

CASE STUDY

Norlys achieves
top benchmark
performance with
Nokia's end-to-end
network optimization

NO^KIA

NORLYS



“

Through close cooperation between our teams and Nokia's experts, we've built a foundation for continuous improvement so our subscribers enjoy the best mobile experience. This achievement reflects what can be accomplished when there is deep trust, aligned goals, and a shared focus on quality. Together with the Norlys teams, we've run an optimization project that highlights the joint technical leadership of Nokia and Norlys, and our shared commitment to an excellent work environment.”

Bogdan Hantau
Senior Director, Norlys



Norlys is Denmark's largest integrated energy and telecommunications group, a cooperative with more than 800,000 member-owners and approximately 4,600 employees. Formed through the merger of Eniig and SE in 2020, Norlys serves over 1.7 million customers with services including electricity, broadband, TV, EV charging and mobile.

As part of its digital transformation, Norlys has consolidated multiple billing and network systems and owns the country's largest fiber infrastructure (Sinal), while also managing a significant portion of the electricity grid through subsidiary N1.

In April 2024, Norlys acquired Telia Denmark, gaining ~1.5 million mobile subscribers and a 50% share in Denmark's mobile network infrastructure. This move expanded Norlys' position in the mobile market, aligning with its ambition to lead in quality, digital access and sustainability across energy and telecom.

OBJECTIVE

Differentiate on quality in a shared RAN environment

Norlys aimed to deliver Denmark's best mobile experience by focusing on improving overall customer satisfaction and perceived service quality. This ambition was challenged by the fact that Norlys shares its radio access network (RAN) with another provider, operating a Multi-Operator Core Network (MOCN) model.

In shared infrastructure setups, achieving service differentiation is difficult. Norlys needed to outperform competitors using the same physical assets. The operator sought a partner capable of delivering optimization beyond the RAN, spanning core, transport and service-quality visibility.

Crucially, Norlys framed churn reduction and subscriber loyalty as core business

objectives, linking quality leadership to improved Net Promoter Score (NPS) and the conditions for ARPU growth. Additional pain points included rising customer expectations, an initial lack of real-time insight into subscriber experience and increasing technology complexity coupled with limited internal resources for specialized optimization.

After successful collaboration over prior years, Nokia was selected based on trust, expertise and proven RAN optimization credentials. The partnership aimed to elevate subscriber-experienced quality and translate technical excellence into measurable customer satisfaction improvements.

SOLUTION

Best end-to-end network performance, powered by Nokia services

We deployed a two-pronged approach combining our Network Planning & Optimization and Managed End-to-End & Performance Management Services to enable end-to-end service excellence, focusing on customer experience and satisfaction metrics.

Our experts employed advanced tools and methodologies to calibrate and tune the shared RAN environment for optimal signal quality, handover performance, capacity balance and coverage consistency, allowing Norlys to outperform in a shared infrastructure setup. Simultaneously, the Managed Performance Services layer provided continuous end-to-end monitoring, active testing and analytical feedback

loops that extended beyond the radio layer into the core and transport domains.

This directly addressed Norlys' earlier visibility gap by creating subscriber-centric, end-to-end observability and faster detection-correction cycles tied to business KPIs like churn and NPS.

This integrated service model was valued by Norlys as truly end-to-end, combining RAN-level engineering with service experience visibility and performance-based refinement. Our processes had been refined over multiple years of collaboration, enabling fast iteration and deep alignment with Norlys' quality objectives. Through tight co-operation

between Norlys engineers and Nokia specialists, the partnership could rapidly identify performance gaps, implement corrective adjustments and monitor impact, ensuring sustained improvement and benchmark readiness.

A key differentiator was our multi-technology optimization capability across RAN, core and transport, augmented by our leadership and active contributions to industry standards. We also actively contribute to global standardization bodies such as 3GPP, ETSI and the GSMA, ensuring that the technologies deployed with Norlys align with industry standards and meet key regulatory and compliance benchmarks.

RESULTS

Improved customer satisfaction and network quality leadership

Through this network optimization project, Norlys achieved measurable improvements in network quality and customer satisfaction, reinforcing its reputation for service excellence, especially given the shared RAN environment.

Thanks to the quality leadership, Norlys enhanced its brand image, positioning itself as Denmark's mobile operator with service excellence as a key differentiator. This quality perception helps reduce subscriber churn, improve NPS and supports long-term customer

loyalty. Stronger loyalty and improved experience also create the conditions for ARPU growth and more effective retention marketing.

This case study reflects the strength of the long-standing partnership between Nokia and Norlys, built on mutual trust, shared goals and a commitment to delivering exceptional mobile experiences to Danish subscribers. The collaboration enabled agility, faster innovation cycles and sustained customer satisfaction improvement.

A trusted partner for long-term differentiation and growth

Norlys' success highlights what's possible in shared RAN environments when operators invest in full-stack optimization and service-level visibility. In a world of spectrum scarcity, infrastructure sharing and cost pressures, being able to independently assure quality is becoming a critical differentiator.

As part of ongoing modernization efforts, Norlys is also preparing for the retirement of legacy GSM infrastructure, enabling spectrum re-farming and paving the way for full adoption of VoNR and 5G SA services.

This case demonstrates how end-to-end services, combining network analytics, optimization and managed assurance, can

unlock subscriber satisfaction even when physical assets are shared. This case demonstrates how end-to-end services, combining network analytics, optimization and managed assurance, can unlock higher customer satisfaction even when physical assets are shared.

Beyond Norlys, this approach supports global trends toward performance-based differentiation, especially as operators transition to technologies like Standalone 5G, VoNR and network slicing, where maintaining consistency across domains becomes essential.

For more information, visit our Radio Access Networks webpage.



Nokia OYJ
Karakoari 7
02610 Espoo
Finland

Tel. +358 (0) 10 44 88 000

CID: 215121

nokia.com



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.