



# STAND-ALONE SYSTEM FOR HYDROMETRIC AND VIDEO MONITORING WITH DATA SENT VIA 4G/LTE TO THE MUNICIPAL CONTROL CENTRE

System for 24/7 monitoring of the water resource using radar sensors and high resolution infrared cameras.

Supply: **November 2017** | Municipalities: **Cuneo**



## CHALLENGE

Execution of a stand-alone monitoring system equipped with webcams and high-speed transmission routers.

## 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 objective of the monitoring system in question, made up of 4 stations, is to prevent risks linked to flood events caused by overflow, extending control to all waterways on Cuneo's territory. At the same time, the Civil Defence service was equipped with a tool able to guarantee effective control and monitoring after modernising and implementing the hydrometric reading network currently in use.

As part of this project, ETG developed a special software program able to guarantee increasingly effective and functional monitoring.

## THE SOLUTION

In order to adequately, and even better, meet the customer's requirements, ETG supplied a complete system including both the field portion (control units, sensors, cameras, etc.) and the centre portion by installing the software application developed by ETG with the trade name WinNET7.

This software will let the customer obtain all of the standard functions of a monitoring network like those of acquiring data, display, alerts and diagnostics, and at the same time manage the video dataflow coming from the infrared cameras installed at all of the municipal stations.

Each of the 4 stations, equipped with the monitoring control station produced by ETG - iLogger model - have high-speed 4G/LTE transmission modems, a hydrometric radar sensor and an infrared camera.

The monitored data, including the video flows, are transmitted to the control centre where the WinNET7 software comprehensively manages the network.

## THE BENEFITS

A solution like the one ETG proposes requires no field activities since it operates in an automated manner. In view of the engineering of the stations made by ETG, the monitoring stations built with this solution require no maintenance except for a simple annual inspection of the state of preservation of the equipment in order to detect any alterations compared to the initial environmental conditions.

## SUCCESSFUL DATA

The system and the underpinned stations installed in June 2017 are able to guarantee perfect real-time video streaming, a feature essential for controlling the actual state of the instrumented waterways. In this way all hydrometric data received by the control centre can be associated with their corresponding images.

## 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.

In the case of the stations built for the municipality of Cuneo, we developed a software application that would meet, in the most respectful manner possible, the specific requirements of the customer.

This made it possible to obtain a tool that meets expectations and that is perfectly customised based on the requirements.

