Hybrid alerting system: quick, transparent, and digital

Reference report on the Mettmann District, Germany

In the Mettmann district, the Mettmann District Control Center is responsible for dispatching firefighting and rescue services in ten cities. The district has now changed its alerting infrastructure over to digital technology. Kay-Jörg

«We now have one of the most advanced digital alerting networks, and it will remain technically up-to-date for many years to come.»

Kay-Jörg Kawi, Fire Chief and Digital Radio Officer for the Mettmann district

Kawi, the Fire Chief and Digital Radio Officer for the Mettmann district, describes the infrastructure as follows: «The Mettmann District Control Center is connected to 27 wireless base stations that cover the entire district. We deploy approximately 2,000 radio pagers in the field. Multimaster technology is used to send alerts. We are able to control six master stations, which in turn control the remaining slave stations, at the same time. In this way messages are broadcast simultaneously throughout the district. Two transmissions, instead of three or four as in the past, are enough to cover the entire district. This saves time – and lives as well in some cases.»

Swissphone's Express-Alarm, a patented multicast technique for digital alerting, helps deliver further time savings by shortening the time between alarm transmission and signaling on message receivers. It pairs multiple addresses for groups of emergency responders with an alerting text. This reduces the amount of data considerably, making it possible in practice to send alerts within a few seconds.

A digital system with hybrid alerting

The digital system offers still more advantages. To name an example, all emergency responders can be notified via hybrid alerts. This is how it works: If emergency responders cannot be reached via the district's POCSAG network, the system automatically transmits the alert via

The Mettmann district in figures

Mettmann is Germany's most densely populated district. Approximately 500,000 people live and work in the 407 km² region between the cities of Dusseldorf and Essen.