

# TSUNAMI WARNING

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## Effective Outdoor Warnings with Sirens for Coastal Areas



***NATURAL disasters are increasing and occur suddenly. The Tsunami in the Indian Ocean in December 2004 causing unprecedented devastation of coastal regions are evidence for the horrible consequences these incidents can cause within minutes. On any such occasion, the regional population must be efficiently warned and informed in time, to protect human life, property and the environment.***

Protection starts with carefully considered warning and information systems of advanced technology, designed to activate different alert signals, pre-stored messages and public address announcements, which are broadcast with high reliability and audibility.

With warning and information systems available and in place, governments and administrations can act in time, enabling those threatened to react in time.

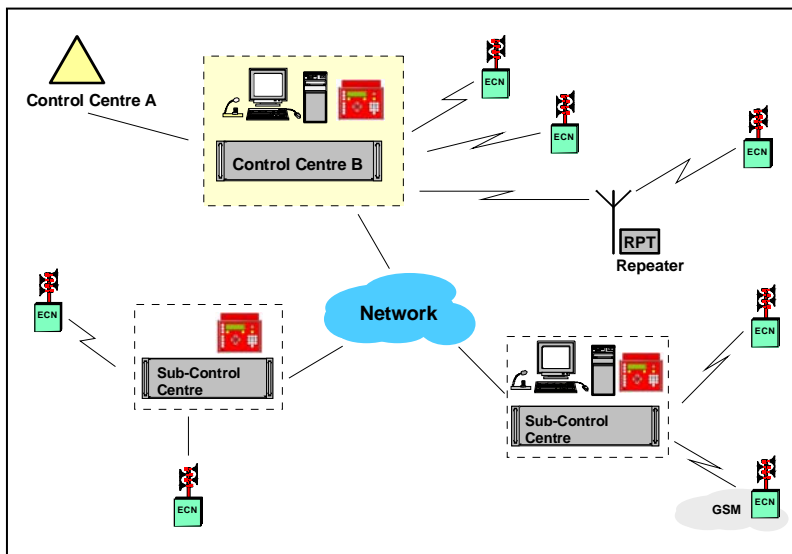
HÖRMANN's warning and information systems are designed to be independent from public utilities including electricity and public telephone networks. Large-capacity batteries and a radio communication link guarantee operation during critical conditions.

The modern outdoor warning and information system comprises a computer-supported control centre, a radio communication network and electronic sirens of various acoustic output power, which are responsible for providing warning information.



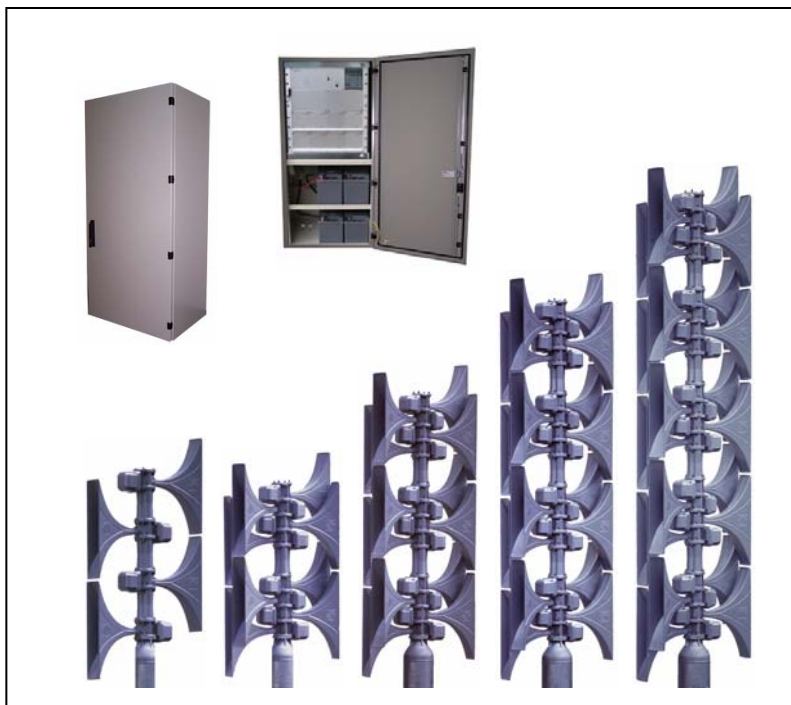
# Tsunami Warning System

## Outdoor Siren Warning System



- High scalable control system architecture for community-, country- and nation wide systems
- Integration of different communication links like LAN, VPN, Line, Radio and GSM
- Control Centre with high sophisticated graphic user interface based on digitized maps offers full system control and supervision in real-time
- Customer specific integration of interfaces to external devices, like seismological, geological, and meteorological sensors
- Highest system availability and security guaranteed

## ECN Sirens



- 19" rack assembly housed in rigid cabinet
- Communication control processor for integration in radio- and line operated systems
- Siren control for remote- and local activation and status monitoring
- Power supply and emergency power supply
- Live speech broadcast
- Broadcast from digital speech memory
- Siren head assembly of aluminium cast horns – configurable for individual acoustic output power
- Mechanical accessories for all kinds of building and pole installations