

A Solution for Schleswig-Holstein:

A single network for all services.

Schleswig-Holstein's communications network leverages MPLS.

The customer.

Bordered to the west and east by the North and Baltic Seas, Schleswig-Holstein is Germany's most northern state. Covering an area of 15,764 square kilometers, with a population of just 2,780,000, it is comparatively sparsely populated. This makes it difficult for the state government to ensure a satisfactory level of service for its citizens and maintain the necessary statewide organizational structures. The Ministry of the Interior, with its wide range of functions and responsibilities, is particularly reliant on an effective communications infrastructure. In addition to running the police department and intelligence services, the Ministry has the overall responsibility for all building works. It also conducts elections and oversees the development and proper provision of public services.

The brief.

Originally, there were five separate communications networks in Schleswig-Holstein. The goal was to transform these legacy networks into a single network, while also offering significantly enhanced services and functions. In addition to data transmission, the wish list included integration of voice services using Voice over IP (VoIP). System requirements. As well as integrating voice and data, the network needed to support a range of special features, such as different quality of service levels for voice and data traffic to ensure adequate voice quality. Similarly, the integration of an SAP solution for cash and budgetary accounting made it important to distinguish between different service classes for data traffic. A further requirement was for various agencies and local offices to have the capability of setting up closed user groups (CUGs) within the network, based on virtual private networks (VPNs).

The T-Systems solution.

T-Systems was able to offer the Ministry the perfect solution by leveraging Multi-Protocol Label Switching (MPLS) technology, which already incorporates many of the required features, such as the simple implementation of VPNs with quality of service distinctions.

Using access routers and VoIP gateways, T-Systems created direct broadband connections between all IT and telephone systems at the various sites and the MPLS backbone, typically with transmission speeds of $n \times 2$ Mbps. The backbone's redundant design guarantees 99.8 % availability. A special service area operated by the state's own data center allows the network to be monitored and adapted to specific needs. Any communication between VPNs, for example, takes place solely in the service area, offering total control. Realized in just under ten months, the T-Systems solution now connects more than 80 state agencies with a total of about 40,000 employees across 320 offices throughout Schleswig-Holstein. The Ministry plans to expand the network to include more than 500 offices.

Customer benefits.

To meet the special administrative needs of such a large area, T-Systems delivered a uniform, single-source solution that includes technical support. Key features such as VoIP and the flexible installation of VPNs are standard benefits of MPLS technology. The resulting solution offers enhanced availability and significant cost savings, as well as being easy to maintain, configure, and adapt.

One particularly notable advantage is that calls within the network are free of charge, while calls outside the network are routed to the telephone system closest to the destination, so that every office can call anywhere in the state at the local rate. At the same time, the Schleswig-Holstein communications network is ideally equipped to meet future challenges, such as implementing e-government solutions.

At a glance:

- More than 80 state agencies, with 320 offices and about 40,000 employees, connected to a single voice and data network
- Closed user groups based on VPNs
- Shared MPLS backbone
- Equipped for the future – ideal platform for e-government solutions
- Investment protection—services are provided by the network, not via hardware at customer sites
- Lower costs – e.g. for in-house and outside telephone calls
- All services from the same provider – including support
- Single platform for voice and data communication

Publisher

T-Systems Enterprise Services GmbH
Corporate Marketing & Communications
Mainzer Landstr. 50
60325 Frankfurt

Contact

E-mail: info@t-systems.de
Internet: www.t-systems.com

Any questions? Please visit our website or send us an e-mail.