



The European Union has invested 2,642,895 million Euros

everis takes part in a European security technology project for medical and emergency professionals

Madrid, 27 February 2011.- everis multinational strategy consulting, application development, technology and outsourcing, is immersed in a European Union Seventh Framework Programme project, which seeks through the use of digital technologies to support professional first responders (firefighters, police, medical services ...) in critical situations that happens in tunnels or buildings where standard communications of these bodies (eg TETRA) do not work.

The project, called INFRA, is funded by the European Union and has the participation of nine organizations leaders in security, intelligence and wireless technology o from different European countries (Belgium, Spain, Greece, The Netherlands, England, Ireland, Portugal and Romania) and Israel.

The INFRA solution consists on the development of different technologies that work in an integrated way. Thereby, from the communications point of view, it has been developed an *ad-hoc* wireless broadband network that allows interoperability between standard radio equipment of the response bodies that assist in an accident.

According to the everis innovation consultant, Mario Carabaño, “the possibility of deploying an instant communications network anywhere and allow the use of multiple communication devices independent of protocol, is a great progress towards the emergency staff real interoperability.

In addition to the communication network, the INFRA solution integrates different applications; non-invasive biometric sensors that monitor the blood oxygen level, heart rate, total hemoglobin level and measure body temperature of each of the members of the emergency staff through a clip on the ear, to ensure their safety, as well as gas and radiation sensors. This sensors measure ionizan radiation, CO₂ of the environment (carbon dioxide), CH₄ (methane) and O₂ (oxygen)

Likewise, the solution is provided with an indoor navigation system based on the information received from the staff emergency modules incorporated thought the integration of an inertial sensor. The application also provides a data exchange system and a pre-entry video that allow sending messages in image and data format between the command and control center and the emergency response teams.



Finally it has been developed an infrared camera that use a sophisticated algorithm for detecting hidden fires. The live video images are transmitted over IP and Wi-Fi to the command and control center. This solution is based on an application based on a portable architecture of rapid deployment on a PC.

According to the INFRA responsible Project and innovation manager at everis, Marino Gallego, “the solution will increase the staff security that work in the emergency field through innovative concepts while the optimization of the rescue operations in environment without communications”.

The working test has been successful in a Madrid tunnel

The first proof of concept tests took place last February to demonstrate the effectiveness of this novel technology in a controlled environment.

For the test development was made an accident simulation in an emergency tunnel, with the participation of the Madrid Council emergency staff, who contrasted the technology that composes the solution INFRA in a rescue situation.

About the INFRA Project

INFRA is a public safety project funded by the European Union, and has the participation of nine European organizations of the industrial and academic field leaders in the security field and belonging to different European countries (Belgium, Spain, Greece, The Netherlands, England, Ireland, Portugal and Romania) and Israel. INFRA has as its principal objective the investigation and development of integral digital technologies to support medical and emergency professionals for the effective management of crisis situations in critical infrastructures.

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