CUSTOMER CASE

TERMA
ALLIES IN INNOVATION

TERMA CONNECT STREAMLINES RADAR MONITORING AT OSLO GARDERMOEN AIRPORT

AVINOR AND OSLO GARDERMOEN AIRPORT SIMPLIFY AND UNIFY MONITORING OF RADAR OPERATIONS WITH TERMA CONNECT. A SOLUTION THAT COLLECTS EVENTS AND MAINTENANCE DATA FROM MULTIPLE RADARS ACROSS THE AIRFIELD.

The clock strikes 8 AM at Oslo Gardermoen Airport (OSL). As the morning fog begins to lift, Thomas Østvang and his team settles in, ready to dive into the daily ritual of checking the airport's critical radar systems. But today is different. Instead of spending the next half hour carefully logging into the Radar Service Tool (RST) of all the radars, one-by-one, he opens a single portal on his computer screen: Terma Connect.

"Until recently, we only had the RST software. But since we have three sites located at Gardermoen with dual transceivers, it's not always easy to get the full picture," Østvang explains and sets the stage for why Terma Connect has become a critical component in keeping the airport operational.

In essence, the Terma Connect portal collects radar operating data from all radars in multiple locations and presents it in a single, easy-to-use platform. With Connect service, you can monitor your system's health without interrupting operations, generate automatic events and operations reports, and get notified when pro-active maintenance is required.

Radar Coverage is the Lifeblood of OSL

As the person responsible for radar systems and surface surveillance at Norway's busiest airport, Østvang knows all too well the challenges of managing multiple data streams in a high-stakes environment.

At Gardermoen, the main airport in Norway, the reliance on Surface Movement Radars (SMR) systems is critical, especially given Oslo's frequent periods of low visibility.

"Without the radars, we cannot use the runways in low-visibility conditions," Østvang emphasizes. With two runways handling a heavy load of traffic, even a single radar failure can have significant operational and economic consequences.

"Terma Connect allows us to keep an overview of our radars and allows us to run maintenance and handle potential incidents before they happen. This keeps the airport running."

The Solution: A Digital Control Tower with Terma Connect

Evidently, constant radar uptime is imperative for Østvang and his team. And while incidents are rare, diligent monitoring is a must. With the introduction of Terma Connect, monitoring and managing of the airport's radar systems has been transformed.

"***With the Connect portal, it's much easier for us to see everything at once,***" Østvang says and explains how the Terma Connect software collects data from all sensors into one platform, and provides him and his team a comprehensive analysis and a holistic view of the airport's surveillance capabilities.

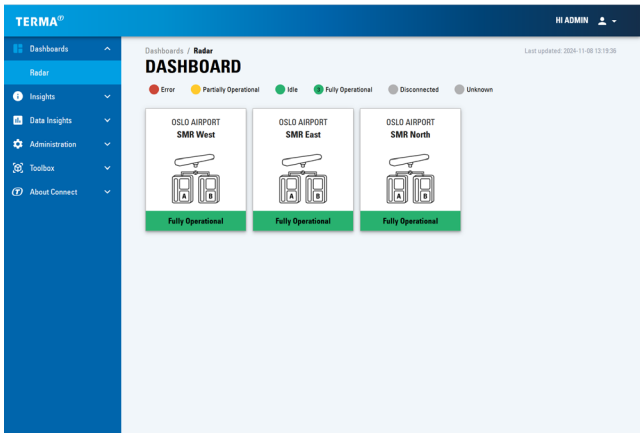
"***We are using the Terma Connect here to get the full overview, together with the RST software of course,***" Østvang explains, highlighting how the new system complements existing tools by making operations much more efficient and precise.

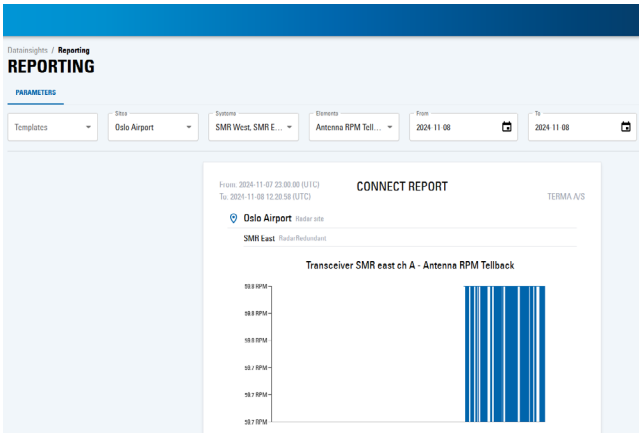
Spotting the Needle in the Haystack

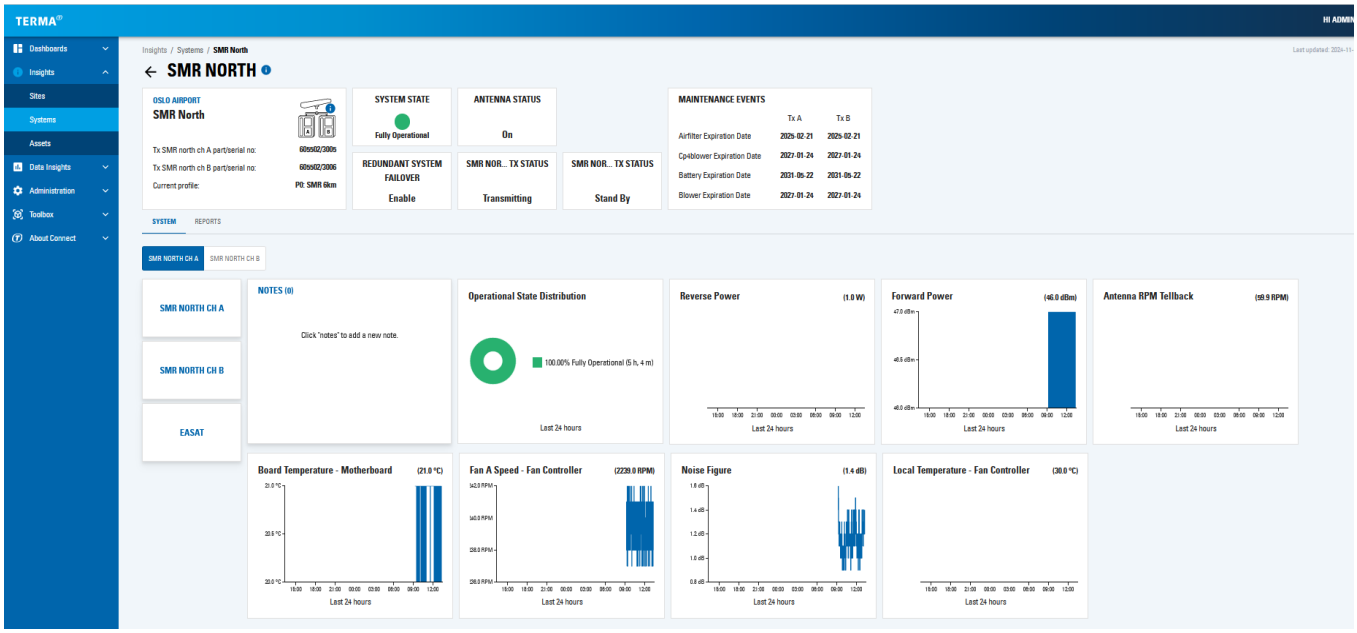
The impact of Terma Connect on daily operations has been significant. What once took up to 30 minutes of meticulous checking now requires just a few clicks.

"***Now with the Terma Connect service, it's three, four clicks and you see the whole log right away. So, we save a lot of time,***" Østvang notes, and explains how the solution not only saves time but also raises monitoring quality because the traditional radar monitoring analysis held the risk of overlooking critical events.

That risk is eliminated with Terma Connect, because data is flagged and archived automatically, which allows operators to revisit previous events and the operational history to run additional analysis. This increased visibility of system events recently allowed Østvang to identify a potential issue with one of the solid-state transceivers, enabling proactive maintenance before a critical failure could occur.







In an environment where uptime is imperative – with strict requirements of 99.98% availability – such early detection is invaluable.

The Future of Oslo Airport's Digital Transformation

The journey with Terma Connect is just beginning for Oslo Airport. Looking to the future, Østvang envisions expanding the capabilities of Terma Connect.

As Oslo Airport continues to grow and adapt, the possibility of implementing Terma Connect at other Norwegian airports is on the horizon for Avinor, who also operates the largest "remote towers" in the world where air navigation services of several airports across Norway are brought together at a single location.

With plans for radar upgrades at Bergen Airport and potential new installations at Trondheim, the stage is set for a wider adoption of Terma Connect and for innovating the radar monitoring system altogether.

As Østvang puts it, ***"At the airports, there are always things that will change, and we need our systems and solutions to change with them."***

About Avinor and Oslo Airport

Avinor is a state-owned company operating 43 of Norway's civil airports. Oslo Gardermoen Airport is the main international airport serving Oslo and the busiest airport in Norway. It handles over 28 million passengers annually and operates with two runways, relying heavily on advanced radar systems for safe and efficient operations, especially during periods of low visibility.