

DISASTERS WE LIVE WITH **FLOODING**





HOW DO YOU NOTIFY YOUR CITIZENS?





IF YOU ONLY FOCUS ON ONE COMMUNICATION CHANNEL, HOW MANY LIFES WILL YOU SAFE

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

BUT WHAT IF IT'S NOT ENOUGH?

JAPAN 2018 INDIA 2016

BRAZIL

2011

At least 1,000-8,000 people have died in eastern and central India and more than 6 million others have been affected by by monsoon rain, that have submerged villages, washed away crops, destroyed roads and disrupted power and phone lines.

225 people were confirmed dead across, Approximately 54,000 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 rain15 prefectures successive heavy downpours in southwestern Japan resulted in widespread, devastating floods and mudflows.

The floods caused **at least 1600 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 was affected. Around 2960 peaople had their homes destroyed.

COMMON RESULT LOSS OF LIFE MASS DESTRUCTION ECONOMICAL IMPACT



INTEGRATED COMMUNICATION SYSTEMS MADE SIMPLE

HSS Engineering has for more than a decade been at the forefront providing interoperability and integration solutions tailored to meet our customers' needs. Through research and development we strive hard to always provide the best solution to keep our customers safe.



THAT IS WHY WE DESIGNED 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 which has a population of 165.000.

For the project in Shih-Kang Dam 12 sirens were needed along the river for a reliable flood warning system. Each siren system consists of a one-cell omni-directional TWS-291 siren plus a number of directional speakers. The system communicates with radio link and runs on AC power with battery back-up. The control center consists of a customized software system with an encoder and software, which has been translated to Chinese as pr. customer requirements.

The software includes a map of the area, which 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 Engineering field engineers supervised the installation and commissioning in Taiwan.

SO WHY DO YOU NEED A CIVIL WARNING?

- PREVENT LOSS OF LIFE
- GIVE THE RIGHT MASS NOTIFICATION COMMANDS AND REACT ACCORDING TO THE SITUATION
- REDUCE ECONOMIC LOSS

HOW CAN WE HELP YOU?



HSS ENGINEERING IS AT YOUR SERVICE. ANY PLACE ON EARTH ...

EUROPE & MILITARY

LENE H. SØRENSEN

P + 45 7022 8844 D + 45 8736 2478 lhs@hss.dk



JAMAL KADDOURA P + 45 7022 8844 D + 45 8736 2486

jmk@hss.dk

LATIN AMERICA

ENRIQUE ASANZA P + 45 7022 8844 D + 45 8736 2480 ena@hss.dk

AFRICA

JAMIL MAHMOUD P + 45 7022 8844 D + 45 8736 2489 jkd@hss.dk

HSS

USA & OCEANIA

JAMES STURZENEGGER

P + 45 7022 8844 D + 45 8736 2493 jms@hss.dk



ENGINEERING

WARNING SYSTEM SOLUTIONS

Laegaardsvej 12 · 8520 Lystrup · Denmark Phone + 45 7022 8844 Fax + 45 7022 8866 www.hss.dk · info@hss.dk