

Wanting to ensure its consumers would reap the benefits of 5G at an early stage, Swiss operator Swisscom was looking for a vendor that could act as a one-stop shop in managing and maintaining its entire IP transport network. Our product portfolio and subsequent partnership with Juniper Networks made us the perfect choice.

In November 2017, Swisscom was discussing how the upcoming introduction of 5G would greatly increase complexity in its IP transport network. Swisscom wanted to be early in the market with 5G technologies, and it was looking for a single vendor able to take full end-to-end responsibility for its complete IP transport network from the radio site up to the data center.

Key characteristics of the network were the support for slicing, low latency, time/phase synchronization and high performance, and the complete transport network had to be managed by one management system.

That same year, we demonstrated the capabilities of our Router 6672 on a 4G and 5G site and our Router 6675 as a C-RAN router to Swisscom. The positive results of this led the operator to ask us to propose a 5G architecture for its edge and core networks as well

Our subsequent partnership with Juniper Networks enabled us to meet these demands, providing Swisscom with a fully end-to-end transport network that results in ease of use and lower cost of ownership for the customer.

In the first end-to-end 5G transport network deal in the industry, Ericsson is delivering Swisscom's new end-to-end 5G IP transport network with Router 6672 as the site router, Router 6675 as the C-RAN router, Router 6274 as the edge router and Juniper MX 10008 as the core router. The architecture meets scalability, availability, performance, latency and synchronization demands, and it is functionally aligned end-to-end. All of the routers are managed by one single operations support system (OSS), namely Ericsson Network Manager.

Heinz Herren, CIO and CTO at Swisscom says: "We have selected Ericsson's transport solution for our 5G network. Partnering with Juniper Networks, Ericsson has extended its transport coverage and can now take end-to-end transport responsibility all the way from the Radio Access Network (RAN) to the next generation core. Seamlessly managed and orchestrated, this reduces our complexity and affords a more efficient, high-performing network."

## Challenges

- Swisscom required an end-to-end 5G IP transport network that supports new 5G use cases and provides low latency and network slicing
- To keep operational costs low, the network had to be managed with a single operations support system (OSS)
- Swisscom had to ensure forward compatibility end-to-end with 5G standardization in flux
- The vendor had to take end-to-end solution responsibility including RAN and core functional alignment. The 5G mobile IP transport architecture had to fulfill scalability, performance and availability demands

## Solution

- Delivery of new end-to-end 5G IP transport network with the Router 6000 series as the site and edge router and MX series in the core
- The architecture provided meets scalability, availability, performance, latency and synchronization demands and is functionally aligned end-to-end. All nodes are managed by Ericsson Network Manager

## Result

- A 100 percent Ericsson 5G mobile IP transport solution from the radio site all the way to the data center
- A 5G future-proof architecture managed by a single OSS

## Related resources

Mobile transport

Our Portfolio - Ericsson Mobile Transport

Our Portfolio - Ericsson Router

<u>Ericsson strengthens end-to-end transport solutions</u> for 5G with Juniper

