



**Client** Agency for Fire and Disaster Prevention /  
Fire Brigade Koblenz, Germany

**Branch** Rescue Services, Fire Brigade and Civil Protection

**Project** Integrated Control Centre solution in collaboration with  
Alex GmbH, Koblenz



**Customer** The regional Control Centre was commissioned by the German State of Rheinland-Pfalz on behalf of the Fire Department of the City of Koblenz. The integrated Control Centre manages a very broad range of public protection and rescue tasks. Covering an area of 2500 km<sup>2</sup> in the north of Rheinland-Pfalz, the Control Centre is not only responsible for the coordination of the Fire Brigade, but also for the entire emergency, medical and ambulance services, and alarming for catastrophe protection. The safety of a half a million people is at stake.

Calls from the European emergency number 112 are managed in the Control Centre. 300 fire protection units, 13 rescue teams as well as all available rescue units including fire trucks, ambulances, fire rescue boats and helicopters are assigned by the dispatchers. Up to 500 call-outs per day or 150,000 missions per year are managed by the Centre.

In the flood-prone areas surrounding the Rhine and Mosel rivers, water rescues are not uncommon. Shortly after the implementation of the new solution, the recovery of a damaged cargo ship near the famous Lorelei Rock made news headlines around the world. As the ship could only be salvaged several days after the accident, there was an acute danger of contamination to the surrounding areas. The Control Centre continuously transmitted live pictures from the scene of the accident in order to guide the numerous teams of rescue workers in their work. Dispatchers in the newly inaugurated Control Centre mastered the situation and avoided loss of life and damage to the environment.



Mission

The project included the realisation of an integrated control centre, the physical consolidation of operators from fire fighters and rescue workers from the city of Koblenz and the counties Mayen-Koblenz, Ahrweiler and Cochem-Zell. In addition, direct connections were established with the police force's headquarters and emergency call centre as well as neighbouring call centres. A key challenge was to create the conditions necessary to harmonise heterogeneous data signals from diverse sources. Additionally, the fleet of rescue vehicles needed to be monitored and managed so that all emergency vehicles are able to leave the premises at a second's notice. Finally, to ensure business continuity, a second smaller control room was also required to enable autonomous response to catastrophic situations.

The implementation was realised in the existing control room of the fire brigade, and was accomplished during operational hours, placing stringent demands on the project management team. As the number of desks was increased from 3 to 8, the efficient use of space was essential to the solution design. Technically, the focus was on efficient and intuitive media control as well as on guaranteeing the highest levels of system stability. All desk monitors and large-screens were migrated to full high definition format resolutions.

The companies Alex GmbH and WEY were responsible for the design and realisation of the complete solution. One key deciding factor was that WEY offers customised solutions based on products developed in-house and tailored to the client's individual requirements.

Solution

The WEY Solution has realised an ergonomic working environment with extremely high system stability and reliability. The main Control Centre consists of 8 multi-screen workplaces each controlled by an *EKlight* Multifunctional Keyboard. Each desk has 4 high resolution screens and real-time access to all data sources via a Deskswitch. Two videowalls each with 4x42" flat screens and a 60" plasma display as well as 8 surveillance cameras complete the future-oriented facility.

Facts & Figures

- Desktop Integration
- 9 *EKlight* Keyboards with 36 monitors
- Deskswitch KVMA 8x8
- 3 Videowalls with 14 screens
- Remote Solution
- Single Pair Transmission
- 26 PCs

The Multifunctional *EKlight* enables an intuitive control of all the PCs and the multimedia applications. Tasks are simplified by numerous function keys which are individually programmable and labelled.

The second control room was equipped with a complete operator station and a video wall of generous proportions (1x60" and 2x32" displays) so that all the signals can be received simultaneously. This guarantees high availability in case of major accidents or catastrophes.

All the workstations have been remoted to a protected and optimally cooled system room. Software updates and maintenance tasks can be performed centrally, without disrupting operations in the control centre. The operators enjoy a quieter and more comfortable working environment.

Reference

Olaf Becker, Head of the Control Centre has this to say about the project: "Operators must be able to react quickly and dispatch easily. When tools are too complicated, this can be a serious security risk factor. The ease of control of all functionalities using a single keyboard and mouse, was therefore very convincing. Additionally, with WEY we chose a partner not only with years of experience, but also with an integrated solution from a single source. This ensures optimal support over the long-term."