

ARVENTO INDUSTRY SPECIFIC SOLUTIONS

EMERGENCY OPERATIONS MANAGEMENT SYSTEM

The **Emergency Operations Management System** is an advanced solution designed for emergency teams like **ambulance, police, fire department** and the command centers that manage such fleets. The solution consists of a **call center, voice recording system, operation management software, digital mapping applications, vehicle tracking and mobile data communication systems**. All these systems and software work in a fully integrated manner and therefore the whole process from the origination of the emergency call to the completion of the operation can be managed seamlessly.



The solution includes the following components:

- Emergency Operation Management Software
- Call Center System
- Voice Recording System
- Digital Maps and Digital Mapping Applications
- Tracking and Orientation through GPS Satellites and Data Communications System via Mobile Devices
- Coordination with Related Central Units
- Computer and Network Hardware
- Design and Technical Infrastructure of the Command Control Center

Emergency Operations Management Software Capabilities

- From the incoming emergency call to the completion of the event, the whole emergency operations process can be monitored, recorded and controlled. The switchboard integration allows all calls to be taken and managed through the user interface.
- With this system, the incoming calls and the communication with related units can be monitored constantly and immediately. Standardized data entry fields prevent inaccurate or incomplete data collection.
- Teams and units can be directed to target destinations based on their actual locations.
- Standardized and custom operational reports can be generated and used for future planning.



Industry
Specific
Solutions

Emergency
Operations
Management
System



Call Center System Capabilities

- A custom-built, integrated call center system, in which all telephone operations are automated.
- The numbers of incoming calls are monitored and emergency case history can be displayed immediately for prompt response. With a complete integration with telecom provider established, the address information can be automatically obtained from inbound landline calls.
- Thousands of telephone numbers for incoming calls and user-specific speed dial buttons can be defined in the system. The number of waiting calls can be monitored online in real-time through the call center system interface.
- With the "Black Listing" feature, most of the "Irrelevant, non-critical and fraudulent" calls can be blocked and the volume of incoming calls can be reduced significantly for improved efficiency.

Voice Recording System Capabilities

- All incoming calls as well as the radio interactions with teams can be recorded from the moment they reach the switchboard.
- Voice recordings operate in an integrated manner with the system. Numerous queries and searches can be conducted based on detailed criteria such as date, time, operator, telephone number, and by case and protocol number.

Digital Maps and Digital Mapping Applications Capabilities

- Any location and unknown addresses can be searched on digital maps and accurate driving directions can be generated.
- Exact location of the emergency case can be determined by entering the GPS coordinates.
- Major and important reference points can be added and utilized in address searches for finding locations accurately.
- The exact location of the emergency case can be marked on the map and communicated to the teams in real time.

Tracking and Orientation Capabilities through GPS Satellites and Data Communications System via Mobile Devices

- With the "Arvento Mobile Data Device", vehicles can be tracked on the maps 24/7 via GPS satellites. Their speed, departure times, locations and durations of stops can be easily tracked.
- Emergency software allows the location of the case displayed on the digital map with accurate details and driving directions to be communicated to the teams immediately. Photos of the emergency scene can be taken and sent to the command control center immediately with the mobile device.
- The teams and units can send their task forms to the center online and messages can be exchanged between the control center and the teams via the mobile device.

Coordination with Central Units

At the time of the emergency, the relevant center can be contacted online and up to the moment location and situation information can be communicated about the emergency.

For example, with the 112 Emergency Operation Management System of the Ministry of Health of Turkey, the latest number of available beds in hospitals and information about the personnel on duty at the time of the emergency can be received from the command control center.



Detailed emergency case information can be communicated automatically while the ambulance is on its way by the monitors installed in hospitals. Consequently, the hospital is informed in advance and the necessary preparations can be made while the patient is on the way. Information about the patients regarding their stay in the hospital can be tracked online and retroactively. The system also allows for tracking appointments and work plans necessary for the transportation of a patient. Patient transportation vehicles are tracked via GPS and can be monitored continuously.



Computer and Network Hardware Specifications

Specifications and requirements for hardware and software such as servers, computers, power sources, and network infrastructure, necessary for the system implementation are projected after on-site analysis and delivered as a turn-key solution for Arvento clients. Special hardware and software for security and back-up are provided and all records are regularly backed-up for safeguarding valuable data.

Design and Technical Infrastructure of the Command Control Center

Various options about overall design of the Command Control Center room, electrical and data infrastructure, operator and supervisor desks, large screen display units and such are offered within scope of the project.

Who can benefit from the Emergency Operation Management System?

The Emergency Operation Management System can be used by **any public or private institutions involved in emergency management operations.**

Award-winning Project

The project has won IBM's "Project of the Year" award in 2007.

