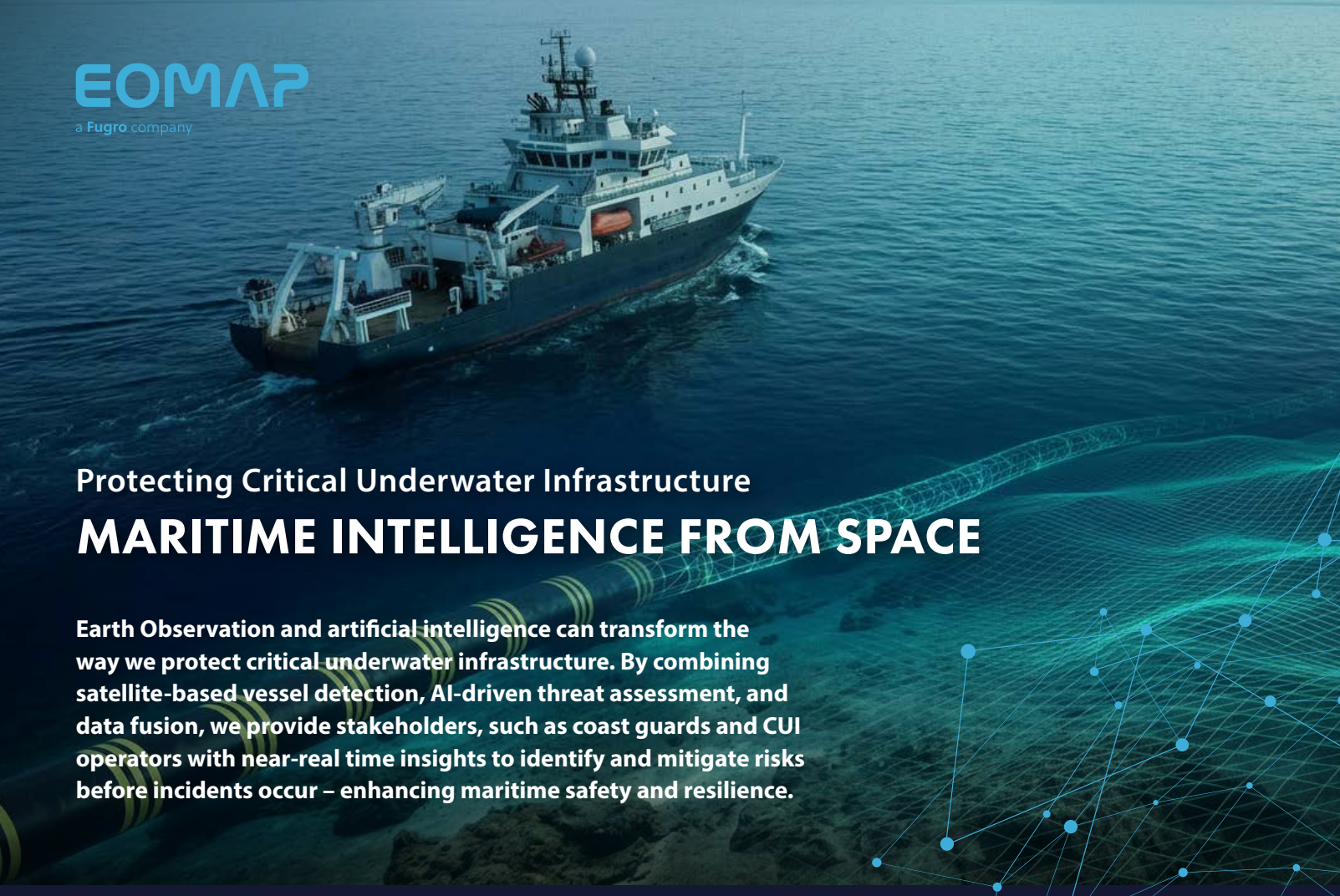
EOMAP
a Fugro company



Protecting Critical Underwater Infrastructure

MARITIME INTELLIGENCE FROM SPACE

Earth Observation and artificial intelligence can transform the way we protect critical underwater infrastructure. By combining satellite-based vessel detection, AI-driven threat assessment, and data fusion, we provide stakeholders, such as coast guards and CUI operators with near-real time insights to identify and mitigate risks before incidents occur – enhancing maritime safety and resilience.

Pipelines and cables form the invisible backbone of modern society. Monitoring them requires fusing satellite data, vessel information, and AI-based analytics to predict and prevent threats – ensuring energy security and communication stability beneath the waves.

CHALLENGE ACCEPTED

+ Thousands of vessels cross the North and Baltic Sea daily
+ Detecting and assessing threats from space is complex
+ Integrating diverse data sources is key to situational awareness
+ Rapid alerts are needed for effective intervention
+ Informing the public in time

WHY BUILD ON EOMAP SERVICES

- **Multi-sensor EO expertise**
  Combining optical with radar data enables reliable and continuous vessel monitoring.
- **AI-driven threat analytics**
  The smart fusion of vessel, AIS, and contextual data facilitates rapid risk scoring.
- **Global coverage and scalability**
  Monitoring solutions are adaptable to any region or infrastructure worldwide.
- **Actionable intelligence**
  Real-time alerts and AI-powered data provide insights for operational decision-making.

Contact us
maritime_intelligence@eomap.com

OUR SOLUTIONS

Satellite-Based Vessel Detection

High-resolution optical and radar data enable continuous monitoring of vessel movements in sensitive maritime zones – day and night, in all weather conditions.

Integrated Threat Assessment

A smart fusion platform combines Earth Observation data with AIS signals, vessel metadata, and contextual sources to calculate dynamic risk levels.

Decision Support & Reporting Tools

Customisable reports and decision-support interfaces help coast guards, navies, and operators prioritise actions and strengthen maritime domain awareness.

Real-Time Alerts & Visualisation

Interactive dashboards and automated alerts provide stakeholders with actionable intelligence to quickly assess and respond to potential threats.

AI-Driven Ship Classification

Advanced algorithms identify ship types and behaviour patterns. This helps to distinguish between regular traffic and potentially suspicious activity near critical infrastructure.

Smart Scheduling of Resources

Automatic planning of surveillance resources, such as anticipating future satellite positions and recordings. for the most suitable and cost-efficient coverage at any time.

FEATURES

Dark Vessel Detection | Correlate AIS information with satellite-based detection and identify vessels with AIS turned off.

Risk assessment | Identify vessels that have ambiguous ownership, behave suspicious, deviate from their route or halt for a vessel to vessel transfer.

Learn more
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