

Securing the Open Seas

How International Seaways Strengthened Maritime Cybersecurity with Gradient Cyber's MXDR

The Client

International Seaways is one of the world's largest tanker companies, providing energy transportation services for crude oil and petroleum products globally. With nearly 80 large ocean-going vessels, their mission is to provide safe and efficient transportation while maintaining a strong security posture in an industry with increasing digital threats.

Headquarters

New York City, NY

Industry

Maritime Transportation

Company Size

~80 vessels, global fleet operations

Geographic Reach

Worldwide

Why INSW came to us

Maritime cybersecurity presents unique challenges—ships operate in remote locations, rely on evolving digital infrastructure, and have minimal onboard IT staff. International Seaways needed a solution that would provide visibility into their shipboard networks, detect anomalies early, and ensure regulatory compliance without overwhelming their IT team.

Key Challenges

Increased vulnerability to cyber attacks

Delayed Incident Response

Compliance & Regulatory Risks

Potential Operational Disruptions

We needed a way to see what was happening on our ships in real time, without having IT staff onboard. Gradient Cyber's MXDR solution gave us the visibility and early detection we lacked, preventing potential breaches before they escalated.

Amit Basu

Vice President, CIO & CISO, INSW



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The Challenge

As maritime operations become more digitized, the industry faces growing cybersecurity threats. Ships now depend on broadband connectivity for IT and OT systems, vendor access, and even crew internet usage—all sharing the same network pipe.

Without dedicated IT personnel onboard, International Seaways' shore-side teams had limited visibility into potential threats. A cyber incident on a vessel could go undetected for weeks, increasing the risk of operational disruption, compliance violations, and even the potential for cyber-piracy or geopolitical attacks.

The Solution

International Seaways selected Gradient Cyber's **Managed Extended Detection and Response (MXDR)** after a rigorous proof-of-value process. The deciding factor was our **unified XDR platform**, which provided much needed visibility into all shipboard networks from a single interface, something competing solutions lacked.

By deploying a lightweight monitoring tool on each vessel, Gradient Cyber's MXDR platform continuously analyzed network behavior using AI and machine learning, detecting anomalies and providing **early warnings before threats could escalate**.

In collaboration with our **in-house Security Operations Center (SOC)**, International Seaways' ship managers were able to respond to alerts promptly, minimizing risk and ensuring compliance with evolving maritime cybersecurity regulations.

Key Features of Our Managed XDR Solution

Advanced Network Monitoring

Detects anomalies in shipboard traffic in near real-time

Unified Fleet-Wide Security Visibility

A single, transparent dashboard provides key threat insights across all ships

24/7 SOC Support

"Always on" expert-led threat investigation and response

Regulatory Compliance Reporting

Ensures adherence to IMO and other stringent maritime standards

The Results

With Gradient Cyber's MXDR, INSW was able to:

🎯 Prevent Major Onboard Network Breaches

Early detection allowed IT personnel to mitigate threats before they escalated, even before traditional antivirus tools flagged them

🎯 Enhance Network Visibility into Anomalies

Provided ship managers with insights into onboard network activity that were previously unavailable

🎯 Improve compliance & reporting

MXDR simplified adherence to IMO cybersecurity regulations with automated compliance reporting

🎯 Reduce IT Burden, MTTD and MTTR

Freed up shore-side IT teams from manual log analysis and reactive troubleshooting, allowing them to respond faster and focus on strategic initiatives

The Long-Term Value

International Seaways continues to rely on Gradient Cyber's MXDR solution as it delivers **peace of mind in an unpredictable environment**. The ability to **detect and respond to threats in near real-time** has strengthened their security posture without requiring additional onboard resources.

With maritime cybersecurity risks evolving—whether from **geopolitical threats, cyber-piracy, or insider risks**—International Seaways values Gradient Cyber as a **long-term partner**, ensuring their fleet remains secure as new challenges emerge.

About Gradient Cyber

Gradient Cyber provides **Managed Extended Detection and Response (MXDR) solutions tailored for mid-market organizations**. Combining AI-powered analytics with human expertise, we deliver **24/7 threat detection** and response across networks, endpoints, cloud environments, and applications.

Our **technology-agnostic platform integrates seamlessly with existing IT and security stacks** to craft customized security solutions, ensuring early detection and prevention of cyberattacks.

With Gradient Cyber, businesses gain proactive protection against evolving cyber threats, reducing risk and allowing IT teams to focus on growth.

For more more information: [Contact Us](#)