



Belgian Finance Department Deploys Converged Network

Federal Public Service Finance used IP telephony to improve citizen services and help support new ways of working.

EXECUTIVE SUMMARY

Customer Name:

Federal Public Service Finance

Industry:

Central Government

Location:

Belgium

Number of Employees:

32,000

Business Challenge:

- Becoming more citizen-centric
- Improving internal and external communication
- Doing more with fewer resources

Network Solution:

- End-to-end Cisco network for voice and data, with Cisco Unified Communications and IP telephony

Business Results:

- Being easier to reach brings employees closer to citizens
- Network is a platform for innovation and automation
- Substantial cost savings include €1-2.5 million per year on line rentals

Business Challenge

The Federal Public Service Finance is responsible for administering much of Belgium's financial and fiscal affairs. As well as the nation's Treasury, it also manages pensions, Customs, and the land and property registry. It employs about 32,000 people, of whom 4,000 work in the Brussels headquarters and 28,000 are located in 500 offices throughout Belgium.

In recent years one of the organisation's biggest challenges has been to meet the Government's objective of reorganising every department to become more citizen-centric. Because improving internal and external communications is essential to achieving this goal, there is an ongoing programme to remove information silos and make more effective use of technology.

The department is introducing new systems and ways of working with a strong focus on automation, including services such as "Tax on Web" which citizens can use to submit their tax returns online. As part of the restructuring and transformation process, the department also plans to reduce the number of office locations from 500 to about 200 by 2012. Many of the Service's most experienced civil servants are due to retire in the next few years, making it necessary to do more with far fewer resources.

The Federal Public Service Finance moved to new headquarters in Brussels during the last quarter of 2004. Previously, voice communications for its offices had been provided by an external facilities management organisation. Data and voice had been treated separately and solutions had often been implemented on a per-site basis. The result was a patchwork of systems, poor reliability and significant operating costs, especially for voice because so many different types of PBXs and maintenance contracts were in use.

"We saw the opportunity to create a single converged network for both voice and data which would halve our cabling costs and provide the foundation for future IP-based services," says Louis Collet, IT Director, Federal Public Service Finance.

Network Solution

This belief in IP was reinforced when discussions with telephony suppliers revealed that no vendor was investing in developing new features for traditional TDM systems; the future was IP. The department wanted to carry out a return on investment analysis, comparing IP with TDM, but the diversity of its PBXs and maintenance contracts made that impossible. Instead, the Federal Public Service Finance conducted a risk analysis of an IP solution.

The risk analysis proved that implementing an IP-based solution carried no more risk than TDM. IP would also help the department to manage the costs and time constraints associated with its move to new headquarters. "We had to implement a new computer network as well as telephony and we had to relocate 4,000 people in just three months," explains Luc Lornoy, Network Manager, Federal Public Service Finance. "We were under pressure to complete the implementation very quickly, and we understood that it would be a big advantage to install only 4,000 lines for both telephony and data, instead of 8,000 lines in total."

These findings were used in a Request for Proposals (RFP) for a converged network infrastructure that could support both voice and data.

Reliability, performance and security were all important selection criteria, together with pricing and project management capabilities. The winning proposal, implemented by a systems integrator, was based on end-to-end Cisco® solutions that not only fulfilled all the criteria, but also offered the most scalable IP telephony platform. "We were moving to one global telephony strategy instead of managing it building by building," says Louis Collet. "Cisco's was the only technology able to scale across an organisation of 32,000 users."

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Louis Collet, IT Director, Federal Public Service Finance

Business Results

The Cisco infrastructure has helped the Federal Public Service Finance to realise its vision of a converged network that provides a platform on which to introduce more applications at less cost. "We see the network as something that can drive innovation within the organisation and support new ways of working as we restructure and automate processes," Louis Collet explains.

The network has also enabled the department to carry out its plans for unifying and simplifying all telephony services throughout the organisation. Since the move to the new headquarters, the department has taken every opportunity to extend the Cisco infrastructure to other sites and migrate them to IP telephony, a process that is expected to be completed by 2008.

"Our 'build once, deploy many times' model is made possible by the Cisco technology, and it enables us to add new sites with exceptional ease and speed," says Luc Lornoy. "Capital expenditure is also lower because we are installing one infrastructure and one cabling system for voice and data."

The department is centralising all the links to its telephone service provider in two places, instead of having one in each building. This means it can reduce the number and capacity of lines required, thereby reducing line rental costs by 30-50 per cent, or €1-€2.5 million, per year. Other significant savings are being made on internal calls, including inter-office faxes which used to be sent over external phone lines but are now exchanged over the Cisco infrastructure. The cost of moves, adds and changes has also dropped dramatically. The department has to organise at least 5,000 relocations each year due to reorganisation and retirements. On a TDM system this was an expensive and time consuming task, but it can be done by one person on an IP telephony system.



Under its new, global dial plan the Federal Public Service Finance now has a dedicated prefix, 257, and a unique five-digit extension number for each employee. This enables a 'one number for life' approach, with staff retaining the same number during their entire careers. Simplicity of design and implementation also means that the network is easier to manage than previously, as well as easier to use. The same number of people in the IT department are now managing a much larger and more sophisticated network, with 50 per cent fewer people needed on the telephony side.

The converged network has helped the Federal Public Service Finance to get closer to the Belgian citizens it serves. IP telephony, in particular, has made employees easier to reach by enabling them to use their unique extension numbers at any of the department's offices. Other functions of the Cisco solution have helped improve internal communications, such as the availability of a global directory for all 32,000 employees which people can search on their handsets, then select and call colleagues without even dialling the extension.

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Luc Lornoy, Network Manager, Federal Public Service Finance

Next Steps

The Federal Public Service Finance was the first major government department in Europe to move its nationwide operation to IP telephony. The organisation is continuing to enhance its communications in order to further improve the quality of the service it delivers to citizens. The department is tendering for a managed MPLS (multi-protocol label switching) WAN to strengthen the resilience and flexibility of the connections between all sites. It also plans to save about 20-30 per cent on its mobile telephony bill each year by negotiating a better price with the operator; this is possible because all calls can now travel over the department's network.

As part of its commitment to new ways of working, the organisation is piloting Cisco VPN Concentrator 3005 which will provide secure remote access to the network for home workers and mobile employees. Other network-based options being considered include virtualising contact centres so that agents no longer have to work at the same location, e-learning, physical security applications such as building access control and IP Webcams, and biometric identification.

Technical Implementation

The 10Gb core of the department's network is high-performance Cisco Catalyst 6509 switches with integrated Firewall Services Modules. Dual redundancy in the network design, combined with the built-in resilience of the Cisco Catalyst switches, results in the 'five nines' availability required by the Federal Public Service Finance. Some 276 Cisco Catalyst 3750 switches with Power over Ethernet make up the access layer of the network. Cisco 2800 Series Integrated Services Routers provide the department's remote sites outside Brussels with high-speed delivery of voice, data and security services.

A cluster of Cisco Media Convergence servers running the Cisco Unified CallManager application provides centralised call processing functionality, including features that were previously unavailable on TDM PBXs.

The department has already developed an application in XML (Extensible Mark-Up Language) that enables employees with Cisco IP Phones to view each day's restaurant menus on the handset displays. There are plans to introduce other XML-based applications in future. Cisco Unity currently provides 15,000 employees with voicemail capabilities for the first time, and 400 workers are using Cisco IP Communicator to make calls through their PCs or other devices instead of a telephone handset.

Cisco Unified Contact Center Express is a customer interaction management solution for 10 to 300 agents. Although designed for small to medium-sized contact centres, it combines extensive and sophisticated functionality with ease of use. It was first deployed at the department in a 20-agent IT helpdesk for employees. Now there are three more contact centres with 180 agents in total supporting Customs, Tax and HR which run on the same server platform as the Cisco Unified CallManager cluster.

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Louis Collet, IT Director, Federal Public Service Finance

For More Information

Product List

Routing and Switching

- Catalyst 6509 switches
- Catalyst 3750 switches
- Cisco 2800 Series Integrated Services Routers

Security and VPN

- Cisco Catalyst 6500 Series Firewall Services Modules

Voice and Unified Communications

- Cisco Unified CallManager
- Cisco Unity
- Cisco Unified IP Phones 7900 Series (7912G, 7920, 7936 and 7940G models)
- Cisco Unified Contact Center Express
- Cisco IP Communicator

Wireless

- Cisco Aironet 1200 Wireless Access Points



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