

City system of extra connection "Citizen – Police"



Due to the process of realization of the programs of MIA of Russia, the operating transfer of the information about incidents from citizens to police units, EMERCOM and other services is more relevant than ever. There are many communication tools, ranging from telephones to mobile communication systems and digital radio communication operative systems. All of these tools have a number of advantages, but their direct use for operative communication with police and other services is not always possible. The digital system of emergency communications "Citizen – Police" of the company "Tecnocom Group" allows promptly contact with emergency services without dialing and ask for help in an emergency situation, or to inform about the origin of such. Functionally emergency communication system (ECS) can be represented as a distributed video telephone network, the whose hub is the hardware SIP-server, allowing you to transfer and route the audiovisual information.

The transmission medium is TCP/IP, physically it may be wire or wireless channels. Emergency communication system "Citizen – Police" of "Tecnocom Group" is:

- digital video and voice connection of the citizen with response center;
- integration with the city systems of video monitoring;
- reflecting the events on the city map;
- the opportunity to use any channel of digital connection, including the lines of any

internet provider;

- integration with the security and anti-fire alarm and dispatching systems;
- integration with the complex ITV Intellect.

The system is based on the standards of TCP/IP, IP networks of the telephony and video signal transfer and managing signals on the Ethernet nets. It gives the opportunity to create any territorial systems with complicated topology, to route and connect separate segments of ECS. The basis of the system is Call-center, the functions of which may be realized by dispatcher`s computer in small networks and VoLP-commutator with the opportunity of distributing pressure between dispatchers in the huge networks. The second integral part of ECS is the system of video monitoring, installed in each point of emergency communication (PEC).

ESC consists of:

1. emergency communication end devices (PES);
2. signal converters (Interface blocks – IB);
3. commutator equipment;
4. call-centre or IP – ATS;
5. work places of emergency communication dispatchers.

PES is an end device, consisting of communicational block, video camera and opening sensor. This device is designed for being located outdoors and has a climatic modification Y1. Power of PES is carried out via the communication from the interface unit. IB unit transforms the signals of audio and video signalization from PES to Ethernet. IB supports audio communication standards H.323, G.711 (for “narrow” channels – G729), video MJPEG, MPEG4 (H.263 in the long term with the possibility of two-way video). Then the signal through the Ethernet connection goes to the Call-centre, where it is distributed between the dispatchers and may be readdressed to any external lines of connection, including telephone lines. Work place of the ESC dispatcher can receive incoming calls from the emergency communication devices, make an independent call to the PES, receive messages from devices ES and conduct video monitoring. Specialists of “Tecnom Group are ready to demonstrate the ESC work. In addition of solving the problems of public security and assistance in police work, there is an opportunity of informational and service maintenance. The aim of the project, as experts think, is to improve the level of security in our cities and create more comfortable conditions for life. Our system is up-to-date in distant districts of the city and in crowded places, in carrying out various events and recreation of citizens.