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NATO UNVEILS BALTIC SENTRY: A NEW SECURITY MISSION FOR UNDERSEA PIPELINES AND CABLES

**WRITTEN BY** KATHARINA BRZUSKA

SUPERVISED BY BENJAMIN ROBITAILLE EDITED BY CONLEY AUSTIN

#### Introduction

On the 14th of January 2025, NATO Baltic leaders met in Helsinki for the Summit of Baltic Sea allies, where leaders discussed the growing threats to the critical undersea infrastructure (Steinhauser, 2025). The NATO allies announced the launch of the operation Baltic Sentry which aims to address these vulnerabilities, enhancing security measures to protect undersea communication and energy networks (Mahadzir, 2025). Given the Baltic Sea's strategic importance, both economically and militarily, any disruptions to its infrastructure pose significant risks to regional stability and global markets. The region's sea lanes are essential to Europe's trade and security, and any threats pose serious consequences. Bordered by nine nations, the Baltic Sea is crisscrossed by undersea cables used for electricity and communication (Donguy, 2025). The increased threat of hybrid warfare tactics such as sabotage or interference of the undersea infrastructure shows the critical need for initiatives like the Baltic Sentry (West, 2025). Recent incidents, such as the damage to undersea cables between Estonia and Finland, as well as, Latvia and Sweden highlight the increasing threat posed by state and non-state actors engaging in sabotage (Sytas & Ahlander, 2025). With hybrid warfare tactics on the rise, including cyber-attacks, espionage, and maritime disruptions, NATO and its allies have recognized the urgent need for coordinated defence measures. The Baltic Sentry initiative brings together naval assets, surveillance technology, and multilateral cooperation to deter future threats and safeguard essential maritime routes.

This paper will explore the strategic significance of the Baltic Sea, examining the geopolitical and economic factors that make it a critical battleground. It will also analyse the role of hybrid warfare in infrastructure security, assessing the tactics used to target undersea networks. Furthermore, the discussion will outline the core components of Operation Baltic Sentry, including key assets, operational strategies, and allied coordination efforts. Finally, the paper will assess the broader implications of the operation, evaluating its impact on regional security and NATO's long-term strategic posture.

## 1. Strategic Importance of the Baltic Sea

Since the accession of Finland and Sweden to NATO, discussions on the Baltic Sea's strategic importance have intensified, reinforcing its role in regional security. The Baltic Sea, often referred to as the "NATO lake" has seen increased defence cooperation among its bordering nations, with many celebrating the enhanced security framework this expansion brings (Messmer, 2024). Sweden, which possesses the longest coastline in the Baltic, has an extensive archipelago that creates a unique operational environment, further shaped by the shallow waters of the sea (Wieslander et al., 2023).

While Northern European states such as Poland, Norway, Germany, and the United Kingdom operate submarines, their primary naval focus remains on blue-water operations in the North Atlantic (Wieslander et al., 2023). However, NATO's expanding presence in the Baltic underscores the region's critical role in maritime trade, military operations, and rapid force mobility. Given the Baltic Sea's proximity to major European economies, its security dynamics are central to NATO's strategic objectives. Additionally, the sea hosts an intricate network of undersea infrastructure, including fiber-optic data cables and power transmission lines, which are vital for communication and energy flow between European states (Steinhauser, 2025). Following Russia's invasion of Ukraine, Baltic nations have significantly increased their defence expenditures, recognizing the growing threats to regional stability. Lithuania, for example, has tripled its military budget over the past decade (Cancian et al., 2023). In terms of defence spending, the Baltic states now exceed NATO's 2% GDP target, reflecting their commitment to strengthening military capabilities. Moreover, these nations have reintroduced conscription to further bolster their defensive readiness (Cancian et al., 2023). These strategic measures align with NATO's broader efforts to enhance deterrence, resilience, and security cooperation in the Baltic region.

## 2. Hybrid Warfare in the Context of the Infrastructure Security

The Baltic Sea region has recently faced escalating security threats, with multiple power cables and telecommunications links damaged in recent weeks and months. These incidents have exposed the flaws of undersea infrastructure, raising concerns about potential acts of sabotage. The first major event occurred in September 2022, when explosions damaged the Nord Stream 1 and Nord Stream 2 gas pipelines (Security Council Report, 2024). This was followed by the severing of two undersea cables in mid-November — one connecting Germany to Finland and another linking Lithuania to a Swedish island. While Baltic authorities have yet to identify concrete evidence or suspects, many nations suspect these disruptions are part of a broader hybrid warfare strategy by Russia aimed at destabilizing European nations allied with Ukraine (Wiseman, 2025).

Another notable incident occurred on November 17th and 18th, when two undersea cables in the Baltic Sea were damaged. Investigations traced the event to the Chinese-flagged bulk carrier Yi Peng 3, which allegedly had a Russian captain (Omholt-Jensen, 2024). The vessel's route coincided with the timing of the cable cuts, prompting Danish authorities to detain the ship. However, no formal actions have been taken against Moscow or Beijing, leaving the incident shrouded in ambiguity (Edwards, 2024). This event highlights the increasing complexity of hybrid threats, as state actors may also use third-party proxies to carry out covert operations. NATO's Allied Maritime Command (Marcom) has expressed growing concerns about the vulnerability of Europe's underwater infrastructure. The deputy commander emphasized that the region's network of cables and pipelines was not designed to withstand hybrid warfare tactics employed by Moscow and other NATO adversaries (Bryant, 2024). Supporting these concerns, Maleterre stated, "We know Russians have developed extensive hybrid warfare capabilities under the sea to disrupt the European economy, including targeting internet cables and pipelines. Our entire undersea economy is at risk" (Bryant, 2024, para. 3). NATO officials have stressed the need for enhanced surveillance, military cooperation, and rapid-response measures to counteract these threats.

On December 26th, Finnish authorities detained the Eagle S, a Russian oil tanker suspected of damaging a key power cable and four telecommunications cables by dragging its anchor across the seabed (Lehto & Sytas, 2024). Investigators believe this act was part of a broader pattern of covert Russian operations targeting European infrastructure and political stability (Van Rensbergen, 2025). While Moscow denies involvement, Finnish officials claim to have found evidence on the vessel, including spy equipment (Van Rensbergen, 2025). Swedish Prime Minister Ulf Kristersson echoed these suspicions, stating, "It is highly unlikely that a ship could accidentally drag an anchor with 300 meters of chain for over one hundred kilometres without noticing the damage caused" (Mahadzir, 2025b).

Further incidents have heightened tensions. On January 10th, a ship carrying 99,000 tons of oil was secured by three German assistance vessels to prevent a potential environmental disaster. German Foreign Minister Annalena Baerbock commented that Russia is "endangering European security not only through its war of aggression against Ukraine but also with decrepit tankers" (Donguy, 2025). Then, on January 26th, undersea cables between Latvia and Sweden were severed, sparking suspicions of another act of sabotage linked to Russian interference (Standish, 2025).

Charlie Edwards, a senior advisor at the International Institute for Strategic Studies (IISS), summarised the situation: "Through all these actions, Russia is intensifying its hybrid war in Europe, multiplying operations on an ever-shifting front" (Donguy, 2025, para. 21). In response, Latvian Prime Minister Evika Silina called for close cooperation with NATO and regional partners to investigate the latest incident. She pointed to "most likely external damage" and dispatched a patrol boat to inspect ships in the area (Sytas & Ahlander, 2025, para. 6). Two vessels, including the Malta-flagged bulk carrier Vezhen, were identified for further investigation (Sytas & Ahlander, 2025). However, with thousands of vessels traversing the Baltic Sea at any given time, pinpointing responsibility remains a challenge. The Vezhen, escorted to Swedish waters by a coastguard ship, anchored outside the Swedish naval base in Karlskrona, but its operator, Navigation Maritime Bulgare, has yet to comment on the

#### allegations (Sytas & Ahlander, 2025).

The growing pattern of attacks showcases the pressing need for enhanced security measures in the Baltic Sea. NATO has already initiated expanded maritime patrols, enhanced data-sharing agreements, and the development of undersea monitoring systems to detect and deter future threats. The Baltic states have also called for greater investment in autonomous surveillance technology, including unmanned underwater drones capable of monitoring key undersea routes.

## Shadow fleet

The damage to undersea energy and communication lines in the Baltic Sea has been increasingly linked to Russia's so-called "shadow fleet" - a network of aging tankers reportedly used to circumvent international sanctions by secretly transporting Russian oil and gas (Braw, 2024). This fleet not only undermines global sanctions but also poses significant maritime and environmental risks, particularly in the Baltic Sea region (TVPWORLD, 2025).

Undersea infrastructure, including submarine cables and pipelines, forms the backbone of the global economy and communication networks. These cables, primarily made of fiber optics, carry over 95% of global internet traffic and play a critical role in transmitting energy, gas, and electricity across continents (Army Recognition, 2025). Despite their importance, they are increasingly vulnerable to natural wear, accidental damage, and, more recently, deliberate acts of sabotage. In today's interconnected digital economy, disruptions to these cables can have catastrophic consequences, freezing essential services and crippling economies (Army Recognition, 2025).

The recent incidents have drawn attention to Moscow's use of the "shadow fleet." The term "shadow fleet" or "dark fleet" generally refers to vessels engaged in illegal operations to evade sanctions, bypass safety and environmental regulations, avoid insurance costs, or participate in other illicit activities, according to the International Maritime Organization (IMO) (Caprile & Leclerc, 2024). The Kyiv School of Economics (KSE) offers a broader definition to better capture the risks posed by these vessels. Under this framework, a "shadow fleet" comprises ships that meet two key criteria: first, they lack Western insurance, relying instead on providers outside the International Group of Protection and Indemnity Clubs; and second, they are owned by companies from non-EU/G7 countries (European Parliament, 2024).

Experts suggest that Moscow often employs low-level operatives to carry out these operations, making it difficult to establish direct ties to the Kremlin (Van Rensbergen, 2025).

Additionally, Russia's shadow fleet operates under flags of convenience and complex ownership structures, further obscuring accountability. As Bart Schuurman, a professor of Terrorism and Political Violence at the Institute of Security and Global Affairs, noted, "The Russians don't leave a note" (Van Rensbergen, 2025, para. 12).

Estonian Defence Minister Hanno Pevkur has accused Russia of acquiring aging tankers to evade Western restrictions on the sale of Russian oil. "We are taking this as it is, and we know that these vessels, when we talk about the shadow fleet, are a threat - not only from a security perspective but, first and foremost, from an environmental one," Pevkur stated, emphasizing the need to address Russia's hybrid warfare tactics (Robertson & Dean, 2025, para. 11).

# 3. Core Components of Baltic Sentry

At present, the details of the NATO mission are not yet set in stone. Initially, an idea proposed by Poland involved a permanent navy policing for the protection of the critical infrastructure in the Baltic Sea. Instead, the allied nations agreed to an enhanced operation limited to 90 days (Szymański, 2025). Additionally, the number of ships currently reported by media counts to approximately ten vessels (Szymański, 2025). This might pose some limitations regarding readiness for the mission. The Baltic Sentry will involve the NATO Standing Ship Group (SNMG1), which has directed a Dutch missile frigate, and the NATO standings Mine Defence Force Team (SNMCMG1) with a German mine destroyer and a Dutch hydrographic ship. The Zr. Ms Luymes, a Dutch command ship, the minehunters Zr. Ms Schiedam, the French FS Croix du Sud, German FGS Datteln, and Belgium's minehunters Lobelia forming the force patrolling the Baltic Sea (ArmyRecognition, 2025b).

Additionally, the mission aims to include aerial maritime surveillance and the use of underwater drones (Olech, 2025). The Baltic Sentry is being coordinated by the Commander Task Force-Baltic (CTF Baltic), a naval headquarters established in Rostock, Germany, in October 2024, and supported by Operation Nordic Warden, launched at the start of this year. Furthermore, the mission is carried out by the Joint Expeditionary Force (JEF) led by the United Kingdom. This operation involves an advanced system for tracking shadow fleet vessels (Szymański, 2025).

The Allied Command Operation (ACO) was established to take control of the operation and logistics of the initiative (Bahtić, 2025). It was assigned for the planning and execution of all NATO operations regarding the Baltic Sentry in the Baltic Sea. In partnership with the Allied Joint Force Command Brunssum (JFCBS) and Allied Maritime Command (MARCOM) (NATO, 2025). In addition, the NATO Maritime Centre for Security of Critical Underwater

Infrastructure (NMSCUI), a network and knowledge centre based at MARCOM, will assist both NATO and ACO in the decision-making process and overall coordination of tasks relating to the operations of critical undersea infrastructure protection and adequate response (NATO, 2025). It aims to deter any future attempts by a state or non-state actor attempting to sabotage the critical undersea infrastructure there (NATO, 2025). This multi-domain activity has been approved after the many incidents of damage to the undersea cables connecting Estonia and Finland on December 25th. It follows the declaration of solidarity by Allies with the two countries on Dec 30th and the Baltic Sea NATO Allies Summit in Helsinki and Finland today (NATO, 2025).

# 4. Modernization and Strategic Adjustments

The Baltic Sentry requires refinement from the allied nations. As Sweden solidifies its role in Baltic security, its naval forces are undergoing core transformations to align with the objectives of the mission. A prime example of this shift is the modernisation of the HMS Visby, the lead of Sweden's stealth corvette class. Constructed in 2002, HMS Visby is now undergoing renovations that include the installations of CAMM anti-air missile launchers, improved sonar capabilities, and the integration of remotely operated underwater vehicles (ROVs) for enhanced situational awareness (Palowski, 2025). The corvettes with its advances radar systems (Sea Giraffe AMB), a multi-role missile capabilities (RBS-15), a low radar cross-section, HMS Visby is a highly adaptable platform for modern threats (Palowski, 2025).

The former head of the Danish navy, and a well-respected innovator in maritime affairs, Torben Mikkelsen stated "that it is about being able to transform the needed effects between manned and unmanned assets and to be able to use such in the right combination in line with the current threat and the signal you want to send to the opponent" (Laird, 2025, para. 7). Referring back to the shortages of ships and personnel in the Baltic Sea with the new mission of the Baltic Sentry there is now the need to learn how to operate new systems together and to share generated data from them. In Mikkelsen's last assignment as Denmark's executive director for Navy programs at Defence Command, he prioritised developing a new generation of modular ships designed to engage autonomous systems – the so-called "motherships". The idea is that the capital ships would be tied inherently into unmanned operations which in case of a full-scale war could be controlled entirely remotely through the mothership platform (Laird, 2025).

Mikkelsen concludes that NATO should take many lessons from the situation on the Black Sea where Ukrainians used remotely piloted USVs to impact maritime operations. NATO should draw critical lessons from the maritime conflict in the Black Sea, where Ukrainians effectively utilised remotely piloted USVs to disrupt Russian naval operations. He points to the potential irony that Russia, having faced these tactics firsthand, may have adapted to them more quickly than NATO. If this is the case, NATO must urgently refine its maritime strategies to keep pace with these evolving threats. The efforts being invested in Baltic Sentry provide a strong foundation for this necessary strategic adjustment (Laird, 2025).

# Conclusion

Operation Baltic Sentry marks a major step in NATO's commitment to tackling the issue of protecting critical undersea infrastructure of the Baltic Sea. As hybrid threats, including sabotage, cyber-attacks, and maritime disruptions, continue to challenge regional stability, NATO and its allies have responded with a strategy aimed at deterrence, surveillance, and rapid response. The strategic importance of the Baltic Sea necessitates a strategic and unified effort to counter emerging security threats. The recent incidents involving damaged undersea cables and infrastructure revealed unaddressed issues in the region, highlighting the urgent need for enhanced security measures. By deploying naval assets, leveraging technological advancements such as unmanned underwater vehicles, and strengthening multinational cooperation, Operation Baltic Sentry seeks to mitigate these risks and ensure the stability of maritime infrastructure. This paper examined the strategic importance of the Baltic Sea, the evolving threats of hybrid warfare, and NATO's response through Operation Baltic Sentry. By analysing the mission's key components and regional implications, it demonstrated the necessity of enhancing surveillance, multinational cooperation, and technological advancements to secure critical undersea infrastructure. While the initiative is a crucial step forward, challenges remain. The limited duration of the operation, resource constraints, and the complexities of identifying and attributing hybrid attacks necessitate continuous adaptation and expansion of NATO's efforts. Future developments should focus on reinforcing intelligence-sharing, expanding operational capabilities, and integrating modern surveillance technologies to enhance the mission's effectiveness. Ultimately, Operation Baltic Sentry serves as a vital component of NATO's broader strategy to safeguard European security. As geopolitical tensions persist, maintaining vigilance and adaptability in the face of hybrid threats will be essential to preserving stability in the Baltic region and beyond.

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