





BACKGROUND

Luxembourg, a small country located in Central-Europe, is the home of the European Union.

Such a cosmopolitan state, with a huge amount of banks and administrations, has a substantial need for a high security level with safe and reliable communication.

The security company Group 4 Falck aims to offer a secure, united communication and surveillance solution to banks, security companies and public administration customers in Luxembourg.

In July 2004 Motorola's Compact TETRA system, was chosen as the best solution for a high performance radio communication system for the security company.

The decision for choosing Compact TETRA was based primarily on Motorola's high level of technical expertise, along with its long-term commitment to TETRA. In addition, Compact TETRA has already proven to provide reliable communications in many similar projects throughout the world.

In Luxembourg, the first system compliant to the ETSI TETRA standard is Motorola's Compact TETRA system. The main purpose of the system is voice communication, alarm transmission and reporting.

The system has been operational since October 2004. In the Future, alarm transmission is possible in more than 100 buildings (i.e. banks and small to medium sized companies) all over Luxembourg City, covering an area of more than 25 km².

Intrusion, fire and power supply alarms can all be transmitted through Compact TETRA infrastructure and ultimately combined in a remote control centre.

The long term plan is to switch completely to Compact TETRA, in order to replace the company's conventional analogue system and meet future demands.



CUSTOMER NEEDS

- High system performance
- Reliable, fully backed-up network architecture
- High safety level
- Instant reporting of:
 - Intrusion alarms
 - Fire alarms
 - Power supply outage
- Expandability
- High data capacity





MOTOROLA SOLUTION

Motorola's Compact TETRA system is a small to medium sized system that boasts all the benefits of TETRA's open standard, digital trunked radio service. The system offers a cost effective solution to the security company in Luxembourg, due to the fact that it is specifically designed for small and medium sized companies. It is also easily scaleable for future needs.

Safety and reliability were the most significant requirements and Compact TETRA presented the natural system choice. The reason was a long proven record of high reliability and system performance. The system was sold and installed by Motorola accredited system partner ConnectCom, who also offers extensive technical support.

The implementation of the Compact TETRA system in Luxembourg is being rolled out in three phases. The first phase, which is completed in October 2004, included the installation of a CTS-200 base station with 2 carriers and an ISDN gateway, in Luxembourg City. Additionally, this phase introduced 6 MTM700 mobiles and more than 70 portable radios (MTH650, MTH800 and MTP700 with dead-man functionality). More terminals are added on an ongoing basis, as new customers join Group 4 Falck.

The second phase will consist of the installation of another city site by the end of 2004, along with the addition of more terminals. A third stage of implementation will be the installation of a new site in 2005, which will be situated in Luxembourg South. This implementation will increase the total number of users to anywhere between 500 and 1000, depending on customer requirements.

Motorola MOSCAD, which is a telemetry application designed for supervisory control and Data Acquisition, can be used for transmitting alarms through the Compact TETRA infrastructure. Other microprocessor systems designed by Motorola's Application Partners may be integrated into the system to meet customers' special needs. The reason for using any microprocessor systems is that it allows the user to configure each remote site to run any applications that are needed. This makes the system open for future demands, such as data applications etc.

The use of Short Data Service (SDS) offers the users fast and reliable service, in responding to any kind of alarm, whether it is caused by fire, intrusion, power supply outage or even dead-man alarm. By consolidating all alarms on one site, problem solution can be initiated through 1, instead of through 2, 3 or even more channels.

As a result of installing the Compact TETRA system, the level of safety has increased and at the same time Group 4 Falck has lowered expenses on security. The main cost reductions are based on mobile phone costs and the cost of leased telephone lines.

BENEFITS

- Expertise and technical support from Motorola accredited system partner ConnectCom
- Scaleable to grow as needs change
- Reliable voice and data communications
- Efficient alarm reporting
- Easy usage with minimal training required
- Savings on mobile costs
- Eliminate cost for leased lines

