



# AUTOMATED CITY ALERTING SYSTEM



# ALERTING SYSTEMS USING CLOUD TECHNOLOGIES

## HARDWARE-SOFTWARE COMPLEX «OZON-CPP»

Complex "Ozon-CPP" is designed to inform and alert the public about emergencies, as well as events related to the vital functions of social groups and associations.

The complex uses the features of the public Internet network, which provides easy access to information for all those wishing to use the services of a centralized service of alerting and informing about emergencies.

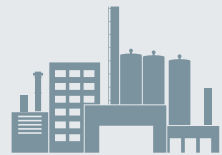
The structure of the complex allows building a system of informing by categories, which allows creating separate groups of the complex users, separated by the subject of the information received.

Common to all of these groups is the ability to receive notifications about emergencies of industrial, natural, military, social or terrorist nature.

### THE OBJECTIVES THAT ARE SOLVED BY THE COMPLEX «OZON-CPP»

- Organization of a single national system for the processing of information on emergency situations, and alerting the population;
- Operative and maximum full targeted informing and alerting the population about emergency situations;
- Coordination of actions of emergency rescue services.

### SOURCES OF PRIMARY INFORMATION



- OBJECTS OF INCREASED DANGER;
- METEOROLOGICAL SERVICES;
- RELEVANT STRUCTURES OF MINISTRY OF DEFENCE, MINISTRY OF INTERNAL AFFAIRS, SECURITY SERVICE OF UKRAINE;
- CRISIS CENTERS;
- SANITARY-EPIDEMIOLOGICAL SERVICE, ETC.

## «OZON-CPP»

### SERVERS FOR INFORMATION PROCESSING BASED ON CLOUD COMPUTING TECHNOLOGY

RESTRICTED ACCESS

OPEN ACCESS

EMERGENCY RESPONSE SERVICES

THE CONTROL POINT OF THE POPULATION ALERTING CRISIS CENTER

ULTIMATE MEANS FOR ALERTING THE POPULATION

THE CITY'S INHABITANTS



SIGNAL-LOUDSPEAKER DEVICES

BROADCAST NETWORK MANAGEMENT MODULES

INDIVIDUAL MEANS OF REPRODUCTION (SMARTPHONES, TABLETS, PCS, SMART TV)

### ALGORITHM OF THE «OZON-CPP» COMPLEX'S WORK

- Pre-prepared or operationally generated for a situation that has arisen, an electronic card of an emergency situation containing the geocoding of its operation or dissemination is sent to the server with restricted access. Upon the request of the emergency services, the card is provided only to those services, whose area of responsibility falls into the territory of emergency.
- Emergency services receive from the server of restricted access an emergency card of an emergency situation, with a detailed description and methods of the elimination of accident and its consequences.
- Crisis centers receive emergency cards that are posted on the server of restricted access for processing and coordinating the action of emergency response services. Also, the alerting control panels receive the cards for verification, and in case of confirmation of the information, they are sent to the public access server.
- The ultimate alerting devices periodically send a request to the public access server containing the GPS coordinates of their location. The server determines whether the device is in the emergency zone, specified in the emergency card, and in case of confirmation, sends the command for activation to this device. The electronic emergency card itself, with detailed action instructions, is transmitted for smartphones and personal computers.
- Owners of smartphones, tablets, PCs, Smart TV after receiving an electronic emergency card have the ability to send an electronic message with a request for emergency assistance. This message will be received by the appropriate emergency response services in automatic mode.