

CASE STUDY

Nokia helps Elisa deliver leading 5G performance

- Fastest 5G mobile network in Estonia (1H/2025)
- Offering leading 5G performance and exceptional user experience from Day 1
- 325.90 Mbps median download speeds
- 19.90 Mbps median upload speeds

NOKIA

elisa



“

At Elisa, we are focused on creating the highest value for our customers. For our 5G network launch in Estonia, it was clear that we aimed for premium performance from Day 1.

Thanks to the strong expertise of Elisa and Nokia experts in optimizing 5G performance and the industry-leading Nokia AirScale radio and baseband solutions, we were able to achieve Ookla's valuable recognition as the fastest 5G network in Estonia.

Kristo Kork

Head of Mobile Networks
Elisa Estonia



Elisa Estonia is one of the largest providers of mobile and fixed internet connections in Estonia and a fully owned subsidiary of Finland's leading mobile operator, Elisa.

Nokia is a long-term strategic partner and radio access network (RAN) supplier for Elisa, supporting its mission to create a sustainable future through digitalization.

Ookla has recognized Elisa's 5G network as the fastest in Estonia during 1H/2025*.

Together, we are preparing Elisa's network for the next evolution step, Advanced 5G.

This case study illustrates how Nokia's technology portfolio and global expertise in 5G, combined with Elisa's strong expertise in network optimization, enabled premium downlink and uplink data rates from Day 1 of Elisa's 5G launch.

* Based on Ookla® Speedtest Intelligence® data, 1H 2025. All rights reserved.

OBJECTIVE

Launching the best 5G network in Estonia and laying the foundation for Advanced 5G services

Superior 5G performance from Day 1

Elisa chose Nokia as its strategic partner to launch a leading 5G network in Estonia and differentiate with performance. The network offers an optimal combination of 5G availability and consistently high data rates.

Attracting new 5G customers

Elisa started its 5G services with fixed wireless access (FWA) for homes and corporate customers. In February 2025, Elisa became the first in Estonia to launch 5G Standalone (SA) technology, introducing 5G slicing and Voice over New Radio (VoNR) services to accelerate 5G adoption for mobile users. With trusted 5G performance, Elisa is attracting more mobile users and enterprise customers to transition to 5G.

This migration will open the opportunity to refarm more spectrum from 4G to 5G, enabling larger bandwidths and higher data rates that support new Advanced 5G services.

Paving the path to Advanced 5G

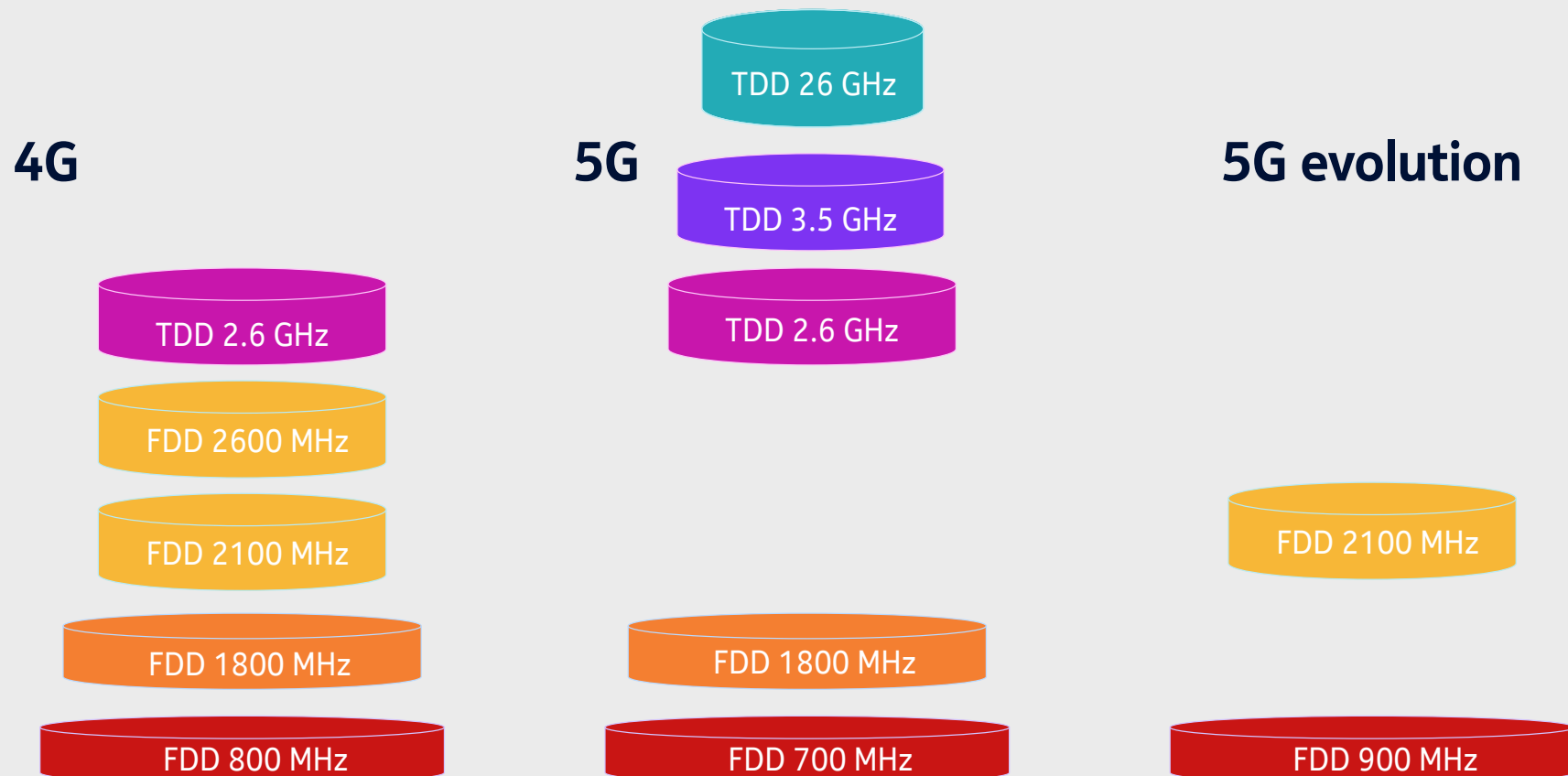
Nokia supports Elisa with industry-leading solutions such as enhanced beamforming algorithms and Massive MIMO techniques. These will help expand 5G capacity, further enhance performance and optimize spectrum utilization, laying the foundation for Advanced 5G services.



ELISA'S EXTENSIVE SPECTRUM ASSETS

Strong foundation for superior network performance and spectral efficiency

With industry-leading Carrier Aggregation solutions, Nokia helps Elisa maximize the benefits of its extensive spectrum pool for enhanced performance, coverage and spectral efficiency in all deployment scenarios from urban and suburban to rural areas.



SOLUTION

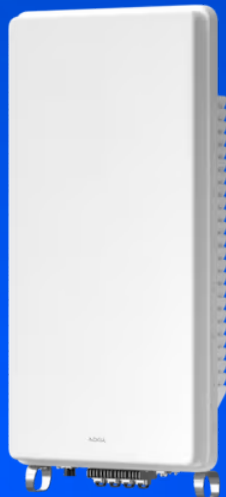
High-performance AirScale radios and high-capacity AirScale baseband

Solution for the 5G launch

To establish a robust foundation for Elisa's 5G launch, Nokia provided a comprehensive 5G RAN solution from the AirScale portfolio.

With software features such as 5G Carrier Aggregation and advanced beamforming algorithms, Nokia helped Elisa fine-tune its 5G network performance to achieve a leading position in Estonia.

With compact, sustainable site solutions and Nokia's service experts, Elisa was able to optimize the operational efficiency and energy efficiency of its 5G sites right from the start.



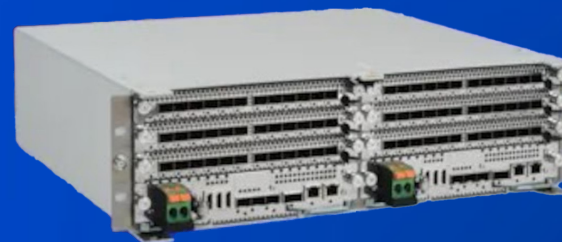
Discover more
about AirScale
Massive MIMO
radios

**Habrok
Massive MIMO**

Next evolution step

In the next phase, Elisa will deploy the latest AirScale Habrok Massive MIMO radios and baseband solutions to guarantee consistent 5G performance as its network grows. The modular design of AirScale baseband allows Elisa to scale its 5G capacity seamlessly to meet future demands.

Elisa will also leverage Nokia's software innovations, such as Dual Boost base station technology. It delivers a significant increase in 5G Massive MIMO uplink and downlink processing power, enabling higher throughput and latency.



**AirScale
baseband**



Discover more
about AirScale
baseband

Uplink boost

Downlink boost

CROWD-SOURCED RESULTS

Fastest 5G mobile network in Estonia

Crowd-sourced measurements conducted by independent research companies provide a reliable benchmark for telecommunications providers globally.

Ookla has recognized Elisa as Estonia's Speedtest Awards winner for 5G mobile network speed during 1H/2025.

To win this award, Elisa achieved Ookla's Speed Score of 63.10, consisting of:

- Median download speeds of 325.90 Mbps
- Median upload speeds of 19.90 Mbps

These results show that Elisa's 5G speeds are globally competitive.



Read about
the Speedtest
results

325.90 Mbps

Median downlink
speeds

19.90 Mbps

Median uplink
speeds

CONCLUSION

Network performance is the foundation for a superior 5G user experience

Today's 5G networks are typically optimized for downlink data rates. With the expansion of AI-enhanced applications and services, uplink throughput is becoming an increasingly important KPI.

As we have illustrated in this case study, it is possible to achieve premium downlink and uplink performance from Day 1 of the 5G launch, similarly to Elisa in Estonia.

Close collaboration with Elisa's experts, combined with Nokia's global 5G expertise, industry-leading RAN portfolio and advanced software capabilities were key to this achievement.

We are continuously enhancing the hardware and software capabilities of our portfolio, including high-order Carrier Aggregation solutions, a comprehensive suite of beamforming algorithms, advanced Massive MIMO techniques and performance innovations such as Dual Boost base station technology.

These capabilities help our customers differentiate from the competition with premium performance, enabling a superior user experience and laying the foundation for Advanced 5G services.



Read more
about Carrier
Aggregation

Nokia OYJ
Karakaari 7
02610 Espoo
Finland

Tel. +358 (0) 10 44 88 000

CID: 215144

nokia.com

NOKIA

Nokia is a global leader in connectivity for the AI era. With expertise across fixed, mobile, and transport networks, powered by the innovation of Nokia Bell Labs, we're advancing connectivity to secure a brighter world.

© 2025 Nokia