wave Cold Wave Avalanche

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Solution Purpose

Prevention & Mitigation Preparedness Response Recovery

Solution Theme

Infrastructure Technology Building Technology Information & Communication Technology Products & Goods Education & Training

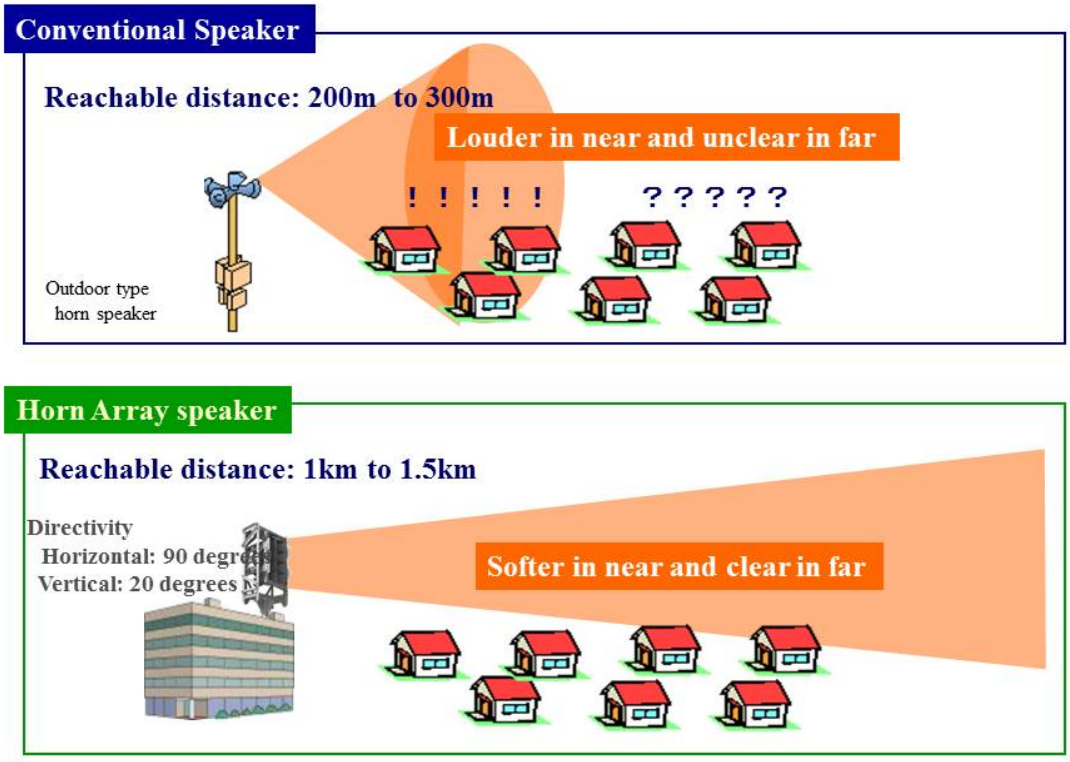
Technology Subject

River & Basin Dam & Reservoir Coast Sabo Road Railways Airport Port Essential Utilities Urban Facility for Disaster Prevention Emergency Base & Back-up Facility Resilience Improvement on Existing Building Mitigation Measures for Interior & Facility Temporary Housing & Facility Information Communication Machinery & Equipment Training & Exercises

Advantages

Our unique technology “Voice directivity” is able to focus and deliver evacuation messages in where disasters like Tsunami, flood and landslide are foreseen. In addition, TOA provides the sound systems which deliver the effective information for the necessary place while avoiding the noise problems in the city area.

Solution Illustrated



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Background

In the Great East Japan Earthquake in 2011, hundreds of emergency radio systems equipped with loudspeakers on poles are flooded and collapsed due to Tsunami deserter. Then communication from government offices to residents ware cut off.
In order to overcome such situation, the public announcement system which is able to reach further distance than conventional systems ware required.

Exposition of the Solution

* Horn Array speaker system employed Line Array technology that multiple loudspeakers are set on a vertical line. Thanks to the technology, it is possible to deliver audio messages to longer distance in outdoor envelopment.
* Audio messages from Horn Array speaker system are reachable to 2 to 3 times father than conventional speaker system.
* Sound intelligibility though the emergency radio system shall be improved with equalizer function.

Achievements of Examples

Installation profiles of Horn Array speaker system
Kutchan in Hokkaido
Ogata in Akita
Sendai in Miyagi
Asahi in Chiba
Koto in Tokyo
and other numbers of municipalities.

Other References

https://youtu.be/MXEleiJkK0M
http://www.toa.co.jp/products/hornarrayspeaker/video/movie_03.htm

Corporate Profile

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