



Reference project



People and building security without compromise

Reference project: Swiss EPI Foundation

The area of the Swiss EPI Foundation, surrounded by a beautiful park on Lake Zurich, consists of an area the size of around 17 football pitches and includes no fewer than 50 buildings. Rudi Grasern is responsible for the entire hotel business and infrastructure, from the basement to the roof.

Mr. Grasern, you are Head of Hotels and Infrastructure at the EPI. What does a typical day at work look like for you and how important is the topic of safety for you and your company?

There is practically no typical day-to-day work for us because we are a multi-divisional company. Our company is very versatile. In the morning, we check whether all of our systems are working properly or whether there has been any feedback. Since you can't be everywhere at the same time, we have a building management and information system in use that signals to us in detail where we need to intervene quickly in the event of technical alarms. Of course, fire alarm systems are installed in all buildings in accordance with the regulations. In addition, we use the higher-level alerting and positioning application MobiCall from the company New Voice for a wide variety of scenarios. These include various alarms such as the people alarm, the gastro call, the support call and an amok emergency call. The most important alarm where human life is at stake is the resuscitation alarm. Additionally, there is the personal emergency call.

Two years ago, the EPI Foundation decided to replace both the old traditional telephone system with the mobile DECT solution as well as the alarm server solution. What were the main motivators?

In 2018, the end-of-life phase of the old telephone system was announced. Shortly thereafter, the service contracts of the individual suppliers were also terminated. So we had to look for solutions. We decided on a new modern communication solution, which we introduced in 2020. A well-known consulting company supported us in developing the concept and during the evaluation process.

What was the path from tender, evaluation to implementation?

Various companies could apply for our tender. The contract was awarded to the alarm system from the company New Voice. A possible implementation time frame was then determined. What was special about the implementation was this "corona pandemic", which slowed down the hardware



Reference project



installation in the buildings. Another challenge was the large number of alarms. As a multi-divisional company, we had to map the most diverse needs for the alarms. Thanks to the partnership with the company New Voice, we were able to further develop the alarms individually.

What were the requirements for a new alarm system - especially in your company?

Since many of our employees are on the move throughout the company and accessibility is a top priority, we had to decide which of the available mobile communication solutions (DECT, WiFi, in-house mobile services provider) we would use for existing and future requirements in advance of the evaluation. Recently, we decided on a mobile in-house solution in connection with smartphones of the Samsung XCover 4s type, not only because of the additional requirement of room-accurate positioning in case of an alarm. We wanted to know where the alarms are coming from so that we don't restrict our mobility: for example, when you're in an area with a client or patient. This means that you know where the alarm is coming from and you don't have to first think about where to go. On the other hand, another requirement was visual support for the alarm, so that we can provide the building information and floor plan so that we can find our way quicker. Accordingly, we not only send the building and room number, but also the exact location information via a visualized building plan. In addition, the defined outdoor zones are graphically displayed.

Simply explained: What does a technical infrastructure look like that meets the preceding security-related requirements?

In the concept phase, we defined the positioning accuracy for each building complex and outdoors. Then, after reading in the building plans, the specialists from New Voice automatically positioned the Bluetooth beacons (Bluetooth Low Energy) in the plans using the specially developed NVX application. In order to meet the high requirements, a total of 1,500 BLE beacons were installed (1,300 for indoors and 200 for outdoors). The desired accuracy is defined via the NVX software. If an emergency call is triggered outside of the defined outer zones, positioning capability is guaranteed using GPS coordinates. The various alerting processes are triggered via the MobiCall app by

pressing the "emergency call button" on the smartphone. Automatic triggering (no movement / loss verticality / shake alarm) can also be defined for each employee or application area. In the event of a problem, all beacon signals detected by the smartphone at the time of the triggering are transmitted to the NVX localization application. The software calculates the location and transmits the relevant information to the defined group of people using the MobiCall.App, including display of building plans. At the moment, around 400 smartphones are in use for all communication needs. Of course, this also includes fast and targeted alarm communication. As part of a stress test, we started an alarm scenario including location information and sent the details via the app to the 400 smartphones within ten seconds!

What are typical alarm processes in the area of resuscitation and personal emergency calls etc. that can be used at the EPI Foundation?

The most important alarm for us is the so-called resuscitation alarm. With this emergency call, a specific team, in which each person has a specific role, is alerted. The alarm is either triggered via MobiCall.App or in the hospital, for example, by a fixed button on the room phone. Precise location information is sent each time. A certain group of people must accept the alarm, move out and go to the scene of the event in order to be able to help quickly. MobiCall is configured to ensure an escalation process via the acknowledgment option. Of course, we practice all of our planned alarm processes regularly. Another important alarm is the personal emergency call, which employees can use MobiCall.App to trigger at any time anywhere on campus.

Other emergency scenarios are, for example, a fire alarm or a rampage at school. In case of poisoning incidents, the Tox-Info-Hotline is at our side. In addition, we can trigger various scenarios via a telephone call. In addition, the nurse call system (resident call) is integrated directly into the alarm application via an interface. If a personal alarm is triggered on a hospital bed, it is displayed on the smartphone along with the location in the building plan. In order to keep the service quality high, we have set up the gastro call on the system. When you press the "coffee cup" symbol on the phone, the catering staff is connected. The patient's room number



Reference project



appears on the telephone. Blue light organizations can also be selected directly via MobiCall.App.

How are fire alarms, resident calls and technical alarms triggered?

The fire alarm is displayed on MobiCall.App. If a fire alarm is triggered, for example via a fire detector or a fire button, employees, who are in the section are informed in order to help with evacuation.

What were the biggest challenges in general when implementing the solution?

Until you understand which alarms should work where and how. A thorough situation analysis was conducted. Due to new technological possibilities, we were also able to identify optimization potential in the area of alarm processes. On the other hand, there were technical difficulties at the beginning, such as incorrect floor and location displays when triggered. This involved various challenges in assembly and measurement. However, these problems were fixed relatively quickly by installing additional beacons - and/or via the software. The specific setup of the building must also be taken into account.

In general, what is possible with the New Voice MobiCall solution? Or what could be the future requirements for the alarm systems?

The idea is that even more attention will be paid to the subject of safety: from personal safety to reliability. I therefore believe that our system could be expanded in the future.

What does the solution look like in terms of availability and operational support?

The MobiCall application is fully redundant. This guarantees maximum availability. In connection with positioning, New Voice has invested some development work. What is very important to me personally: We have also further developed the system together with the company New Voice due to our high demands. It was an absolute win-win situation. The way the solution is designed today, the system works very well. What we can optimize further and which additional functions can be used are questions that concern us every day..

Has there been an incident in which the new system has proven particularly effective?

Several times already! It is extremely important to us that when an alarm is triggered, the necessary support arrives at the scene of the incident as quickly as possible.

About New Voice

New Voice International AG is a global system integrator and solution provider in the areas of emergency, security and business process communication, IT and automation. Thanks to comprehensive networking between machines, devices, sensors and the responsible personnel, the core product MobiCall allows all strategic business processes or business-critical communication to be automated. Since it was founded in 1991, New Voice International AG has implemented more than 7,000 systems worldwide in close cooperation with major telecommunications companies, leading manufacturers, system integrators and providers of security software. Experience, expertise and an exceptional network guarantee efficient and secure solutions for critical systems and processes.