



# FINLAND'S DNA KEEPS THE WORLD'S MOST AVID MOBILE DATA USERS SATISFIED

# Summary

# Company:

#### Industry:

Service Provider

#### **Business Challenges:**

Deliver high-quality, low-cost mobile data and broadband services in a fiercely competitive market

#### Technology Solution:

- MX80, MX10003, MX2020, MX2008, and MX960 5G
   Universal Pouting Platforms
- Junos Space Network

  Management Platform

#### **Business Results:**

- Met massive demands for fixed and mobile services with a 1.2 Thus core network
- Prepared core network for the rollout of 5G, a predicted 7X increase in traffic
- Simplified network operations and reduced errors with automation

"Finland is a unique market," says Mikko Kannisto, director of transmission networks at DNA. "A lot of customers use mobile broadband as their primary broadband service. They use 4G services more or less like fixed services."

Finns are avid mobile data users, and competition for subscribers among the nation's service providers is fierce. DNA is one of the leading Finnish telecommunications groups with more than 3.9 million subscribers of its fixed and mobile network services, covering 99% of the population. Unlimited 4G Internet access costs less than €50 a month with DNA, and in the first half of 2018, its subscribers consumed an average of 19.8 GB of mobile data, with data traffic in DNA's mobile communications network growing 33% year over year. The company is Finland's largest cable operator and leading pay TV provider.

5G will drive additional growth of mobile data. Global mobile data traffic is predicted to increase nearly sevenfold between 2016 and 2021.<sup>1</sup>

#### **Preparing for Growth**

To meet customer expectations for low-cost, high-quality services and to prepare for the coming of 5G, DNA wanted to strengthen its core network and use network programmability to reduce operational costs.

DNA has used the portfolio of Juniper Networks® MX Series 3D Universal Edge Routers for more than 16 years, and it chose to upgrade to the latest MX Series 5G Universal Routing Platforms for industry-leading system capacity, density, security, performance, and longevity.

DNA's IP/MPLS core network now runs at speeds of up to 1.2 Tbps. With Juniper, DNA can support multiple services, including consumer and business fixed and mobile services as well as TV broadcasting, on the same infrastructure. It can also scale to meet growing demands. A highly capable, scalable core network enables DNA to easily provision services to customers and ensure that those services operate smoothly.

"Although data volumes keep growing, our Juniper network continues to be reliable, efficient, and modern."

- Mikko Kannisto, Director of Transmission Networks, DNA

<sup>&</sup>lt;sup>1</sup> "Global mobile data traffic from 2016 to 2021 (in exabytes per month)," Statista, 2018 https://www.statista.com/statistics/271405/global-mobile-data-traffic-forecast/

DNA uses Juniper Networks MX80, MX2020, MX2008, and MX960 5G Universal Routing Platforms in its core for an operationally efficient platform for growth. It also uses the MX10003 for best-in-class performance and density in an ultra-efficient form factor. It uses Juniper Networks Junos Space® Network Management Platform for centralized network management and orchestration.

"Although data volumes keep growing, our Juniper network continues to be reliable, efficient, and modern," Kannisto says.

# **Embracing Automation**

Network automation eliminates operational complexity and enhances the customer experience. "We use automation to improve the network quality by reducing human error," says Panu Rissanen, senior network architect at DNA.

"We want to perform proactive maintenance on our networks to keep our customer promise to provide good services," Kannisto adds. The engineering team developed its own automation tools that tap into Juniper's open automation frameworks and APIs. With a highly programmable Juniper network, the DNA engineering team can automate the creation and maintenance of multiple network services based on the same automation toolsets.

"The network is becoming more complex all the time, and automation helps to resolve this complexity by creating templates that take care of every detail," says Kannisto. "Juniper provides a strong foundation for automation."

DNA prides itself on customer service and invests in its network to support customers' new ways of working, including digital businesses. With a scalable, programmable network from Juniper, DNA can continue to deliver innovative services to meet its customers' expectations while growing profitably.



#### For More Information

To find out more about Juniper Networks products and solutions, please visit www.juniper.net.

# **About Juniper Networks**

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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3520645-001-EN Oct 2018