

Dam and water reservoir warning systems



Why to build dam and water reservoir warning systems

Dams and water reservoirs play a key role in controlling floods and landslides, water supply management, irrigation, and the like. They are built as safe structures, complying with the strict standard requirements. However, there are still threats such as natural disasters or human-made activities that can result in their mechanical damage, whereby endangering the population property and the environment in an inundation area.



Warning system

Medium



Acoustic Coverage

Exterior

By early warning, you mainly prevent the dramatic loss of human lives in emergencies.

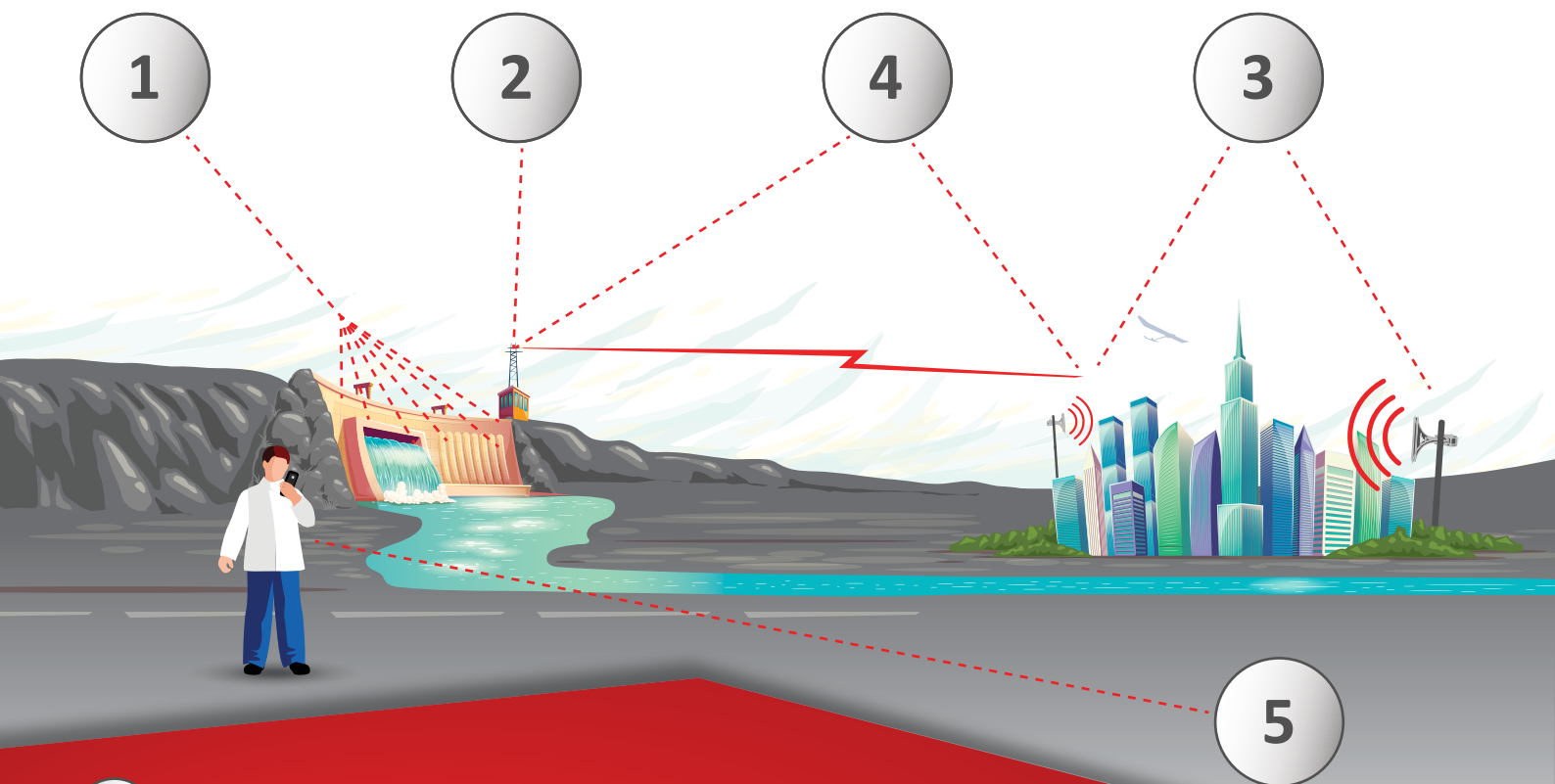
Thanks to advanced monitoring, warning, and notification systems installed in the surroundings of dams and water reservoirs, you will obtain a reliable solution in case of an emergency.

Description of the dam and water reservoir warning systems

The dam and water reservoir early warning systems are designed as mostly small to medium-sized, integrated monitoring, warning and notification systems, typically consisting of 5 to 30 electronic sirens. They are equipped with the Vektra® software applications (SCADA, Warning, and Notification) for the individual systems as follows:

- The **monitoring system**, monitoring the risk of a dam rupture or damage.
- The **warning system**, covering by a warning signal the area that gets flooded within an hour of damaging the dam.
- The **notification system**, informing the persons in charge (the first responders) of emergency via voice or text message.

Components of a dam and water reservoir early warning system



- 1 The monitoring system and sensor network that:**
 - o Indicate any damage to the dam in good time and
 - o Make use of at least three different types of sensors to **increase reliability** and **prevent the occurrence of false alarms**

- 2 The control centre that:**
 - o **Automatically activates the necessary warning and notification functions** when critical values are detected in the monitoring system
 - o Guarantees **tight security** thanks to **100 %** secure back-up technology

visual and acoustic alerts



the pre-set response time of the operational personnel



the automatic sounding of electronic sirens and notification



3

The Pavian electronic sirens that:

- o **Produce high acoustic pressure** over a great distance
- o **Ensure perfect intelligibility** of live voice reproduction
- o **Demonstrate their high reliability** due to:
 - their full operability even in case of a power failure
 - their full functionality in extreme temperatures
 - advanced autodiagnostic functions
- o **Allow using multiple power-supply methods**
- o **Provide communications** with the control centre via **radio and line communications channels**

4

Communications infrastructure that :

- o Ensures communications between the control centre and the other elements of the warning system
- o Allows the **connection** of the dam early warning system to the **national warning system**

5

Responsible persons/Responders to be notified that are

- o Informed of the occurrence of an emergency situation by phone or text message
- o Urgently summoned to their offices and rescue operations

Our dam warning solutions in the world

Polgolla Diversion Dam Early Warning System, Sri Lanka
Bukovec Dam Early Warning System, Slovakia
14 Telegrafia's Sirens in 6 Malaysian Dam Warning Systems

<http://www.electronic-sirens.com>



Feel safe and sound with our reliable solution.



Telegrafia a.s.
Lomená 7, 040 01 Košice

sales@telegrafia.sk

www.telegrafia.eu