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## CAE launches CAEtech in the UAE



*Following the launch of CAEtech - CAE's new line of products - at the Meteorological Technology World Expo in Madrid, the company now lands in the United Arab Emirates, continuing the international promotion for its new solutions.*

*CAE was featured as a Networking partner in the 2nd edition of WeatherTech GCC, a meeting held by the GCC (Gulf Cooperation Council: Cooperation Council of the Gulf States), focusing on issues related to meteorology technologies. The event was held on November 1st & 2nd in Abu Dhabi, capital of the United Arab Emirates and also capital of the emirate of the same name.*

*The Persian Gulf area is characterized by complex microclimates, but in general it's hot and dry during most of the year, with overall low rainfall. Nevertheless, there are isolated events with heavy rainfall, which are difficult to predict both in terms of their evolution and in their effects on soil, and therefore particularly critical.*

*As it happens in other areas of the world, here the trends determined by climate change suggest an aggravation of this scenario and make it even more important and urgent to face the future with investments in innovation, skills and technology.*

*WeatherTech was an opportunity for CAE to enter new markets, create relationships with some local realities, and evaluate with the various players (professionals, leaders, innovators, legislators) the technologies present on the territory, and the possible solutions and strategies to implement in order to address climate change.*

*A high-profile showcase for CAE and CAEtech.*

*For all event information and program: <http://www.weathertechgcc.com/>*



## After the earthquake in central Italy, the water level of Tronto river becomes of crucial importance

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After the earthquake in Central Italy, CAE technology will monitor the water rises

The area most affected by the 24 August earthquake in Central Italy includes the upper valley of the river Tronto, with several areas of high flood risk. Therefore, the national Department of Civil Protection has decided to elevate the level of flood alert in these areas and to monitor some critical points located at crossings that have been severely damaged by the earthquake. CAE has provided for the delivery and installation of two hydrometric stations, placed on the bypass to the Tre Occhi bridge and the Retrosi bridge, built with Bailey technology, near the Rosa bridge which was damaged by the earthquake.

For this contract CAE has built an hydrometric monitoring system, integrated with a visual alert system, which allows to detect the risk of flooding in the vicinity of the two bridges, activating a visual alarm signal to the overcoming of hydrometric thresholds predetermined by the administration. The two stations are able to acquire water level data and images both in scheduling mode and in a split-second mode, via the remote control room of Rome's Central Functional Centre.

The system built for both bridges is thus composed:

- a hydrometric station with an ultrasonic hydrometer, an image capturing module with dual lens for night and day vision, a radio data

communication module working in UHF and GPRS/UMTS;

- two visual warning systems, each consisting of a lantern with signage panel and a wireless communication module linked to the station for the transmission of activation commands ([ACTI-Link](#));
- a power system working on both battery and solar panels.

The station can detect three different scenarios: Normal, Pre-alarm, Alarm. The transition from one status to another is based on the water level detection; in particular, the station shifts into Pre-alarm mode when the water level rises beyond a predefined threshold. In this particularly delicate process, the technology implements

specific algorithms to reduce the risk of false alarms. When the risk increases, causing a change of status, a picture and predetermined SMS are submitted as notifications to the Central. Also, in the transition from the Normal status to the Pre-alarm status, the photo-camera is rescheduled so that it takes pictures more frequently than it usually does with the standard scheduling. Finally, if the status switches from Pre-alarm to Alarm, the lantern is lit up to stop the transit of vehicles on the road, safeguarding the lives of drivers and passengers. ■

## Photogallery







## CAE is a Founding-Sponsor of VACI 2016

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CAE took part in the 5th edition of the Vietnam wATER Cooperation Initiative (VACI 2016) as a Founding Sponsor. The company took the chance to showcase its project implemented in the Mekong Delta (see more here: <http://www.cae.it/en/realizzazione-vietnam.php>) and the Mhast technology.

The event, taking place in Hanoi on 3 to 5 October 2016, addressed the issue of water security in an era of climate change, and was held by the Ministry of Natural Resources and Environment of Vietnam (MONRE). Specifically, VACI aims at sharing and co-creating inno-

vative solutions with a focus on Vietnam and water management in comparable environments and climates.

Among other issues, in addition to those related to water analysis and monitoring, VACI focused on safety and management of transboundary waters: nowadays, more than

40% of the world's population depends on water from transboundary rivers and lakes, hence its sustainable management is essential for development and for peace. Vietnam is a country with 392 transboundary rivers and watercourses, and this kind of situation requires an effective and concrete strategic po-

licy to manage and allocate water resources between conflicting users.

As always, VACI is an opportunity for collaboration between the academic world and industry, foreign partners and all those engaged in the development of innovative solutions and tools for sustainable development and management of water resources. It is also an opportunity to bring together all kinds of expertise in the field of water policy, to share them and work together to provide solutions; that's why CAE just couldn't miss the occasion. ■



### Link

 For all event information and program: <http://vaci.org.vn/>

## Photogallery



### Province of Avellino, Italy, awards CAE with a contract to supply the new monitoring system for river water quality

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CAE has been definitively awarded the contract for the supply of equipment for the construction of the control and monitoring system of surface water bodies in the province of Avellino (Campania, Italy). This project intends to provide the local administration with the tools necessary to protect the wealth of the terri-

tory and its products; it will also be another opportunity for CAE to again demonstrate the company's capabilities in the field of water quality real-time monitoring.

The project involves the evaluation of the water quality index of three rivers in the province of Avellino (Sa-

bato, Calore and Ufita) and some of their tributaries, using a "turn-key" system. Among its various functions, the system will allow the continuous and unattended monitoring of some chemical and physical parameters of the water, taken at the 8 locations of pre-defined water bodies: Lapine, Montella, Melito Irpi-

no, Montecalvo Irpino, Solofra-Consorzio ASI, Atripalda, Manocalzati and Prata di Principato Ultra.

The system functions as information support to both the room and field operator for control and real-time monitoring; it allows to send alerts to operators at every passing of

critical thresholds; and finally, it keeps track of the acquired data and relevant events for documentary purposes.

The interoperability guaranteed by CAE sy-

stems, in line with the project's objectives, will allow to integrate the data obtained in a geographic information system, so that the analysis and presentation of data on water

quality can be linked with other information obtained on a territorial basis. The system has in fact the fundamental objective of enabling complex activities and support procedures

for risk mitigation, and of allowing maximum sharing of information among all parties involved in monitoring and prevention activities. ■

## Photogallery



## Environmentally responsible: ISO 14001 certification

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Franklin Delano Roosevelt used to say: "A nation that destroys its soils destroys itself". Protecting the environment is an essential factor to which we all are called to contribute.

PDCA, ie, Plan-Do-Check-Act: these are the cornerstones of the "continual improvement model" (also named the Deming Cycle after its inventor) designed for the continuous improvement of long-term quality, processes and the optimal use of resources.

Quality: a concept that the business community has incorporated over the past two decades by applying it in an increasingly precise and extended way to products and production processes, and that for some time now has assumed a larger meaning, not just limited to qualities or characteristics of the product itself.

Now we also speak of

quality with a look at the environment, the level of attention that any organization devotes to comply with the rules that ensure its preservation. A tangible commitment, that of "environmental quality", made possible by a specific environmental management system.

The international standard of reference for environmental quality is the Environmental Management Standard (EMS) ISO 14001. Taking inspiration from the above-mentioned PDCA model, it identifies the requirements of an "environmental management system" for the management and control of environmental performance in the long term.

Compliance with the ISO 14001 standard (in Italy UNI EN ISO 14001:2015) and the pertaining certification doesn't attest a specific environmental benefit or a defined level of environmental impact,

but it's there to show that the certified organization/company has established an appropriate management system to monitor the environmental impacts of its activities, and it's trying systematically to improve it in a coherent, effective and above all sustainable way.

The ISO 14001-certified company:

- establishes its own reference framework on which to set the activities
- defines the objectives of its mission towards the environment
- organizes tools and procedures for continuous improvement and dissemination of the environmental management system.

To effectively do this the company/organization needs the will, the ability to question itself, to give itself clear rules and especially to implement them and keep

them up-to-date, with a commitment that goes beyond the possible economic impact on the product (ISO 14001 is not a certification for products).

It is a challenge in which CAE has invested time, resources and above all a great effort, which led to obtaining the certification in question as of September 1st of 2016. CAE is committed to reducing the consumption of non-recyclable materials and develop a sustainable and environmentally friendly production; essentially, the company is taking a real and important commitment to the Environment, a unique and common good the safeguard of which is already partly a direct business of the company. This choice brings with it the knowledge to have taken an important step forward for the protection of the present and future generations. ■

## CAE MAGAZINE

Managing Editor: **Guido Bernardi**

Editor-in-Chief: **Enrico Paolini**

Editorial Staff: **Luca Calzolari, Patrizia Calzolari, Virginia Samorini, Mirco Bartolini,**

**Giuseppe Oliviero, Antonio Giorgi**

Editorial Assistant: **Virginia Samorini**

Contact us: [redazione@cae.it](mailto:redazione@cae.it)



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