



STAND-ALONE HYDROMETRIC AND VIDEO MONITORING SYSTEM FOR THE SAFETY AND MANAGEMENT OF A ROADWAY

System for 24/7 monitoring of the hydrometric level capable of lowering a barrier to stop vehicle thoroughfare in an alarm condition corresponding to critical river levels.

Supply: June 2015 | Municipalities: Genoa



COMUNE DI GENOVA

CHALLENGE

Execution of a stand-alone monitoring system able to automatically handle hydrometric alert situations and block traffic with a barrier.

WHY ETG?

The wealth of experience that ETG has acquired in the weather instrumentation sector and in real-time monitoring data acquisition, archiving, processing and circulation makes it a valuable collaborator.

INTRODUCTORY SECTION

The monitoring system in question consists of **1 control board** containing the control unit made by ETG with the trade name iLogger, a 3G transmission router, a mains power supply system and an automatic dialling machine for sending alarms to the personnel on call.

Surveillance cameras, 1 pluviometric sensor, 1 ultrasonic hydrometric sensor and two automated barriers (upstream and downstream) were added to this board

THE SOLUTION

The system, consisting of the elements described above, is able to monitor the hydrometric level and signal the alert status to the personnel on call selected by the municipality by an automatic dialling machine.

If there is an alarm, the two barriers situated downstream and upstream of the river automatically lower, preventing vehicle thoroughfare, in order to not place the drivers in danger.

Cameras were also combined and are used by Municipality personnel to watch the state of the road crossing in real time.

The system also integrates a pluviometric sensor that is used to associate rain data with the monitored hydrometric level data.

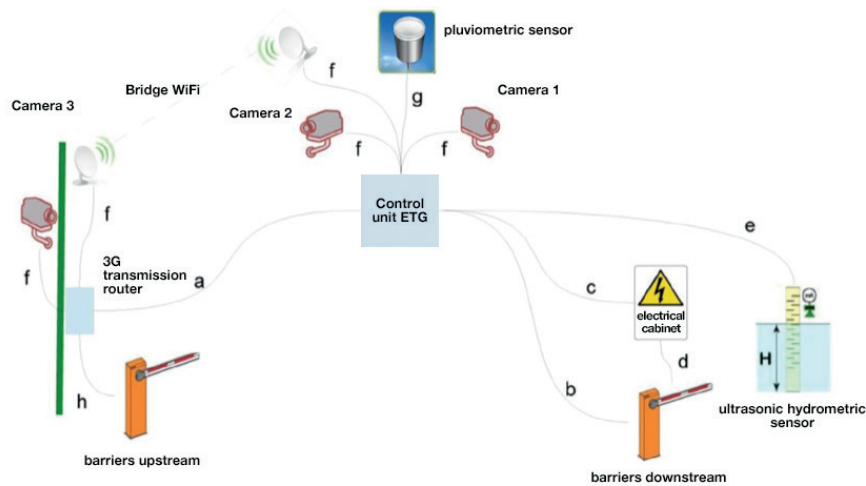


Figure 1: Operating logic of the system

THE BENEFITS

The proposed solution monitors the water resource in real time for effective management of the citizens' safety. Unfortunately, in recent years there have been many cases of death due to flooded roads and underpasses. ETG steps in for this reason to try to protect the safety of citizens at all times.

CLOSING SECTION

Every new monitoring system engineered by ETG entails peculiarities that can be solved only by those - like our company - that have been working in the sector for years.

The system made for the Municipality of Genoa led to a conflict with a very important situation, that of the citizens' safety. This type of situation involved a study and a shrewd choice both of materials used and installation technologies, and of operating logics and activation of the systems employed.

