

# Health reform for web communication

**Client**

AOK

**Sector**

Healthcare

**Business**

Statutory health insurance

**Challenge**

New ICT infrastructure

**Colt products and services**

- Colt Managed Services

## AOK unifies the communication platform for approximately 60,000 employees and 25 million policy holders.

A market-leading company such as AOK is only successful when it can communicate with its policy holders, staff and service partners continuously, securely and reliably. To guarantee this, AOK counts on Colt Managed Services.

By implementing a Colt designed and managed ICT solution, the health insurer has not only achieved higher performance and security for its central communications platform, but has also significantly lowered operating costs - improving competitiveness and keeping their policy holders rates down.

**The customer**

With over 25 million insured, AOK is the largest health insurer in Germany. Approximately one third of the country's population place their trust in AOK. Policy holders are served by over 60,000 employees in approximately 1,600 branches. The AOK federal association is an umbrella organisation representing the interests of 16 independent regional AOK offices in addition to branch offices and further subsidiaries.

AOK offers comprehensive health management, where consistently applied quality management leads to increased efficiency in the provision of healthcare services. For the policyholder, this means optimum care in return for an affordable rate. In fact, AOK is known for customer service - answering client questions concerning health and health insurance within 24 hours during the business week. Moreover, AOK offers various initiatives relating to precautionary healthcare and provides substantial assistance to policy holders via advisory forums, access via the Internet to content-rich databases, current news and medical dictionaries, as well as a hospital "navigator".

**The task**

When system environments expand over a long period, updates to these systems are often complex and require significant effort. This was exactly the case with AOK, whose IT infrastructure required an "overhaul" to accommodate new requirements. This not only included technical upgrades, but also required an increase in





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Andreas Jonscher,  
AOK Account Director at Colt.

cost effectiveness and greater efficiency. The goal was to minimise the expenditure and investment required for data, voice and managed services and to create a flexible platform with transparent, predictable costs for the future.

AOK thoroughly evaluated whether this modernisation should be done with internal resources or via an out-tasking approach with a trusted managed services provider.

Following a pan-European invitation to tender in 2005, Colt was selected to implement the Central Services Area (CSA) as well as a Multi-Protocol Label Switching (MPLS) network. Colt beat five reputable competitors based on the best price/performance ratio. The innovative design of the overall solution, as well as the detailed migration plan and operating model for the CSA also served to further convince AOK decision-makers.

### The requirements

For AOK, the digital world plays a central role and will play an even greater role in the future. The Information Communications Technology (ICT) systems must guarantee a secure, fast and reliable exchange of information with multiple communication partners (from customers to employees and service partners, from any business location or branch) at all times. This also applies to web-based information and self-service facilities from various AOK portals, which offer policyholders practical assistance with current health issues, along with higher quality customer support and greater independence from service points. These services are essential for customer satisfaction and customer loyalty, which are central to AOK's strategic goals.

To support this strategy, AOK required a secure, fault-tolerant architecture so that high availability and security would be safeguarded, even in the event of a disaster. The synchronisation and standardisation of the communications platform were critical objectives for AOK. Over time, the ICT systems must remain both flexible and responsive so that new processes and business models can be supported optimally and on a timely basis. A continuous high quality of service through clearly defined service levels is also important and "future-proofing" must be ensured through straightforward access to new technologies. In addition, it is essential that the solution provided by Colt remain compliant with international certification standards and comprehensive regulatory principles.

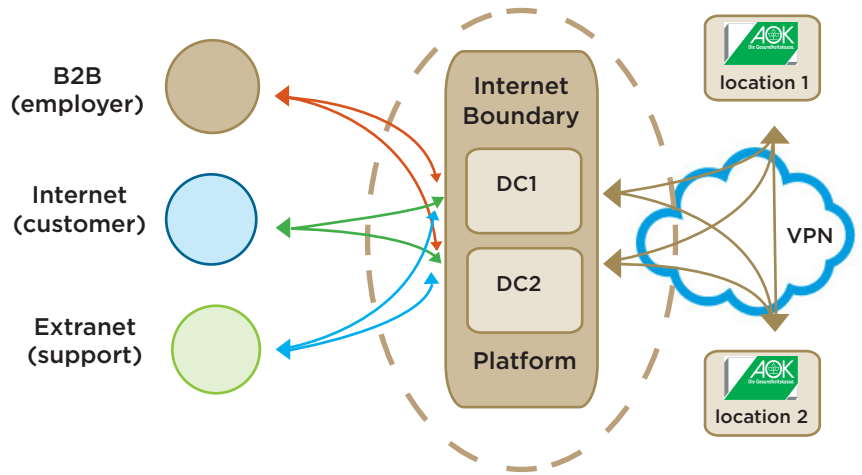
### The Colt solution

These diverse and complex requirements were configured and implemented by Colt in a bespoke solution tailored to AOK's needs. Colt provided the infrastructure for Internet and email communication and took responsibility for the operation of these platforms (over 60 servers) at the agreed point in time. This meant that not only 60,000 AOK employees were provided with central Internet access, but employees obtained a highly available communication platform for the transmission of their social insurance data, and support partners such as SAP obtained a reliable platform for support purposes as well.

By using scalable systems and flexible modules, the solution was designed so that changing requirements can be flexibly accommodated within a short time frame. To secure the data

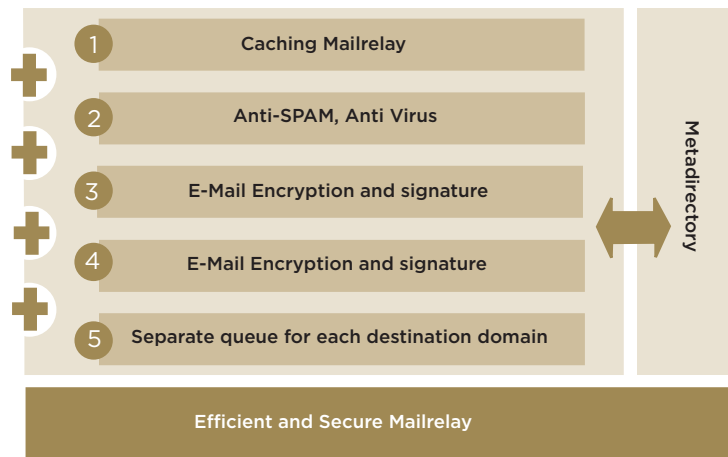


### Solution concept



1. Caching Mailrelay
2. Anti- SPAM, Antivirus
3. Sender/Recipient related content filtering
4. E-Mail encryption and digital signature
5. Quarantine (archive) and release management
6. Application related routing

### Secure mailrelay - features



and systems in the event of a disaster, the CSA is operated with mirrored sites in two separate high performance data centres, owned and managed by Colt. The two data centres are connected by redundant high speed connections that are implemented on the Colt fibre optic network. As a result an extremely high level of security was achieved enabling AOK to continue business activities, without in the event that a data centre, or systems provided in one data centre, become unavailable. Fully automatic switching in the event of a fault is provided via global load balancing.

In normal operation the load balancing devices perform fully automatic distribution of requests so that optimum performance is ensured. The AOK branches access the services provided from the data centres via the MPLS network

operated by Colt on Colt's fibre infrastructure.

The AOK infrastructure within the Colt data centre is protected from compromise or attacks via the Internet using Colt's Managed Security Services such as intrusion prevention systems, firewalls, innovative anti-virus and anti-spam services. A Mail relay with comprehensive functionality installed in the CSA ensures that electronic messages are filtered and only trusted messages are forwarded to the AOK email server. If messages entering this process are identified as suspect, they are forwarded into quarantine for further testing by in-house AOK administrators. Moreover, Mail relay offers encryption and digital signature so that data and documents can be exchanged safely via email.



All services are monitored by Colt around the clock in accordance with ITIL Best Practices. Colt integrates the quality and service management into the IT processes to ensure high levels of service and security. Moreover, the platform designed and operated by Colt was audited “without reservation” by TÜV Rhineland, an international service provider specialising in compliance.

### Customer benefit

The Colt solution provided for the AOK Federation has now been in operation for over a year without interruptions in service. AOK benefits from filtering of spam, virus and content- and has experienced growth in the spam recognition rate (95% to 99%) compared with the previous solution for over 1.2 million emails processed daily. This means that both AOK employees and the internal mail system have been relieved of an extra 10 million unwanted emails annually. In total, the Colt solution filters over 200 million spam messages annually.

In addition to these benefits, AOK was able to realise lower costs by partnering with Colt, particularly due to the use of standardised infrastructure components that lower the required administrative effort. The modular design also ensures high scalability and permits fast adaptations to changing business requirements, including compliance regulations and industry standards.

The Colt solution at a glance

- Provisioning and assumption of operational responsibility for the AOK web-based communication platform in the Central Service Area (CSA)
- A fault-tolerant solution through the replication of the CSA in two geographically separate Colt data centres
- Fully automatic switching in the event of a fault achieved by global load balancing
- Integration of the data centres via internal Colt high-speed fibre optic connections
- Access by the AOK branches to the CSA via the Colt MPLS network
- Preparation of a high-performance Mail relay with extensive security features
- Proactive, 24x7 management of all services handled in the Central Service Area by Colt
- Fixed defined service quality guarantees through Service Level Agreements (SLAs)
- Filtering of 1.2 million e-mails daily, identification of 200 million SPAM/virus-mails per year, > 60 servers, 40 switches
- > 7 TB Storage, Internet access for 60,000 AOK employees

### Next step

To arrange a consultation or to discuss how Colt can help you: Visit: [www.colt.net](http://www.colt.net)

