

Dirección General de Emergencias **Servicio de Sistemas y Comunicaciones**

As part of a strong drive towards the use of information technology as a means of improving emergency management in the región, the Systems and Communications Service is developing a range of new applications that come under the name of MirrorEyes.

The genesis of this development occurred after an accident in the city of Murcia, in which, due to the lack of sufficient visual information from the scene, the victim passed away unnecessarily. Francisco Rojo, head of the Systems and Communications Service of the 112 in Murcia, who was personally affected by this tragedy, started investigating, and pioneered a way in which the 112 operator can remotely identify and take over any 3G terminals that are calling in the incident, activating the speaker, microphone and the video camera without any input from the user, who is often either unaware of how to use all the technology offered by the terminal, or too nervous to operate the phone.

From this starting point, which will be seen as the key moment in next-generation Emergency response systems, other ways of using live moving images straight from the emergency scene have been developed, which together now form the project called MirrorEyes.

The Murcia Region 112 service was awarded the "Outstanding Emergency Service Initiative" in February 2009, in an award ceremony celebrated in Brussels.

MirrorEyes

This project's overall objective can be described as the intensive use of moving images as a means of improving the rapid and successful resolution of emergencies.

It represents a qualitative leap from the classical voice channel between the 112 Emergency service and the citizen, and makes the aphorism "an image is worth a thousand words", a reality. Personnel working on the emergency have access to real-time live video images of what is occurring on the ground, long before they even arrive at the scene, thus allowing far more effective preparation of available resources and the gaining of crucial time in the overall intervention.



Although the source of these images is obviously the scene of the emergency, the channel over which they arrive at the Emergency Control Centre has been and will be kept deliberately open, without restricting any of the possibilities provided by different technologies, present and future. In this way, the main channel will be latest generation (3G) mobile terminals, already widely in use in Spain, Europe and the United States, although images may also be transmitted from cameras fitted to emergency vehicles, from laptop webcams, or even from surveillance cameras permanently installed in forest areas, and so on.

All these images can be transmitted using a wide range of media, such as 3G telephony, the internet, WiMax or TDT signals, and are received at the 112 Centre for immediate analysis, and recorded for documentary purposes, or as a register of actions.

This project, heavily based on cutting-edge technologies and new protocols, constitutes a new frontier of investigation, not only due to the means employed but also for the use they are put to. In fact, the project may well serve as an impulse for expansion plans of the actors involved in signal availability, such as 3G operators.

The philosophy that underlies this project, the use of video in real time, is so innovative and positive to the community involved in emergencies, that interest in its implementation in the near future has arrived from all over the world.