



Blue Shield
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Maritime Security

FACT SHEET #4

MARITIME SECURITY IN THE BALTIC AND NORTH SEAS: LESSONS LEARNED FOR THE ATLANTIC

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I - EXECUTIVE SUMMARY

Portugal's maritime security faces a structural challenge. Its Exclusive Economic Zone (EEZ), one of the largest in Europe, cannot be effectively monitored through traditional, presence-based surveillance alone. Atlantic weather conditions and limited human reach create blind spots that are actively exploited. The Portuguese Navy has reported numerous monitoring operations of Russian ships and submarines transiting the Portuguese EEZ, where enforcement authority is limited. Drug cartels operate purposely built semi-submersibles from Latin America, transiting through Portuguese waters mostly undetected. These developments represent a growing threat to both national security and European border integrity. The Baltic and North Sea countries have developed responses to comparable challenges via public-private cooperation that converts commercial assets into dual-use extensions of surveillance, and shared data environments that multiply the reach of national systems. These models were built for the same problems: vast maritime spaces, low resources, and challenges that exploit specific weaknesses. The following selection of examples provides lessons that could translate directly to an Atlantic-based scenario, where Portugal holds a more direct stake from a maritime perspective.

II - CASE STUDIES

II.1 FINLAND - Gulf of Finland Maritime Surveillance Centre

Announced in January 2026, the Finnish Border Guard is currently establishing a [joint maritime surveillance centre](#) with other Baltic Sea states and the European Commission to protect critical undersea infrastructure in the Gulf of Finland. Preventive measures include seabed sensors and AI-driven real-time traffic analysis. Other Baltic states are expected to establish national equivalent centres, as the architecture is nationally sovereign but interoperable. Data is exchanged through EMSA's [CISE \(Common Information Sharing Environment\)](#), connecting not only states but multiple Finnish domestic authorities: Border Guard, Defence Forces, Transport Agency, and environmental bodies, all within a single situational framework.

Relevance to Portugal: Portugal is a participant in both [MARSUR](#) and CISE. Opportunities range from streamlining information sharing between different Portuguese authorities, to hosting a regional cell that connects data from the Azores, Madeira, and regional partners, able to feed it into the MARSUR/CISE architecture.

II.2 DENMARK - TERMA Coastal Radar Modernisation

In July 2025, the Danish Defence Acquisition and Logistics Organisation (DALO) contracted Danish company Terma A/S to deliver 32 new coastal surveillance radars. The system introduces AI data fusion across all radar sites at the network level instead of individual radar processing, allowing the automated connection of vessel tracking and anomaly detection across the full covered area. This innovation will [improve real-time situational awareness](#) and support operations by delivering intelligently processed data immediately to decision makers. The platform also supports the Vessel Traffic Service (VTS) in the Danish straits.

Relevance to Portugal: Portugal already operates VTS coverage along the mainland coast. Adding AI data fusion onto existing radar and AIS feeds, in partnership with the private sector, could deliver Terma-style situational awareness without buying a new radar fleet, and could be financed through the EU's [SAFE](#) program.

II.3 NORWAY - The INSURE Project

The [INSURE \(Infrastructure and Surveillance using Undersea cable REsources\) project](#), aims to convert existing seabed fiber-optic telecommunication cables into continuous acoustic sensors using Distributed Acoustic Sensing (DAS) technology. AI machine learning filters acoustic activity (anchors, underwater vehicles, etc.), recognizes threats, and the system delivers real-time geo-located alerts to officials. The pilot site is found at Berlevåg in northern Norway, being tested in harsh maritime conditions. The project is a repurposing of existing civilian-infrastructure into sophisticated military-purpose systems and shows that surveillance reach can be expanded without deploying new physical assets at sea.

Relevance to Portugal: Portugal is located on large amounts of transatlantic fiber-optic cables. Applying DAS to a portion of those cables, would create a continuous acoustic sensor across critical Atlantic chokepoints, countering the approaches of, for example, semi-submersibles, at a fraction of the cost of new sensor networks.

II.4 SWEDEN - SAAB Industrial Pivot

SAAB has concentrated its naval capabilities at the Karlskrona shipyard, where they build, among others, [Blekinge-class A26 submarines](#) for the Swedish Navy. SAAB was also [selected by NATO to lead the Allied Underwater Battlespace Mission Network \(AUWB-MN\)](#), delivering interoperability for maritime uncrewed systems across allied navies. The strategic value lies in the pivot itself: a precision manufacturing base redeployed into submarines, sonar, and unmanned underwater systems. SAAB's [AUV62-MR](#), a modular autonomous underwater drone using high-resolution sonar, serves both commercial survey work and military reconnaissance, embodying the dual-use logic.

Relevance to Portugal: Portugal is already a sponsor nation of the AUWB-MN project, providing direct access to NATO's emerging undersea interoperability standard. With over 300,000 vehicles manufactured annually, Portugal's industrial base could be redirected into USV/UUV components. The [NRP D. João II](#) offers an operational platform for Portuguese-made systems, with the [European Defence Fund](#) providing financing pathways to formalise this industrial pivot.

III – CONCLUSION

Portugal faces complex hybrid threats in its maritime security environment, but it also has great potential to drive innovative solutions at a time of great technological advancement. Structural efficiency in governance and jurisdiction is as important for operational capability as surveillance reach, especially in the legal context of the vast Atlantic Ocean. The application of dual-use technology fits the Portuguese context well, given the already existing offshore infrastructure and R&D institutions in the country, turning private sector operators into national security assets for a minimal cost. Lastly, a defence-oriented reorientation of Portugal's vast industrial production capacity would represent both an economic and security opportunity. In the context of rapidly expanding European defence spending and the fundamental shift in military technology towards unmanned and autonomous systems, Portugal can reposition itself as an innovative military industry player.

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