

AtoN House Nordic

Scandinavia's AtoN Expert Center



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Complete AtoN Solutions in Nordic Waters

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We are your full-service AtoN Experts

AtoN House Nordic is a dedicated coordination hub created **to support ports, authorities and contractors across Scandinavia.**

We bring together the region's most reliable suppliers, proven technologies and field expertise to make AtoN projects clearer, safer and easier to manage.

Our Mission

To strengthen maritime navigation in Nordic waters by connecting the right experts, equipment and knowledge in one place.

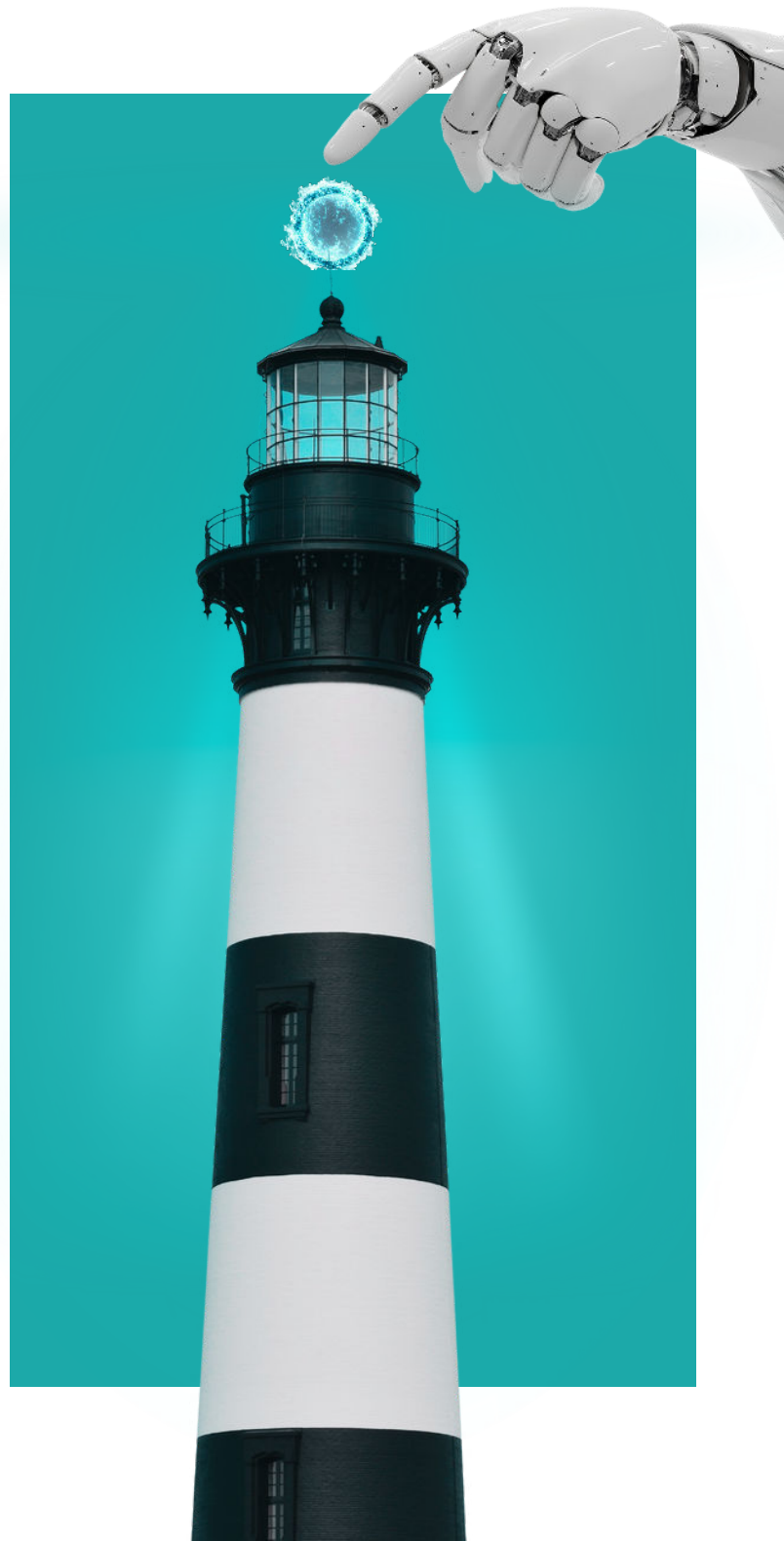
What Defines Us

- » **Coordination** – Independent coordination between ports and suppliers
- » **Nordic Expertise** – Strong understanding of Nordic maritime conditions
- » **Field Experience** – Consistent guidance backed by practical field experience
- » **Knowledge Hub** – A single hub for trusted AtoN knowledge in Scandinavia

Our Focus

Helping ports and coastal authorities make informed decisions and build AtoN systems that are stable, safe and future-ready for decades that come.

Know what's happening.
Act when needed.



Scandinavia's AtoN Expert Center

We take care of everything from design, authority approval, planning, delivery, installation and long-term monitoring with full technical support and close coordination every step of the way.

Project Design & Specifications

We help define navigation needs, propose layouts and select the right equipment, all aligned with IALA standards. This includes a full review of the site, technical specifications, and the documentation needed to ensure a correct and safe AtoN setup.

Installation & Configuration

We provide support throughout the installation process, including masts, cabling, solar or power grids, and on-site device configuration. Our guidance helps contractors complete each AtoN installation correctly and prepares the system for long-term use.

Remote Control & Maintenance

Using EMIKO and IoT monitoring tools, we enable real-time alerts, system status updates and usage reporting. These tools help ports maintain oversight of their AtoN equipment and plan maintenance activities with confidence.

Support & Advisory

From the first project discussions to final activation, we offer technical guidance to engineers and contractors. Our role is to ensure compliance with AtoN requirements and help build reliable, long-lasting systems suitable for Nordic conditions.



Smart Remote Control for AtoN Infrastructure

AtoN sites in the North Atlantic face extreme weather, long distances, and limited accessibility. EMIKO provides a modern and reliable way to monitor and control equipment remotely – helping authorities, ports, and lighthouse operators maintain safe navigation at all times.

Everything Connected in One Platform

EMIKO brings all AtoN equipment into a single, unified dashboard – giving operators full visibility, real-time alerts, and the ability to react instantly when conditions change.

What You Can Monitor

Sector lights and long-range LED lanterns	Radar beacons (RACON) and AIS AtoN	Aviation Warning Lights (AWL)
Solar output and battery status	UPS capacity and remaining runtime	Environmental sensors and system alarms

Why it matters

In remote areas such as Iceland, Greenland and the Faroe Islands, inspections can be time-consuming and weather dependent. EMIKO reduces the need for physical visits and provides accurate, real-time data even during difficult sea conditions and long periods with limited access.

By detecting faults remotely, EMIKO helps avoid unnecessary service trips and reduces maintenance costs. If a light or beacon fails, teams are notified immediately, supporting safe navigation and faster corrective action.

Real-Time Alarms for Critical Situations

EMIKO automatically alerts operators when equipment performance drops or a component fails, enabling fast and informed decisions.

Alerts can be delivered via SMS, email, push notifications or API integrations.

Alarm types include:

- Lantern or beacon failure
- Low battery / no charging
- Solar power disruption
- UPS capacity warnings
- Communication loss
- AWL light failure
- Racon offline
- Intrusion or unauthorized access



Continuous Monitoring Without Interruption

EMIKO maintains a constant flow of status data, relying on redundant GSM links and lightweight communication to keep system information continuously updated.

It ensures:

- Continuous status reporting
- Logged data for audits and documentation
- Centralized data overview
- Improved lifecycle management



Trusted Partner of Iceland's AtoN Authority



Vegagerðin, Iceland's lighthouse authority, chose Vikingegaarden to deliver a complete AtoN solution with masts, backup power and EMIKO remote monitoring. This setup keeps systems running even during storms, winter darkness and periods with limited access.

"EMIKO gives us a clear overview of our AtoN equipment and reduces the need for on-site inspections. The complete solution simplifies responsibility and supports long-term, secure operation of our navigational marks in Icelandic waters." – **Greipur Gísli Sigurðsson, Vegagerðin**

Tideland Signal Long-Term Partner



With more than 60 years of experience, Tideland Signal develops marine lanterns and racons used in ports, harbors and offshore structures around the world.

Many of their key products can be fully integrated with EMIKO, giving operators both proven equipment and modern remote monitoring.

- ✓ Over six decades of focused AtoN expertise in use worldwide;
- ✓ Products prepared for integration with EMIKO for status, alarms and control;
- ✓ Long service life and low maintenance design for demanding sites;
- ✓ Wide range of LED lanterns and racons for ports, fairways and offshore assets;



Nova-65 LED Lantern

Compact omnidirectional LED marine lantern with 5–30° vertical divergence, suitable for buoys, beacons and fixed structures in ports and offshore areas.

Low power consumption and robust design for long service life in demanding marine environments.



Seabeacon 2 System 6

Marine racon with over 30 years of proven use, available in X-band only, X+S band and X+S band dual polarised versions. Provides clear and consistent radar responses for busy shipping lanes and offshore installations.

Well suited for busy shipping lanes and offshore installations where reliable radar marking is critical.

MSM - Innovative AtoN Partner



MSM is a modern AtoN manufacturer focused on the design and production of marine and waterway aids to navigation.

Their portfolio includes advanced solar lanterns and high-precision sector lights, and many key products can be fully integrated with EMIKO for monitoring and control.

- ✓ Strong focus on energy-efficient LED and solar technology
- ✓ High-precision sector lights for demanding approaches
- ✓ Product range covering buoys, beacons, ports and fairways
- ✓ Full EMIKO integration available for status, alarms and remote control



MCL 360 Solar Lantern

Self-contained solar marine lantern designed for high energy efficiency and light output, with ranges up to 11 nautical miles.

Ideal for buoys and fixed AtoN where long autonomy and minimal maintenance are important.



MBL 400S LED Sector Light

Omnidirectional LED sector light with 0.5° sector accuracy and ranges up to 12 nautical miles, suitable for precise approaches and channel marking.

Provides sharp sector boundaries for safe navigation in narrow or sensitive fairways.

Orga – Aviation and Helideck Marking



Orga designs and manufactures aviation obstruction and helideck lighting for offshore and onshore structures.

Since 1973, the company has supplied marking systems that help protect people, assets and the environment around tall structures and landing areas.

- ✓ Specialist in aviation warning lights for offshore platforms, wind farms and tall AtoN structures, with solutions proven in daily operation.
- ✓ Explosion-proof designs certified for use in hazardous and marine environments, helping to protect both equipment and maintenance personnel.
- ✓ Solutions for offshore and onshore obstruction marking schemes, adaptable to different tower heights, layouts and regulatory requirements.
- ✓ Systems designed to meet relevant ICAO and CAP437 lighting requirements, supporting safe aircraft operations around tall coastal structures.
- ✓ LED technology with low power consumption and long service life, reducing energy use and the need for frequent replacements.
- ✓ Complete systems including power supplies, controllers and accessories, ensuring that aviation warning setups are delivered as a coherent package.
- ✓ Modular product range that allows step-by-step upgrades, from single obstruction lights to full multi-level aviation warning systems.



L550-xxx-G (AWL)

Medium-intensity obstacle light for day and night marking of aviation hazards. White flashing by day, with white and/or red/infrared flashing or steady light at night.

Well suited for towers, platforms and tall AtoN structures where clear visibility to pilots is required.

Daniamant – Marker Light Solutions



Daniamant develops marker and strobe lights to improve visibility and safety at sea, especially in low-light conditions. Their products are used to mark critical points, structures and hazardous areas.

The marker light range combines robust construction with flexible settings, making it easy to adjust intensity, colour and flash character to each application.

- ✓ Complete range from low to high intensity
- ✓ Available in white, yellow, red & green LED
- ✓ Large vertical divergence for good visibility at different viewing angles
- ✓ Supports IALA flash characters and synchronization between units



ML-300 Marker Light Series

High-intensity LED marker lights configurable from 5 to 70 cd, with up to 40° vertical divergence. Powered by 10–27 VDC, available in four colours and supporting synchronization and all IALA flash characters.



ML-200 Marker Light Series

Battery-powered LED marker lights (4.5 VDC) for low to medium intensity from 5 to 18 cd. Offered in four colours, with built-in synchronization and support for any IALA flash character.



ML-100 Marker Light Series

Compact low-intensity LED marker lights (5–6 cd) powered by three D-size cells. Available in four colours and supporting synchronization and all IALA flash characters.

AMG Microwave Racon Solutions



AMG Microwave develops radar beacons (racons) for maritime navigation, used by lighthouse and waterway authorities to make AtoN structures and hazards clearly identifiable on ship radar screens.

Hekleo 2 XS

Frequency agile X & S band

Operates on both X (9.3–9.5 GHz) and S (2.9–3.1 GHz) bands so targets appear clearly on standard marine radar systems.

Low power consumption

Electronics are optimised for low energy use, making the racon suitable for solar-powered or limited-supply AtoN sites.

Maintenance-free design

Requires no routine internal servicing under normal conditions, reducing site visits and operational workload.

Ready to strengthen your radar marking?

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Marine-grade housing

IP67 enclosure with an operating range from -40 °C to +70 °C, suitable for exposed coastal and offshore locations in Nordic and Arctic regions.

Second-generation RACON platform

Builds on the proven Hekleo XS design, incorporating updated components and control for modern navigation needs.

FullOceans – Buoys and AtoN Marks



FullOceans is a French manufacturer specialised in navigation buoys, sea marks and floating beacons for maritime, coastal and inland waters.

By combining modern design, rotomoulded polyethylene and foam filling, FullOceans delivers durable buoys with low maintenance needs and good overall value.

- ✓ Rotomoulded, foam-filled construction for high durability
- ✓ IALA colour pigmentation integrated in the plastic, no repainting needed
- ✓ Options from small marker buoys to large navigation and spar buoys
- ✓ Use of recyclable polyethylene and zero heavy metals



Navigation Buoys – FLC Series

Navigation buoys from 1.200 to 3.000 mm in rotomoulded, foam-filled polyethylene, with IALA-compliant colour pigmentation in the plastic, no repainting needed and lower environmental impact.



Marker Buoys – BEA Series

Smaller marker buoys designed for lakes, fjords, small ports and coastal areas. They are rotomoulded in UV-resistant polyethylene, foam filled as standard and can be supplied with mooring kits to extend service life.



Spar Buoys

Slim-line spar buoys for fjords, lakes and coastal areas where waters may freeze. Made in UV-resistant rotomoulded polyethylene, they provide stable marking and can be supplied with mooring kits for extended service life.

EIVA – Virtual Buoy Software



EIVA develops software and equipment for maritime survey, offshore construction and shallow water operations, with more than 45 years of experience in the sector.

As a recognised system integrator, EIVA delivers the NaviSuite family of applications, used for navigation, monitoring and data handling in demanding marine projects.

- ✓ Over 45 years of experience in offshore and shallow water projects
- ✓ NaviSuite platform covering planning, execution and data management
- ✓ Strong focus on software for navigation, monitoring and survey
- ✓ Solutions that support both physical and virtual AtoN concepts

NaviSuite Perio – Virtual Buoys

NaviSuite Perio is a software solution for broadcasting virtual and synthetic AIS AtoN. It allows authorities to deploy and manage virtual buoys without placing physical marks in the water.

Up to 25 Virtual AIS AtoN

Each licence can handle up to 25 virtual or synthetic AIS AtoN objects in the monitored area.

Flexible Buoy Control

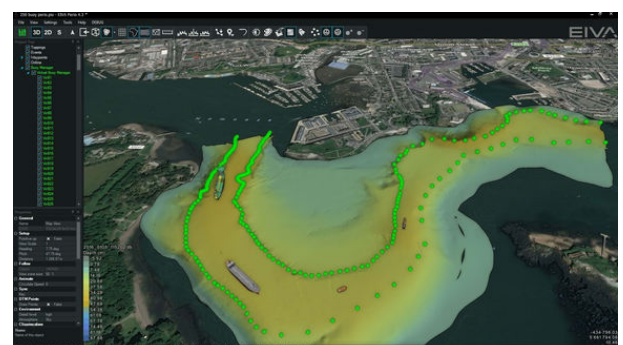
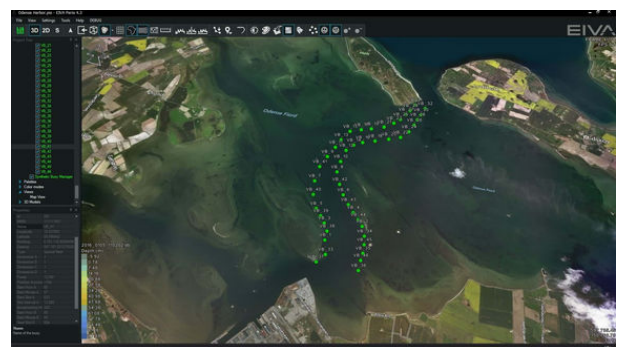
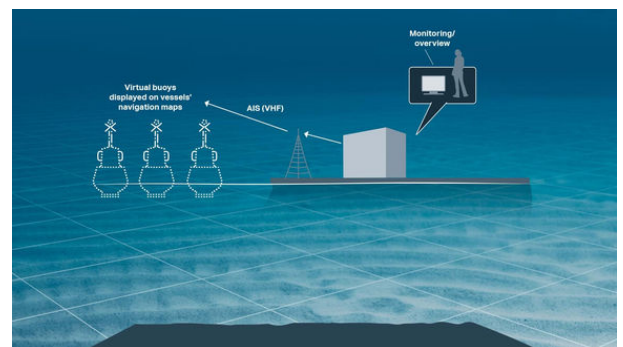
AIS buoys can be switched on or off and repositioned freely in the software as operational needs change.

Multiple Background Layers

Supports background charts, satellite images and survey data to check buoy positions against real depths and conditions.

24/7/365 Support and Updates

Includes helpdesk access around the clock plus ongoing software updates and improvements.



Sabik – Marine AtoN Lighting



Sabik is a global provider of marine aids to navigation, supplying lights and beacons for coasts, ports and offshore structures.

Their product range covers everything from long-range beacons to buoy lanterns and port entry lights, used by authorities and operators worldwide.

- ✓ Extensive range from long-range beacons to buoy lanterns and approach lights
- ✓ Proven installations on coasts, fairways, busy ports and offshore structures
- ✓ Solutions for fixed structures, floating buoys and specialised navigation marks
- ✓ Options for remote monitoring, control and integration with port systems



Omni Directional Beacons

Omni directional beacons from Sabik are designed for long-range marking of fairways, headlands and offshore structures. They provide strong, consistent light output for general sea navigation.



Lead, Sector and Port Entry Lights

Sabik offers a full family of lead lights, sector lights and port entry lights to guide vessels on defined approach lines. These systems support safe entry to ports and narrow channels.



Buoy Lantern Portfolio

Sabik supplies a broad range of buoy lanterns for lateral, cardinal and special marks. The lanterns are suited for both coastal and offshore buoys and can be configured for different ranges and colours as required.

PowerGuard Solution

Self-Sustaining Power Solution for Remote & Critical Operations

Backup Power

PowerGuard's internal battery guarantees uninterrupted operation during power outages, keeping critical systems functional.

Off-Grid Operation

Designed for remote areas, PowerGuard provides efficient power without requiring traditional infrastructure.

Extended Battery Life

With over 48 hours of backup power even without sunlight, PowerGuard ensures reliability in all conditions.

Solar Panel Integration

Get renewable energy by integrating PowerGuard with solar panels, reducing dependence on external power sources.

Ready to Secure
Reliable Energy?

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Applications of PowerGuard

Harbors, Marine Lanters and Lights

Ideal for maritime use, powering navigation lights, buoys, and port infrastructure for enhanced safety and visibility.

Weather Stations

Keeps monitoring systems powered at remote areas, securing uninterrupted data collection for reliable forecasts.

Research Stations | Isolated Facilities

Delivers reliable, grid-free energy for research stations, isolated facilities, and industrial sites.

Endless Applications – Power Anywhere!

With its adaptable design, it can be deployed in a wide range of industries, ensuring energy access wherever you need it.

EMIKO Bridge Control

Lantern & Signal Management for Bridges

Emiko Bridge Control centralises the control of bridge lanterns and traffic signals in one system. Authorities and service partners can switch lights, run predefined patterns and monitor status from a distance, instead of operating each bridge locally.

EMIKO BC

Remote Control via GSM

Bridge Control boxes are connected over GSM, so navigation lights and traffic signals can be operated from shore or a control centre, without visiting the bridge.

Configured Light Patterns

Supports predefined light and signal patterns for passages, closures and special situations, making it easy to apply the correct configuration every time.

Status and Alarm Monitoring

Shows live status for each bridge, including lanterns, traffic signals and power. Alarms are raised when something changes or a fault is detected.

Built for Towns and Authorities

Designed for municipal bridge owners and road authorities. Operation can be shared between owners and service partners such as SH Group, with clear roles and user accounts.

Simple Installation and Expansion

The control box is installed on the bridge and links directly into existing signal wiring. Additional bridges can be added step by step and managed from the same Emiko account.



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Vikingegaarden

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We unite leading suppliers, technical expertise and practical experience to provide complete AtoN solutions in Nordic waters.

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