



THE BACKBONE OF REGIONAL ECONOMIC DEVELOPMENT



JURAJ LECHNER
Director of Technical Division

Juraj Lechner has been active in the telecommunications industry since taking the position at the technical division of Slovak Telekom. Starting in 2003, he worked at Dial Telecom, where he was responsible for data services, optical and SDH infrastructure as the Data Services Manager. In 2007, he became the Chief Technical Officer and a member of the board of directors. Following the acquisition of Dial Telecom by GTS Slovakia, later Benestra, he worked in the team of Service Delivery as Service Delivery Manager. In July 2021 he was appointed as Chief Technology Officer at SWAN.

SWAN

This is also recognized by SWAN, a company that invests millions of euros in the development of fiber optic internet in the regions. In 2022, SWAN completed its key investment in technology, building its own backbone fiber network throughout Slovakia, which gives the company a significant competitive advantage. We spoke to SWAN's CTO, Juraj Lechner, to discuss what this investment means for the company and Slovakia.

What does the backbone network project mean for SWAN?

Throughout the past year, we focused on improving our services and invested in technology and infrastructure. We successfully built our own backbone network using the most advanced DWDM technology, providing reliable infrastructure, stable connections with high transmission speeds, and availability. The construction of the DWDM network was an exceptional project in terms of its scope, complexity, internal resources, and the set deadlines for successful project completion. The network's capacities currently range from 10 to 100 Gbps, with configuration changes up to 200 Gbps, and hardware upgrades enabling speeds exceeding 200 Gbps if needed. This project significantly advances us technologically and opens

up new opportunities in the telecommunications market.



Several factors, primarily high electricity prices, have had a negative impact on the telecommunications market.

How did you achieve this complex project?

Alongside several ongoing consolidation milestones, the implementation of the new C5 voice softswitch and services was one of the significant strategic projects after an extensive RFI/RFP process with multiple potential suppliers and selecting the most technically suitable partner. The project's extent, complexity, and high demands rank it among the most challenging projects of the year. The production C5 hardware is located in two highly available TIER3 data centers. After various phases of implementation and integration, testing of technology features and capabilities, operation began at the end of last year.

Economic growth in the regions today is highly dependent on the availability of infrastructure. Not only in terms of accessible transportation but especially when it comes to the development of telecommunications services and up to date technologies. Access to the internet has become a crucial determining factor of the economic development of regions, not only in Slovakia but worldwide.



What is the main goal of the backbone network project?

The goal of implementing the new C5 technology is to bring cutting-edge technology and advanced features to our customers all over Slovakia. It represents another key technological consolidation steps that our voice team is actively working on. In 2023, the project will continue with the gradual migration of both larger and smaller customers to the new modern technology and services.

What are the challenges in operating IT infrastructure in Slovakia?

Several factors, primarily high electricity prices, have had a negative impact on the telecommunications market. We have been going through a challenging period in terms of operating cost growth. In addition to rising energy prices, we have also faced an increase in telecommunications equipment costs.

What are the other key projects in IT infrastructure development?

In many areas, we continue to improve our products, services, and telecommunications infrastructure. Successful projects included numerous customer projects across all segments, as well as internal projects. These include the migration of wireless 26GHz technology, the development of FTTH to households, and software upgrades for IP infrastructure. Thanks to our NOC and technical support for the residential segment, we have been able to quickly and effectively respond to customer issues in the required time. Our TIER 3 data center - one of the most efficient in Slovakia, has been operational without interruptions since 2011.