Fire Brigade Düsseldorf: With HiPath 4000 accessible even in extreme emergencies

Open Communications references

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Summary

The new telecommunications system of the Fire Brigade Düsseldorf is second to none: With HiPath 4000 by Siemens Enterprise Communications a concept for open communications has been realised. The concept manages everything from compatibility with the City Network Düsseldorf and integration into the control centre technology to flexible call centre configurations and mobile phones that function in the same way as extension telephone lines, right down to emergency concepts that ensure communication is secure even in the event of a disaster. With this system the fire brigade and emergency services of North Rhine Westphalia's capital can reliably be reached even in extreme circumstances.

The task:

- Replacing the Hicom TC-Network serving 800 members of staff
- Disconnecting a range of installations and sub-installations
- Compatibility with the TC-Network of the City Council of Düsseldorf
- Interoperability with the Command Control Centre of the Fire Brigade
- Flexible functions for citizens' telephones and employee mobility

The solution:

- HiPath 4000 as TC solution and as Control Centre Replacement in emergencies
- Take-over of switchboard function through the control centre
- Integration of eight auxiliary fire brigades via the city's HiPath network
- Speech Design Teleserver Mobile Pro for mobile-phone interface connection
- Freely configurable call centre with sectored work stations

The benefit:

- High fail-safe system stability including control centre technology
- Guaranteed accessibility through emergency concepts
- Easy handling of all terminals even in extreme circumstances
- Mobiles can be operated and settled in the same way as extension lines
- Call centre organisation can be set up if and when required

"The contingency concept jointly developed with Siemens Enterprise Communications is designed so that the HiPath System takes over the command control centre function in an emergency. And in the event of cable defects we can also be reached via the mobile phone network."

Zlatko Schmidt
Project Manager
Fire Brigade Düsseldorf

www.duesseldorf.de/feuerwehr

Reliable access even in extreme circumstances

Following the fire at Düsseldorf's Castle in 1872 the City Council decided to establish a "permanent fire brigade". Today the municipal fire brigade is organised into seven watch stations. For each one of these a fire and emergency brigade is responsible. A central command control centre, a fire boat for the river Rhine, a fire station for environmental protection and technical services, emergency services, civil defence and citizens' protection complete the fire brigade. Every day 111 professional male fire fighters and 274 female and male voluntary fire fighters are at hand at this control centre to ensure the protection of citizens.

Integration into Düsseldorf's city council network
HiPath 4000, the Real Time IP system of the fire brigade replaces its predecessor system from Siemens. A seamless networking with the complex telecommunications network of the municipality Düsseldorf, integration into the central management system and connection to the "user helpdesk" had to be established.

Deciding factor for Siemens was the ease of handling. "There's no time during a large scale operation to first ask questions about how things work", says TC specialist Schmidt jokingly. A simple telephone number plan is essential as well. The first digit of the extension number indicates the number of the respective auxiliary fire station, followed by two digits that denote a certain operational area, such as "40" for the station manager. In this way it is easy for the different stations to remember telephone numbers; time-consuming searches for the right number become obsolete.

System stability and technical availability
The HiPath Real Time IP System operates 24 hours a day, seven days a week – fail-safe around the clock. Potential down-times from energy providers are tied over through an interruption-free electricity supply.

Furthermore, the fire brigade's system is connected with the city council systems by way of two independently running S2M tracks, so that in the event of cable defects caused by construction works a connection to the city remains intact. In addition, eight mobile phone connections are reserved at Vodafone and T-Mobile for the HiPath system through GSM gateways. Should all landline connections indeed fail, the fire brigade would still be able to telephone from every desk telephone via the mobile phone network.

Mobile and flexible work stations
On the premises of the fire brigade headquarters many people must be able to be contacted under their office number even if they are not at their desk. For this reason the site has been kitted out with an area-wide radio communication provision according to DECT standard (Digital Enhanced Cordless Telecommunications) with 50 base stations and around 70 cordless telephones.

As staff in managerial positions need to be kept informed about what's going on when away on conferences, press officers need to be accessible day and night, and officers-in-charge need to be kept in the communication loop without fail when out on an emergency mission, a communications solution was required that would integrate existing mobile phones into the HiPath system in such a way that would allow the mobiles to operate in the same manner as extension phone lines. The mobiles now not only facilitate taking calls under the office number, but also allow switching of phone calls, making call backs, setting up call diversions or holding conference calls. When calling from the mobile phone, the office telephone number is transmitted in each case.

Flexible call centre configuration for many calls during large scale incidents"Sometimes we only require three work stations, at other times it's 30 or more", says Zlatko Schmidt with regard to the specific requirements of the fire brigade. The configuration realised here can be divided into four call centres that are each assigned to handle a different scenario – right down to the message: "Thank you for your call. We have already been informed about the incident and appropriate measures have been taken."

Integration of an existing command control centre
The trouble-free interaction of Real Time IP System and command control centre technology was another decisive element in the decision-making criteria for Siemens. During normal, day-to-day operations the staff in the command control centre operate the switchboard function for the administrative departments in addition to their normal duties. During large scale incidents the switchboard can be transferred to any work station or a separate HiPath switchboard on the basis of AC-Win can be activated. Apart from the controller workstations for the everyday needs of the command control centre further emergency call data enquiry and processing workstations for the disaster telephone are at hand.

Communication for the open minded

Siemens Enterprise Communications GmbH & Co. KG, headquartered in Munich, was founded in October 2006 as a wholly owned subsidiary of Siemens AG. As one of the world's leading providers of unified communications, we supply products, solutions and services to customers in some 80 countries.
More than 15,000 employees support enterprises worldwide by unifying communications and collaboration, thereby making our customers more productive.

With our Open Communications concept, we offer our customers cutting-edge solutions and services that are based on open standards and integrate seamlessly in their existing infrastructures and business processes.

In doing so, we are continuing to pursue our goal of realizing universal communications – across network and media boundaries and with a uniform user experience. We deliver added value to our customers by protecting their investments and enabling a phased implementation of our solutions that are tailored to their needs.

Open Communications from Siemens Enterprise Communications – award-winning solutions for everyone.

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