

Emergency Dispatching Center

Implement an information system which manages the goods inputs and outputs in an 112 emergency dispatching center. 112 dispatchers use computer-aided dispatch (CAD) to record a log of police, fire, and EMS services. It can either be used to send messages to the dispatchee via a mobile data terminal (MDT) and/or used to store and retrieve data (i.e. radio logs, field interviews, client information, schedules, etc.). A dispatcher may announce the call details to field units over a two-way radio. Some systems communicate using a two-way radio system's selective calling features.

CAD systems may send text messages with call-for-service details to alphanumeric pagers or wireless telephony text services like SMS. The central idea is that persons in a dispatch center are able to easily view and understand the status of all units being dispatched. CAD provides displays and tools so that the dispatcher has an opportunity to handle calls-for-service as efficiently as possible.

Following a phone call, the dispatcher determines the nature of the emergency (police, fire, medical) is then determined. If the call has been answered by a telephone operator, they then connect the call to the appropriate emergency service, who then dispatches the appropriate help. In the case of multiple services being needed on a call, the most urgent need must be determined, with other services being called in as needed. In many parts of the world, an emergency service can identify the telephone number that a call has been placed from. This is normally done using the system that the telephone company uses to bill calls, making the number visible even for users who have unlisted numbers or who block caller ID.

Your system should be used by the dispatcher during the call. The system allows introducing the type of emergency then displaying the closest units. All calls are logged and also all commands to the units are also logged, enabling the generation of overall statistics : how many calls, how many calls per emergency, workload of each unit.

Each called unit must also complete a report after each intervention which will be associated to the original call and available for future browsing.

For the documentation use the project deliverables table of contents on the site.

Propose to the professor what parts of the system should be automatized and, following his input, implement the computer system.