SMS CRISIS MANAGEMENT SYSTEM

Avconet Ltd.
agreed distributor
SMS Crisis Management System is a complete software platform integrating SMS communication with crisis management processes within an organization.

THE SYSTEM:

- Facilitates and improves the day-to-day operations of an organization
- Is innovative and unique worldwide
- Effective
- Reliable
- Easy to use
The system supports management of the crisis communication in case of:

- Natural disasters like fires, floods, hurricanes and storms
- Transportation catastrophes
- Contamination
- Terrorist attacks
- Public safety risks
- Critical equipment and system breakdowns

Independently of managing the crisis situations, the system also supports standard operational processes of the company.
SYSTEM ARCHITECTURE

CRISIS SERVICES: AIRPORT SECURITY, FIRE DEPT, POLICE, AMBULANCE, HELP FOR VICTIM’S FAMILIES, ETC

GSM NETWORK

SYSTEM ADMINISTRATOR

OPERATOR’S ACCOUNT

SYSTEM’S SERVER AT THE AIRLINES OFFICE (SECURE SERVER ROOM)

APPLICATION PROGRAMMING INTERFACE

SMS-C AT GSM OPERATOR’S

FIREWALL

PRIVATE NETWORK

SMS CRISIS MANAGEMENT SYSTEM - ARCHITECTURE
SYSTEM REQUIREMENTS

SERVER SIDE

Software requirements:
• operating system Red Hat Enterprise Linux ES/AS,
• MySQL database,
• SMS Enterprise Crisis Management server software,
• optional IPSec software coding utility.

Server side hardware requirements depend on the predicted traffic, the number of the operator’s accounts and on the connection to the SMS-C infrastructure of the GSM Operator. The basic configuration includes: a minimum of 1GB RAM, 2 x HDD 40GB, RAID controller, 8xIDE DVD-ROM Drive

• Access to the GSM operator's SMS Center (SMS-C). A connection to the operator's SMS-C according to the operator's requirements (leased line, PVC on Frame Relay etc.) Required throughput: 32-128kb/s,
• a spare connection to the GSM operator’s SMS-C is recommended (e.g. Internet + IPSec),
• optional IPSec hardware coding utility.
SYSTEM REQUIREMENTS

CLIENT SIDE

- Permanent access to the system’s server via network using https protocol,
- access to the administrator’s/operator’s system account via MS Internet Explorer 5.5 or higher equipped with all the critical updates from Microsoft.

A person designated to stay in contact with the system (fireman, contamination specialist etc.) should possess a reliable GSM mobile phone with the possibility of sending/receiving SMS messages and the function of incoming SMS message notification.

Other system requirements:
- constant power supply,
- air conditioning,
- secure server location.
FUNCTIONS OF THE SYSTEM

• Instantaneous notification of the members of crisis services with SMS text messages in case of emergency:
  – raising and revoking alarms by system operators,
  – possibility of setting up various alarm types in the system:
    • each alarm corresponds to a specific crisis situation and calls for different groups of people and for particular persons.

• Computer algorithm controlling the SMS notification process independently of any human actions:
  – requirement of confirming the receipt of messages by the persons involved in the action,
  – in the case when the message is not confirmed by the recipients it is sent to his/her substitute.

• Instant bi-directional communication in the course of the action:
  – with all persons directly involved in the action,
  – with single persons directly involved in the action,
  – with persons who are not directly involved in the action.
FUNCTIONS OF THE SYSTEM

- Two different modes of team notification:
  - only the leaders of the teams or their substitutes are notified,
  - all members of the teams are notified.

- Possibility of controlling the crisis action from any computer connected to the network.

- Possibility of raising and revoking alarms from mobile phones.

- Possibility of steering remote devices equipped with GSM modules such as: alarm sirens, entrance gates.

- All the messages sent and received by the system are recorded.

- Predicted capacity: 150 SMS messages per minute / 1 SMS-C account.
ACTIONS TAKEN IN CASE OF A CRISIS SITUATION:

1. **Raising an alarm** - sending SMS crisis notifications to the teams and to the single persons who should take part in this particular action. (There can be many alarms defined in the system. Each of them calls for different groups of people and for particular persons from different locations.)
ACTIONS TAKEN IN CASE OF A CRISIS SITUATION:

Confirming the receipt of the SMS crisis notification and readiness to act. If the receipt is not confirmed, the SMS crisis notification is sent again to the person. If there is still no answer, the system’s operator is notified and at the same time the system notifies the substitute of the person (In case of TEAM 2 in the example, the substitute of SPECIALIST 3 is SPECIALIST 4).
ACTIONS TAKEN IN CASE OF A CRISIS SITUATION:

In the example SPECIALIST 4 from TEAM 2 has been notified, because neither SPECIALIST 1 nor SPECIALIST 3 had confirmed the receiving of the alarm notification. (Please note that SPECIALIST 2 has been marked in the system as ABSENT, so he does not participate in the action at all)
ACTIONS TAKEN IN CASE OF A CRISIS SITUATION:

Since nobody from TEAM 2 confirmed the receiving of the alarm notification, TEAM 2 is marked as INACTIVE in the system. The operator must undertake other actions to notify the team (e.g. try to call the members of the team, send a messenger or use some other system to notify the team).
During the action, there is a possibility of bi-directional SMS communication between the operator and the persons involved in the action which significantly helps to coordinate the crisis activities.
ACTIONS TAKEN IN CASE OF A CRISIS SITUATION:

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Revoking the alarm - the operator sends an SMS notification to all the persons involved in the action when the crisis is over.
OTHER SYSTEM’S ADVANTAGES

- Secure data transmission.

- Global reach of the service (global GSM coverage).

- The most effective way of passing information as mobile phones are commonly owned and used everywhere.

- Reliability:
  - the SMS text messages can get through even when the mobile phone signal is too weak to sustain a spoken conversation.

- Multilevel access for operators to the system on the basis of granted individual rights.

- Computer verification of the alarm procedure and its execution.
BENEFITS OF SYSTEM IMPLEMENTATION

• Improved management of crisis situations.

• Safe group communication solution for the whole organization.

• Additional channel for everyday communication within the organization and also with the customers and partners.

• Reduction of telecommunication costs.
THE PRODUCER OF THE SYSTEM

• The company specializes in SMS text messaging systems for crisis management centres. It is recognized for the highest level of customer care.

• Systems have so far been implemented by:
  – army,
  – police,
  – government security agency
  – fire departments,
  – airlines
  – mountain rescue organizations,
  – property and personal guard services,
  – chemical plants.