Keeping Traffic Moving Swiftly and Safely
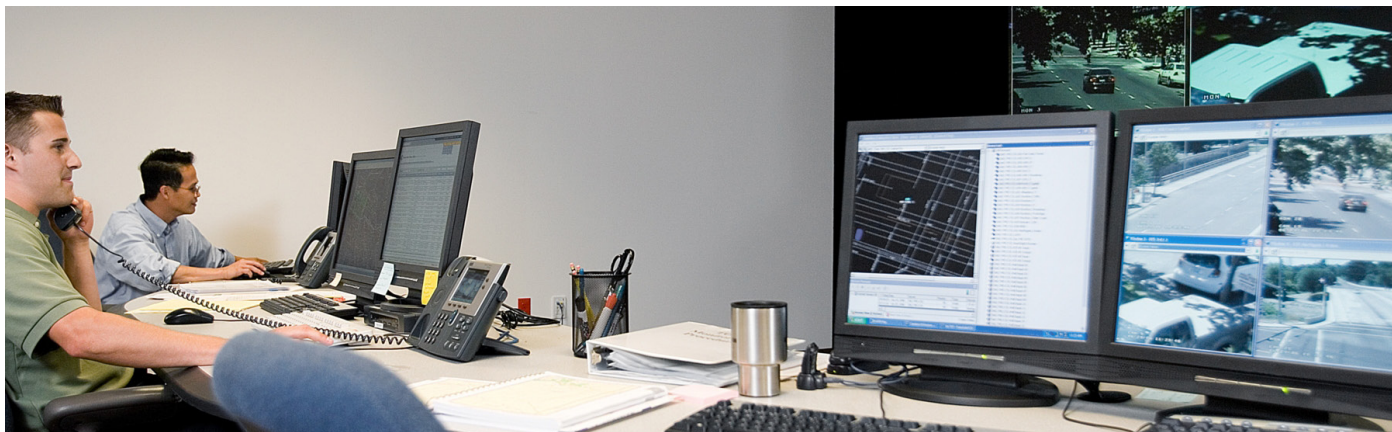
Italian motorway operator builds collaborative platform, improving organizational agility, business process, and customer service

EXECUTIVE SUMMARY

Customer Name: Autovie Venete

Industry: Transportation

Location: Italy

Number of Employees: 648

Challenge
· Maximize road safety and toll revenues
· Improve operational efficiency and quality of services

Solution
· Cisco Borderless Network foundation, protecting existing cable investment and connecting anyone, anywhere, on any device, at any time
· Cisco Collaboration Architecture, enabling unified communications (IP and video telephony) and Cisco TelePresence

Results
· More agile and effective organization: average response time reduced by 50 percent
· Improvements in productivity, driving safety and experience, and environmental impact
· Annual telephony savings of €300,000 with payback on Cisco TelePresence in just 14 months

Challenge

Based in the Friuli-Venezia Giulia region, Autovie Venete is one of Italy's leading motorway operators. It manages 215 kilometers of road, from Venice towards the country's eastern borders of Trieste, and is responsible for 14 toll stations, 16 service areas, 4 customer service centers, 3 parking areas, and 3 maintenance centers. In 2011, the company recorded €139.5 million in revenue, providing a pre-tax income of €31.5 million.

"Our goal is to maximize road safety and toll revenues to further improve and expand the region's highways infrastructure," says Enrico Razzini, General Manager for Autovie Venete. "Through innovation and continuous improvement, we are always looking to deliver a better service at the lowest possible cost to road users."

Within the Italian automotive sector, Autovie Venete is one of the top investors in business transformational technologies, which the company uses to leverage one of its key assets: a 260 km fiber optic cable infrastructure. "Our Metro IP network brings everything together," says Fabiano Tuniz, CIO for Autovie Venete. "It connects all our sites (Trieste, Cessalto, and Palmanova) with our 24/7 control and information center."

To realize its vision, Autovie Venete decided early on to develop a technology roadmap that focused on increasing network return on investment by allowing capacity and new services to be added quickly and economically. "The network was the starting point, but our vision went way beyond a basic refresh," says Tuniz. "We wanted to create a collaborative platform for delivering innovation, whether that's to complete maintenance and new infrastructure projects faster and for less cost, or to reduce accident levels and improve the quality of travel information for drivers."

Solution

Working with its local service provider, Test SpA, Autovie Venete produced a new network design. "Using Cisco Borderless Network architecture, we were able to leverage the existing cable infrastructure and build a platform that connects anyone, anywhere, on any device, at any time," says Tuniz.

"It's much easier now to keep traffic moving, as safely as possible. Not only does that provide our customers with a better driving experience, it also means we can collect more revenue to re-invest in future improvements."

Enrico Razzini
General Manager
Autovie Venete

The network also delivers live video footage, via Cisco® IP cameras, and real-time data collected from highway sensors and toll payment systems, helping Autovie Venete predict traffic patterns and travel times. Once evaluated, this information is then relayed to staff on the road and to customers. "In an emergency situation, enabling our operators to take critical decisions based on factual and reliable information can save lives," says Tuniz.

Autovie Venete laid the foundations for its collaboration strategy nine years ago when it became an early adopter of Cisco Unified Communications. That investment, initially in Cisco IP Telephony, is still being capitalized on today and has been re-used to introduce video and other pervasive communications.

"Cisco Unified Communications provided a platform for integrating a host of services: digital displays, websites, mobile portals, web cams, and information kiosks in service areas," says Tuniz.

The most recent addition is Cisco TelePresence®, enabling high-quality, in-person video collaboration, initially across the company, with the potential to extend externally to other agencies and partners. The solution is currently installed in Trieste, which is equipped with a large, high-definition screen and 20 microphones and network points, along with a second room in Palmanova, and a third site nearby.

Results

Taking a holistic IT approach based on Cisco Collaboration architecture, Autovie Venete was able to develop an investment plan that provided interoperability with existing assets, while, at the same time, delivering a constant stream of business improvements.

Moving to IP telephony was the first step in creating a more agile and effective organization. "In the first year of switching to Cisco IP telephony, we saved €300,000, and we've never experienced any significant downtime since," says Tuniz. "As a traffic incident develops, radio operators in our control center can use their Cisco Unified IP Phones to send a group text to alert tollbooth operators, instantly, reliably, and at no cost. As a result, our average response time has reduced by 50 percent to seven minutes."

Video has transformed operational awareness. Remotely controlled Cisco IP cameras help ensure staff always have a real-time view of what is happening on the motorways, adjoining roads, toll stations, and service areas.

The motorway can also more easily deal with special transport requests. "We often have to oversee safe passage for very large vehicles," says Tuniz. "Using a videophone, the toll-gate operator sees and talks with a control center operator to confirm instructions and arrangements."

Autovie Venete was especially impressed with how simple it was to implement Cisco TelePresence. The solution has reduced the need for management and staff to travel between Trieste and Palmanova, a distance of some 70 kilometers. And it's not just the company's carbon scorecard that has benefited.

"Working with Test and Cisco, we have changed the way we conduct internal meetings," says Tuniz. "It's easier for our board to meet, particularly at short notice. TelePresence saves time and money, lowers the risk of potential travel delays, plus we can record meetings. And, by running it over our network, there are no additional bandwidth costs, so the solution will pay for itself in just 14 months." The company is considering other uses such as delivering training via TelePresence.

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Fabiano Tuniz
CIO
Autovie Venete

Not content with these improvements, Autovie Venete keeps coming up with new ideas for taking Cisco technology and sparking innovation. The latest example is the enhancement of the traveling time prediction system, currently based on the standard RFID-enabled automatic toll payment system named Telepass. The operator is also considering a more advanced system that uses real-time data collected by in-car mobile navigation devices. This data can be delivered via the Cisco Borderless Network and could be integrated with unified communications applications to deliver new value added services to motorists.

"Knowing what is happening on the motorways is greatly appreciated by motorists, who are often happier to wait in a rest area than queue in traffic," says Tuniz. "We also plan to improve information kiosks so that drivers can access these services, or receive alerts via Wi-Fi or Bluetooth."

This proactive traffic management approach has already been tested in partnership with local councils. In the case of the seaside resort of Lignano Sabbiadoro, the approach was able to show a significant reduction in traffic congestion and road safety improvements.

General Manager Enrico Razzini sums up: "Cisco technology, implemented by Test, has improved our business processes and the quality of services we offer. It's much easier now to keep traffic moving, as safely as possible. Not only does that provide our customers with a better driving experience, it also means we can collect more revenue to re-invest in future improvements."

For More Information
Learn more about Cisco Collaboration, go to: www.cisco.com/go/collaboration.

Product List

Borderless Network
· Cisco Catalyst 3750E, 3560, and 6509E Series Switches

Unified Communications
· Cisco Unified Communications Manager
· Cisco Unified IP Phones (7965, 7975, and 9971 models)

TelePresence
· Cisco TelePresence CTS500 and CTS1300 Series