

## CASE STUDY

# AHEAD OF SCHEDULE: HIGH-PERFORMANCE COMMUNICATIONS INFRASTRUCTURE FOR SFS SERVICES

For cabling in its new building, SFS services AG chose proven system solutions in copper and optical fibre from Datwyler. The new communications infrastructure provides high data security and flexibility for the future.

SFS services AG is a central service company that supports the SFS Group and its operating companies. Because of the rapid growth of SFS services, in summer 2007 the group decided to gather its 180-some employees in Heerbrugg, Switzerland, beneath one roof. The new building was also planned to provide space for future growth of the SFS Group. By building a second data centre the company aimed to expand storage capacity, improve data security, and enhance the availability of business-critical applications.

The building was commissioned at the end of March 2009. The office area is equipped with a modern and efficient communications infrastructure for telephony and all IT applications. The network links not only PCs, but also fax machines, copiers, and printers. The data centre, designed for a capacity of 300 kilowatts (kW), houses several high-availability storage area networks (SANs) over 150 square metres. The hardware components are linked with high-speed copper and fibre optic cable.

### System solutions in copper and optical fibre

The SFS project team chose cabling solutions from Datwyler for both systems, specifically a Datwyler Modular Solution (MS) with Uninet 7702 Category 7 data cable and MS RJ45 connector technology.

Links to and within the two data centres were executed in fibre optic cable. Datwyler delivered these FO links in a pre-terminated format with factory-assembled LC duplex connectors and a two-stage fibre optic distribution concept.

"Our LAN infrastructure has only one central distribution rack in the basement, from which copper cable runs through service shafts directly to the office areas. This eliminates the need for floor distribution racks", explains Pascal Benz, Project Head at SFS services. Viewed over a service life of 15 years or more, "this structure costs less than an alternative with sub-distribution racks."

### Strong arguments for Datwyler

The LAN project team comprised of the electrical planner Carl Keel, the project leader of the Heerbrugg-based engineering office Projekt AG, the technical service team, the IT head, and the project leader. The team initially received a proposal that included far more fibre optic connections, but Benz explains that the copper system provides such high reserves that it meets the bandwidth demands even including future growth. "With optical fibre within the central distribution racks, we would have had a very dense mass of connectors which would make changing patch cords unnecessarily difficult", says Benz.

Datwyler solutions were chosen mainly "because they give us great data security, high capacity for future bit rates and applications, as well as a 20-year system guarantee", says Werner Niederer, team leader for electrical building infrastructure at SFS intec. The Group had previously completed other projects with systems from Datwyler and was well satisfied with the quality of the products and the project support. Besides competitive pricing, these are "simply strong arguments".



### **Rapid, precise installations**

The St Gallen firm Huber+Monsch AG handled the installation. By March 2009 the installation team led by Roger Staedler had installed some 80 kilometres of copper cable, 2400 MS modules, numerous fibre optic links in the office area, another 500 copper links in the data centre, and numerous copper and fibre optic patch cords. To connect the fibre optic cables the installation team made full use of the advantages of the new Datwyler FO distribution concept: high-fibre-count, pre-harnessed, factory-bundled cables fixed to several tubes, each with four bundles of 12, fitted with distribution heads. This concept saves space and is orderly and swift to install. "That was very precise and neat work", says Armin Gwerder, data centre general planner and CEO of the Zurich-based divtech GmbH.

The installation work was completed ahead of schedule, tells Pascal Benz. "It was incredible how fast the sea of cable disappeared". Once all links were tested and certified, the entire network was enabled in plenty of time for the move.

SFS Services is also very satisfied with the total costs. With good project management and favourable market conditions, the overall project was completed at five to ten per cent below budget.

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