



**SWISS
ALARM
SOLUTIONS**

EOC - Ente Ospedaliero Cantonale

Alarm Management in the Hospital Environment



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Alarming for Life and Technology



Ente Ospedaliero Cantonale (EOC)

The Ente Ospedaliero Cantonale (EOC) coordinates the activities of a total of six cantonal hospitals in Ticino and ensures their smooth and efficient operation.

It plays a central role in supporting these institutions in the realization of extensive investment projects.

Decisive factors

In the course of searching for a comprehensive solution in the area of alarm management, the EOC conducted a pilot installation at the "Ospedale Regionale di Mendrisio" over a period of two years. This was intensively tested for its reliability, integrability and suitability for practical use.

The positive feedback from the medical and nursing staff as well as the technical staff on the AMX Alarm Management System was a decisive factor in the decision to implement the system in other cantonal hospitals.

In 2004, the extension projects for the Ospedale Civico and the Ospedale Italiano in Lugano were successfully completed and handed over to the EOC. The other locations - the Ospedale San Giovanni in Bellinzona, the Ospedale di Acquarossa and the Ospedale di Faido - followed with their realization in the first half of 2005.



INITIAL SITUATION LUGANO

The hospitals in Lugano are geographically separated, which is why a transparent and cross-organizational representation of all processes is essential.

In the event of an incident, it is crucial that the target group personnel, consisting of nursing staff and technical staff, can be reached both locally and across different locations, through a uniform alarm process.

REAnimation Solution

Ensuring the mobility of target persons is of the utmost importance, and DECT devices are used for this purpose. It is essential that all alarm processes can be displayed on a DECT device. Target persons are notified via display text messages that contain information about the "what" and "where".

These text messages are more quickly captured and interpreted than voice messages. If the target person is already in a telephone conversation at the time of the alarm, an automatic call interruption is initiated after a short announcement.

Effective Advantages

This allows the target person to end or pause the ongoing conversation in an orderly manner. This functionality is enabled by deep integration into the telephone infrastructure, specifically the Alcatel OmniPCX Enterprise System. To ensure an effective emergency response, the availability of an emergency team consisting of at least one representative of each relevant discipline (e.g. physicians, anesthesiologists, OR staff, physicians, etc.) must be ensured.

If certain disciplines cannot be reached despite simultaneous alerting, a targeted escalation will be carried out for the affected discipline to ensure the full operational readiness of the emergency team.



TECHNICAL SOLUTION

The Honeywell building management system, the **Cerberus** fire alarm system, the GETS light call system, and other supporting systems were integrated into the central **AMX Alarm Management Server** using the standard ESPA 4.4.4 protocol or via potential-free contacts.

High-Performance Flexibility

The alarm processes are designed to work regardless of the technician's location. In addition, the technician receives the alarm messages as DECT SMS, which serves as a memory aid and allows them to process less urgent incidents at a later time.

In the hospital environment, there is a significant need for adjustments and changes. To meet these requirements, the system has been integrated into the local network (LAN). This allows authorized users to make necessary adjustments through password-protected access. For extensive changes, the data is first exported in table form (Excel), edited offline, and then imported back into the system.

The flexible architecture of the platform and the direct access to ATT's development capacities ensure that the **AMX Alarm Management System** can be quickly adapted to new requirements. This ensures the long-term value retention of the investment. It also enables the EOC to implement future projects efficiently and cost-effectively.