



FLOODING DISASTERS WE LIVE WITH



HOW DO YOU WARN YOUR CITIZENS?

HSS



ENGINEERING
WARNING SYSTEM SOLUTIONS



WARNING PEOPLE THROUGH BROADCASTING,
SOCIAL MEDIA, SMS, E-MAIL IS VERY EFFICIENT.

BUT WHAT IF IT'S NOT ENOUGH?

JAPAN
2018

225 people were confirmed dead and approximately 54,000 left homeless. Members of the Japan Self-Defense Forces, police and firefighters have been searching for the people trapped or injured in landslides and flooding triggered by the heavy rain. 15 prefectures successive heavy downpours in South Western Japan resulted in widespread, devastating floods and mudflows.

SERRA LEONE
2017

More than 300 dead people left the floods in Serra Leone, nearby Freetown. Heavy rain caused mudflows in Regent, people disappeared and property was damaged. The disaster occurred when most of the people were sleeping.

INDIA
2016

At least 300 people have died in Eastern and Central India and more than 6 million others have been affected by monsoon rain, that have submerged villages, washed away crops, destroyed roads and disrupted power and phone lines.

BRAZIL
2011

The floods caused **at least 500 deaths**, a series of floods and mudslides took place in several towns of the Mountainous region (Região Serrana), in the State of Rio de Janeiro. The disaster caused widespread property damage and the supply of public utilities, such as electricity, running water and phone lines were affected. Around 2,960 people had their homes destroyed.

COMMON
RESULT

LOSS OF LIFE
MASS DESTRUCTION
ECONOMICAL IMPACT

TIME IS A FACTOR TO CONSIDER WHEN DISASTER STRIKES.
AS A RESULT, HSS ENGINEERING HAS INTEGRATED DIGITAL
COMMUNICATION AND SIREN SYSTEMS THAT WORK AS ONE
SINGLE PLATFORM TO SAVE LIVES.



INTEGRATED COMMUNICATION SYSTEMS MADE SIMPLE

HSS Engineering has, for more than two decades, been at the forefront providing interoperability and integration solutions tailored to meet our customer's needs. Through research and development we strive to always provide the best solutions to keep our customers safe.



THAT IS WHY WE HELPED TO DESIGN A FLOOD WARNING SYSTEM IN TAIWAN

There is a high risk of earthquakes in Taiwan and since there are several dams all over the country, authorities decided to implement a public early warning system in Shih-Kang Dam in case of failure. The project was located in the North West part of Taiwan. It was built in 1977 and lies upstream of the city Fengyuan that has a population of 165,000.

For the project in Shih-Kang Dam, sirens were needed along the river for a reliable flood warning system. Each siren system consists of a one-cell omnidirectional TWS-291 siren plus a number of directional speakers. The system communicates with a radio link and runs on AC power, with battery backup. The control centre consists of a customized software system with an encoder. The software has been translated into Mandarin as required by the Taiwanese customer.

The software includes a map of the area that shows the status of each siren. The map provides a complete overview of the warning system and allows the customer to quickly activate a single siren, a group or all sirens simultaneously.

HSS field engineers supervised the installation and commissioning of the flood warning system in Taiwan.

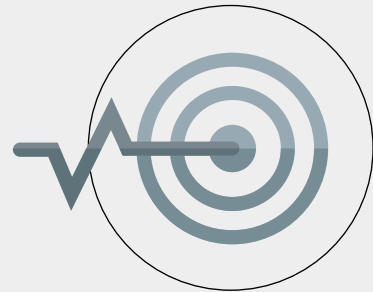
SO WHY DO YOU NEED A CIVIL WARNING SYSTEM?

- Prevent loss of life
- Give the right mass notification commands and react according to the situation
- Reduce economic loss

FLOODING MASS NOTIFICATION

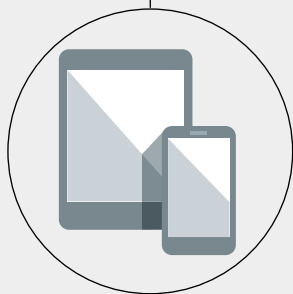
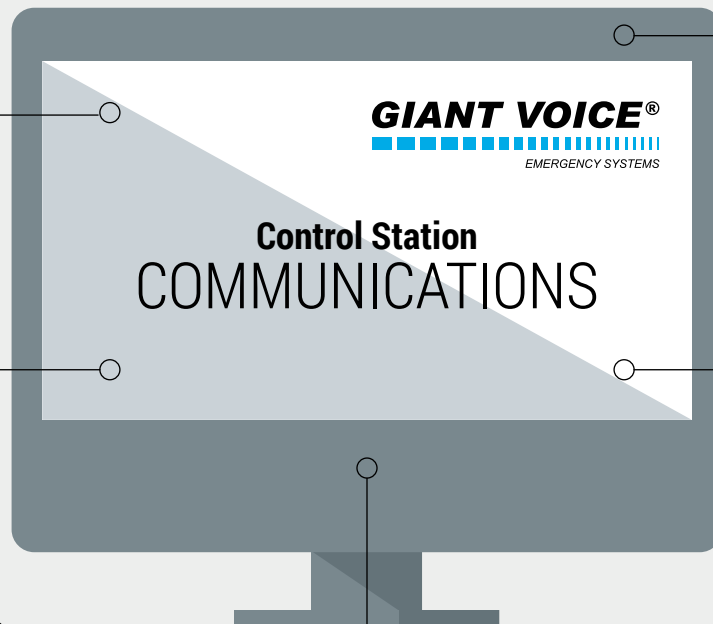


WEATHER ALERT



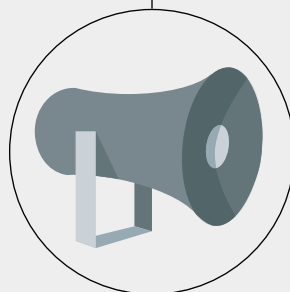
SENSORS

WIND
RAIN/FLOOD
FIRE/SMOKE
CHEMICAL
RADIATION
LANDSLIDE



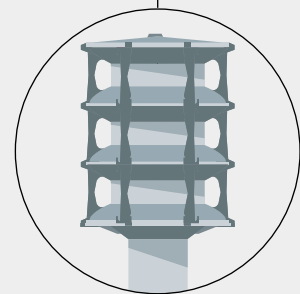
PERSONAL

PHONE	POP-UPS
SMARTPHONE	EMAIL
TABLET	RSS
TEXT/SMS	SOCIAL MEDIA



INDOOR

ACCESS PANEL
SPEAKERS & STROBE
MESSAGE BOARDS
FIRE ALARM PANEL
VOICE EVACUATION SYSTEMS



OUTDOOR

OUTDOOR SIRENS
MOBILE SIRENS
OUTDOOR DIGITAL SIGNAL

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HOW CAN WE HELP YOU?

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