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Success Story Orange Slovensko success story with Nortel EDGE

Background

Since its creation in 1996, Orange Slovensko has been the wireless operator leader in Slovakia, with around 60 percent market share. As a leader in its market, Orange Slovensko understands clearly the needs of their customers, and consistently deploys industry-leading technology to provide a high Quality of Service (QoS) to the entire country. This strategy results in a highly optimized network with dense coverage and a very high availability of the network, delivering a very high quality received by the end-user customer. This GSM operator is also an ISP provider in the corporate fixed market and as such recognizes the paramount importance of delivering stable and reliable communications along with network availability. Orange Slovensko understood very early on the benefits of introducing data services in the mobile world and in 2002, Orange Slovensko enlarged its traditional voice service offering with GPRS services to provide the first step to data applications.

Now the next logical step is the introduction of EDGE, not only to allow additional data services for the mobile subscribers, but also to provide an alternate solution to “dial-up”, and “ISDN” (“ADSL” technologies, which have not been deployed much in Slovakia) by delivering Internet services to residential and corporate markets.

Challenge and strategy

Orange Slovensko’s network provides national coverage with the deployment of more than 1,350 Base Transceiver Stations (BTSs), 12,600 DRXs and 26 Base Station Controllers (BSCs) — all of them provided by Nortel. This network covers 98.6 percent of the population and 85.6 percent of the country.

Based on its ISP experience and its constant concern for end-user QoS, Orange Slovensko has clearly identified EDGE as the technology of choice to offer Internet services to the mass market for the following reasons:

- From a performance perspective, EDGE offers on average up to three times the data throughput of GPRS and becomes highly competitive in comparison with wired Internet technologies currently available in Slovakia.

- EDGE is a natural evolution of the GPRS infrastructure already in place. Evolving from the existing infrastructure to EDGE represents little investment and can be achieved in a very short time by delivering Internet access almost immediately to the mass market
- Based on the existing infrastructure, EDGE services will take advantage of GSM national coverage and of the current reliability of the mobile network. This will allow Orange Slovensko to provide stable Internet services to a wide range of the population from day one. QoS and availability are the key requirements for success when competing with wired Internet technologies.

The strategy was first to deliver rapid Internet services to the fixed market to compensate for the lack of broadband wired solutions (ADSL) in the country and simultaneously to improve the speed and the quality of service for the mobile data users, paving the way to the introduction of new services, such as video streaming.

Why Nortel

Based on a proven relationship of over eight years, Orange Slovensko turned to Nortel to achieve their network evolution to EDGE. Orange Slovensko was confident in the selection of Nortel, as they knew the commitment of Nortel in delivering reliable solutions and providing all the necessary support to implement the hardware upgrades and efficiently and rapidly deploy the software release, which will enable EDGE services.

Nortel’s EDGE solution is designed to deliver the capacity and the performance necessary to offer high-speed data services that meet 3G standards. EDGE shares spectrum and radio resources with GSM and GPRS, thus solving the spectrum availability dilemma for operators aspiring to offer 3G services and allowing for a highly flexible implementation that minimizes network impact and costs.

Nortel’s EDGE is also differentiated in the marketplace by its spectral efficient characteristics of the access solution. Nortel continues to demonstrate innovation and leadership in spectral efficiency with major technological breakthroughs in system capacity and end-user QoS — a major criteria in Orange Slovensko’s decision.



The first of the EDGE services consist of improving the corporate VPN offer based on the concept of the mobile office to corporate and mobile customers of Orange Slovensko.

Lastly, Nortel's EDGE technology has a superior EDGE power amplifier solution. This power advantage solution enhances EDGE performance by optimizing the use of the most efficient modulation and coding schemes and increasing data rates by up to 20 percent. Other commercial implementations may offer lower output power for 8PSK coding schemes, meaning Nortel's basic implementation can offer more throughput and/or more coverage for high data rates.

From a performance perspective, EDGE offers on average up to three times the data throughput of GPRS — yielding a level of service that can support widespread data adoption, allowing new service offerings to evolve and making mobile multimedia services more affordable to more subscribers.

Due to this long list of value-added benefits with Nortel's EDGE solution, Orange Slovensko was eager to deploy the solution, and has been a pioneer of the EDGE technology in the Orange Corporate group, convincing the entire group of the validity of the solution.

EDGE is now selected by Orange Corporate and has already been deployed massively by Centertel in Poland. Other Orange entities are following Centertel and Orange Slovensko examples for a commercial opening within the coming months.

Result

Once Orange Slovensko decided to deploy EDGE, Nortel was able to immediately provide the key resources to meet the tight timeframe for deployment. Within two weeks, Orange Slovensko was able to deploy the EDGE solution in its network. The overall rollout of the release included all the BSCs and BTSs of the network with EDGE activated on 18 BSCs, representing about one-third of the national coverage. The rest of the country will be covered in stages in the coming months, based on market demand.

With such a significant amount of EDGE coverage since the beginning, this allowed Orange Slovensko to launch their first service on December 5, 2004 — immediately after the

deployment. The first of the EDGE services consist of improving the corporate VPN offer based on the concept of the mobile office to corporate and mobile customers of Orange Slovensko.

As a second step, Orange Slovensko began marketing their High Data Rate services on January 24, 2005. The High Data Rate service is being offered to the mass market and is positioned as an alternative solution to fixed Internet services (ISDN, dial-up ADSL). In addition, mobile subscribers will be offered the chance to experience higher speed data rates, allowing Orange Slovensko to offer new services, new applications and generate new revenue streams.

For Orange Slovensko the next step to high-speed data services will be with UMTS and as such will enable not only high data throughput, offering real time services such as TV broadcast, but will also enable benefits from much higher capacity by delivering a large range of data services to the mass market.

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