**EXECUTIVE SUMMARY**

**Customer Name**
Petrom

**Industry**
Oil and gas

**Business Challenge**
- Modernise after privatisation
- Overhaul communication system
- Support business processes while increasing operational efficiency
- Improve information flow

**Network Solution**
Staged introduction of Cisco Unified Communications throughout the network, including over 800 sites in Romania

**Business Value**
- Increased opportunities to exploit new revenue streams
- Immediate online reporting provides instant information management
- Improvements in employee productivity due to extension mobility
- Enablement of multinational expansion
- Cost reductions

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**Petrom**

The ability to review, learn and act is vital to achieve success in the marketplace. Petrom have shown their capabilities in a country that has been involved in the exploration and production of oil for more than one hundred and forty years. Petrom is Romania’s largest oil and gas group, with activities in the business segments of Refining and Petrochemicals, and Sales and Marketing as well as Exploration and Production. Petrom has around 350 filling stations in Romania in addition to an international network of 82 stations in Moldova and Hungary. This network was increased by 178 OMV premium stations in Romania, Bulgaria and Serbia-Montenegro in January 2006. For 2005, Petrom’s turnover amounted to EUR 2,970 million.

After privatisation in 2004, Petrom began a comprehensive modernisation process to become more powerful, competitive and profitable. Petrom appreciated that by initiating the development with an overhaul of their communication systems they would experience real-time changes and receive detailed statistical information instantly.

Information flow is critical for large companies such as Petrom due to substantial distances between their commercial facilities. Without an underlying network infrastructure its reorganisation would be undermined by inadequate communication capabilities, as Robert Mueller, Petrom’s Director of IT Architecture explains: “We had to completely exchange our existing telephone system, even the cable. It was obvious for us to go with the new technology. We wanted to renew the infrastructure.”

Previously, Petrom had been using various types of equipment for voice communication and different vendors for LAN. By placing communications at the forefront of their modernisation plans they were able to realise the benefits of central management. By deploying a converged IP network Petrom would experience greater control of resources at lower costs, therefore impacting on the total resource management of the company.
**Solution**

With a mission to create a powerful, standardised IT infrastructure, Petrom were able to support business processes while increasing operational efficiency, meanwhile reducing inter-site operational costs. The decision to utilise central management enabled Petrom to adapt to changes immediately. Therefore, it was paramount for the infrastructure to be flexible and adaptable to their needs. Delivering a powerful communication system at the reorganisation stage resulted in huge decreases in expenses between inter-site calls as the network was based on IP technology. The initial strategic deployment would fulfil the needs of Petrom’s modernisation programme.

Deciding to implement ERP (Enterprise Resource Planning) solutions provided the main trigger for the change in Petrom’s communication system. This solution was used for all of the manufacturing and exploration sites as well as the headquarters in Bucharest.

ERP allows for the real-time sharing of critical data across departments, enabling organisations to benefit through:

- Reduction of inventory costs
- Consolidation of purchasing
- Quicker accounting functions
- Automation of human resource administration
- Increases in sales force efficiency
- Streamlined project management
- Enhancing customer service

To expedite the information flow core network engineering was undertaken. The new high speed, high bandwidth network infrastructure gave foundations to new applications, the most significant of these being Cisco Unified Communications, which enabled standardisation and supported converged data and voice applications for all of Petrom’s operations.
Petrom case study

Deployment
Immediately after Petrom was privatised the project began.

Phase 1
1,300 Cisco Unified IP Phones 7940 and 7960, two Cisco Unified CallManager systems to support all call processing over the eight sites. Also deployed here was high-speed connectivity between various Petrom locations. Many of the filling stations were equipped with Cisco Catalyst 3560-24 switches with power over Ethernet.

Phase 2
2,300 Cisco Unified IP phones to expand the initial solution on an integral Cisco network infrastructure based on Cisco Catalyst 3560 and Cisco Catalyst 4506 Series switches, Cisco 2800 Series and 3800 Series integrated services routers, and Cisco PIX 515 and 525 Series security appliances, and AP1121 wireless access points.

Phase 3
A further 1,300 Cisco Unified IP phones to, supported by two additional Cisco Unified CallManager systems, to be installed in storage facilities the division for marine explorations and the Petrom HQ.

Forthcoming Phases
The total number of Cisco Unified Communications users is planned to rise above 10,000 including the filling stations. Although Petrom’s communication systems are undergoing modernisation, the deployment causes no interruption to the workplace. Employees do not have to undergo training on the new equipment because phones are merely being added and are easy to use. However, agents are experiencing substantial benefits, as Mircea Modran, Petrom’s Director of IT Infrastructure suggests: “Integration with staff was very easy. Employee productivity has improved considerably. We have fewer troubles and fewer downtimes.”

As the installation is controlled centrally the management of the operation is simplified, causing no undue loss of time or profit. With Cisco Unified Communications deployed in more than 800 sites Petrom now experience a greater control of resources at a lower cost.

Both tangible and intangible benefits are observed across Petrom’s business network. However, one of the most palpable is at the filling stations. Whereas previously, reporting would have been costly due to the individual pricing of ISDN lines, Unified Communications introduces immediate online sales reporting and faster credit card connections. The network does not only include Petrom concerns in Romania, multinational expansion is possible as the system enables deployment in countries away from their homeland. Having recently acquired concerns internationally, phones can be deployed abroad but still centrally managed at the headquarters in Romania. Therefore, global expansion is possible without the traditional difficulties that may previously have been troublesome.

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Why Cisco?
Cisco's work with Petrom is part of a continuing commitment to support business in Romania. The ability to bring expertise gained through the experience of working with thousands of enterprises worldwide has helped customers to solve complex communications issues and to improve efficiency. As the global leader in Unified Communications, Cisco offered the best solution to meet Petrom’s specific needs. Robert Mueller explains Petrom's choice: “Why did we choose Cisco? Well, why choose the number two if you can have the number one in technology. Cisco’s solutions and their vision are best positioned to successfully handle Petrom’s network infrastructure challenges for the next decade. Using Cisco, Petrom IT will have the ability to support Petrom’s future business development while protecting the investment already done.”

Potential Future Plans
The capabilities of the new communication system are perfectly suited to evolve in tandem with Petrom's business strategy. In addition to extending user figures of around 10-15,000 over the next 5 years some of the most striking implementations may be deployed in the filling stations. Within just a short while each station will be fully integrated. Robert Mueller observes the potential the solution can deliver: “There are a lot of possibilities with new technology, services and also unifying the infrastructure of services at Petrom. We have to bring the solutions to envelop the whole of the company. Covering all of Petrom is more of a priority than enlarging services.”

Future Opportunities
Complete integration unlocks multiple possibilities for Petrom. Pumps at the filling stations will cease to be solely dispensers of fuel; Unified Communications offers opportunities to open completely original revenue streams. An IP line to every filling station enables online communication to monitor stock and the capacity to import supplies automatically, while unifying other communication methods enables each station to allow new concepts.

Cisco’s Unified Communications are being fully embraced by Petrom and, in turn, Cisco will support any future activities Petrom wish to undertake. Diverse areas of Petrom's business may be enhanced, such as the possibility of increasing security by using UC CCTV. Further developments are possible in marketing due to the increased knowledge of customer behaviour. Furthermore, Petrom's flexibility will develop through the possibility of unique offerings, enhancing the brand name, increasing customer satisfaction and, ultimately, boosting customer loyalty.
Conclusion
The oil and gas industry is witnessing technological reform that can transform the nature of its business. Romania’s largest company, Petrom, has taken the initiative to use Cisco’s expertise to revolutionise its communication system. IP technology now enables Petrom to centrally manage its concerns while possessing the capacity to expand globally with uniformed filling stations. Customers will be able to enjoy a brand experience by using filling stations as retail experiences, enhancing loyalty to Petrom in the world’s first oil country.

Considering the benefits of the new solution, Mircea Modran explains: “We have experienced manageability, reliability, flexibility, cost reductions and support. We are very pleased with the Cisco solution.” By using Cisco Unified Communications technology, Petrom will have the ability to go wherever their business strategy takes them.