



CASE STUDY

North Sea Promenade Transformed with Seamless, High-Speed Wi-Fi

“Das Deck” Norddeich is one of the largest tourism infrastructure projects on Germany’s North Sea coast. Located in Lower Saxony, the newly developed promenade attracts thousands of visitors each year with modern amenities, scenic views, and family-friendly attractions. The town of Norddeich wanted to ensure guests could enjoy reliable connectivity for sharing experiences, working remotely, or staying connected — even while on the beach.

To deliver that vision, Norddeich partnered with long-time IT integrator OMG, a regional expert in network and telecommunications solutions since 1997.



The objective: deploy a secure, weather-resilient, high-performance Wi-Fi network that delivers an exceptional experience for thousands of simultaneous users across a large open-air environment.



“With Cambium’s Wi-Fi 6 solution and cnMaestro, we were able to deploy a resilient and high-performance wireless infrastructure for one of the busiest promenades in the region. Our team is ready to support future expansions across Norddeich.”

— Project Manager, OMG IT Systemhaus

“We’re proud that visitors can now enjoy fast and stable Wi-Fi throughout the promenade — in any weather. It’s not just a tech upgrade; it’s part of the Norddeich experience.”

— City of Norddeich Representative

The Challenge

Visitors expect free and fast internet access — even in outdoor spaces. For Norddeich, delivering on this expectation was no small task. The promenade spans a vast area along the shoreline, with heavy foot traffic and challenging weather conditions.

The existing setup and legacy Wi-Fi standard were no longer sufficient to support:

- High client density, especially during peak tourist seasons
- Long-range, outdoor coverage
- Seamless roaming for users on the move
- Simple central management for multiple locations

OMG needed a solution that could handle extreme coastal weather, provide fast speeds to hundreds of users per access point, and be easily managed centrally via an on-premises platform.

The Solution

Cambium Networks and OMG delivered a robust, scalable network infrastructure with Wi-Fi 6 and 60 GHz wireless backhaul to support high user density and extended outdoor coverage.

Technology deployed:

- V5000 Distribution Node with two 140° sectors
- Multiple V2000 60 GHz nodes with PoE power to access points
- XV2-2T0 Wi-Fi 6 outdoor access point with 360° antenna
- XV2-23T Wi-Fi 6 outdoor access point (supports up to 256 clients per AP)
- XV2-2X Wi-Fi 6 indoor access points for the guest house and restaurant areas
- XV2-21X Wi-Fi 6 indoor ceiling-mount APs for indoor coverage
- cnMaestro™ On-Premises centralized network management system

The network was planned and deployed within 30 days, thanks to the collaborative work between OMG and Cambium Networks.

Field Results

The outcome? A high-capacity, weather-resistant network that delivers excellent user experiences.

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- Gigabit Wireless Backhaul: The V5000 and V2000 60 GHz radios created a reliable backbone without the cost or delay of trenching fiber.
- Exceptional Client Capacity: The XV2 series APs provide 360° and sector coverage, supporting up to 512 clients per access point with Wi-Fi 6 efficiency.
- Roaming Without Interruptions: Seamless client hand-off between APs ensures users stay connected as they move through the promenade.
- Resilient Infrastructure: Purpose-built outdoor APs withstand harsh North Sea conditions, from salt air to temperature swings.
- Future Expansion Ready: The cnMaestro on-premises system is designed to manage multiple locations, enabling scalable network growth.

Business Value

The switch to Cambium Networks brought clear operational advantages:

- 60% increase in user connection capacity vs. the previous system
- Improved guest satisfaction as evidenced by increased online engagement and social media check-ins
- Reduced network downtime and manual intervention through centralized management
- Lower Total Cost of Ownership (TCO) due to fewer access points needed for large-area coverage
- Rapid deployment timeline enabled by microwave backhaul and PoE-powered APs

The Power of Cambium ONE Network

At the heart of this project is Cambium's ONE Network, which brings together Wi-Fi, switching, SD-WAN, and fixed wireless into a single platform managed through cnMaestro. This convergence offers:

- One secure, converged IT experience
- Intelligent automation to reduce manual effort
- Application-aware performance optimization
- Single-pane management across switching, Wi-Fi, SD-WAN, and fixed wireless

With ONE Network, Norddeich can expand its infrastructure with less complexity, while OMG can monitor and troubleshoot the environment in real time from a single dashboard.

About Cambium Networks

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences, and device connectivity, with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

