

WORKING PAPER

MAKING THE BALTIC A “SHADOW-FREE” ZONE: A PROPOSAL TO REDUCE MOSCOW’S SHADOW FLEET WITH MINIMAL RISK OF LITIGATION, ESCALATION, OR MARKET DISRUPTION

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Making the Baltic a “shadow-free” zone: A proposal to reduce Moscow’s shadow fleet with minimal risk of litigation, escalation or market disruption

Craig Kennedy*

Half of Russia’s daily oil exports are shipped through the Baltic Sea where they routinely transit the territorial waters of EU member states, and roughly half of those cargoes are carried by Russia’s shadow fleet, the second-hand, often dilapidated [choose your adjectives] ships that Russia bought to avoid Western sanctions. These ships pose three threats: (1) They enhance Russia’s ability to fund its war of aggression against Ukraine by circumventing price-cap sanctions; (2) they likely violate international shipping law by not complying with mandatory oil spill insurance requirements; and (3) they present a heightened risk of oil spills, owing to the poor condition of the aging fleet.

This essay proposes a two-part, pragmatic, low-risk mechanism aimed at excluding shadow ships from operating in the Baltic. The first is a program requesting all tankers operating in the Baltic to verify the adequacy of their spill liability insurance by providing basic financial disclosures. The disclosures are standard financial documents already routinely provided by 95% of the global tanker fleet and would be in line with guidelines provided by the International Maritime Organization (IMO). The verification program would be administered by European Union Baltic states in coordination with the U.S. Treasury’s Office of Foreign Assets Control (OFAC) and would utilize existing on-line platforms. The second part of the mechanism consists of a deterrence threat aimed at dissuading noncompliant or underinsured tankers from continuing to operate in the Baltic.

The goal is to transform the Baltic into a “shadow-free” shipping zone to (1) reduce pollution risk in the Baltic, (2) exclude the shadow fleet from half of Russia’s oil exports, and (3) shift public focus onto the routine violation of international maritime law by Russia’s shadow fleet as well as the negligent oversight of certain flag states that enable these violations. As shadow tankers exit Russia’s Baltic trade, mainstream price-cap-compliant tankers would expand their Russian operations to fill the gap. A similar sanctions mechanism could potentially be implemented in the Aegean Sea, reducing the share of Russian export flows accessible to shadow tankers to below 25%.

Introduction: Challenges posed by Russia’s shadow fleet

In May 2023, a catastrophe was narrowly averted in the Baltic Sea, when an aging oil tanker lost power in a treacherous passage of the Danish Straits. With its steerage all but gone, the disabled vessel began veering out of the channel towards shallow coastal waters (see figure 1). At 18 years of age, the Cook Islands-flagged tanker was in the twilight of its expected service life, its hull integrity impaired by years of exposure to salt and water. The heavy impact of a grounding could breach its hold, disgorging the 340,000 barrels of Russian oil it contained. A spill of this magnitude could cause extensive damage to the Baltic’s sensitive ecology, despoil the pristine shoreline of nearby Langeland, and disrupt commercial traffic in one of Europe’s busiest waterways.

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Shadow tanker loses power and nearly runs aground in the Danish Straits, May 2023

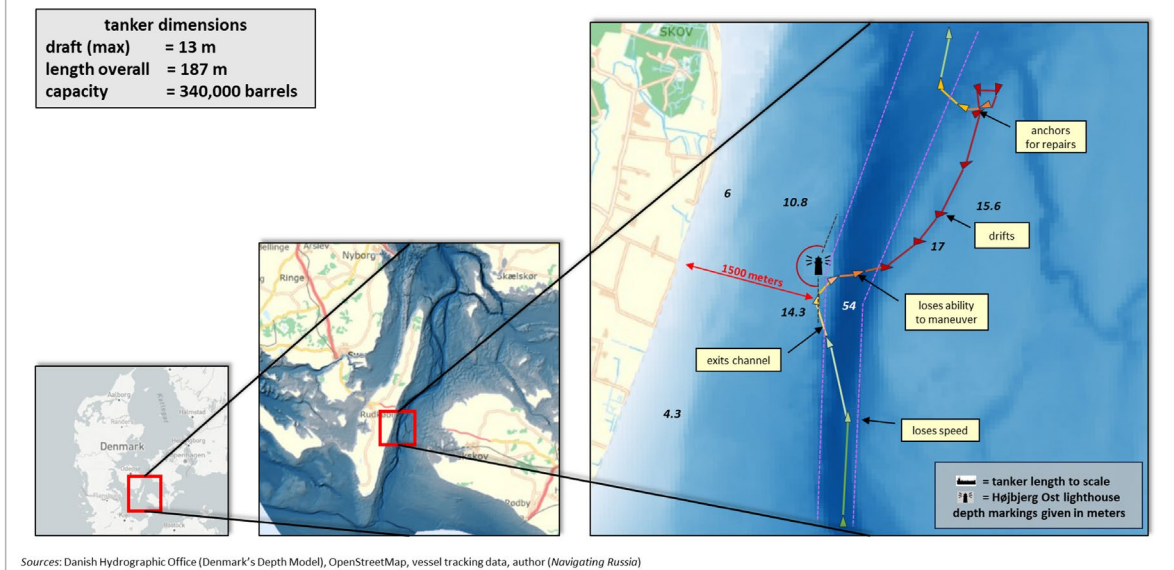


Figure 1

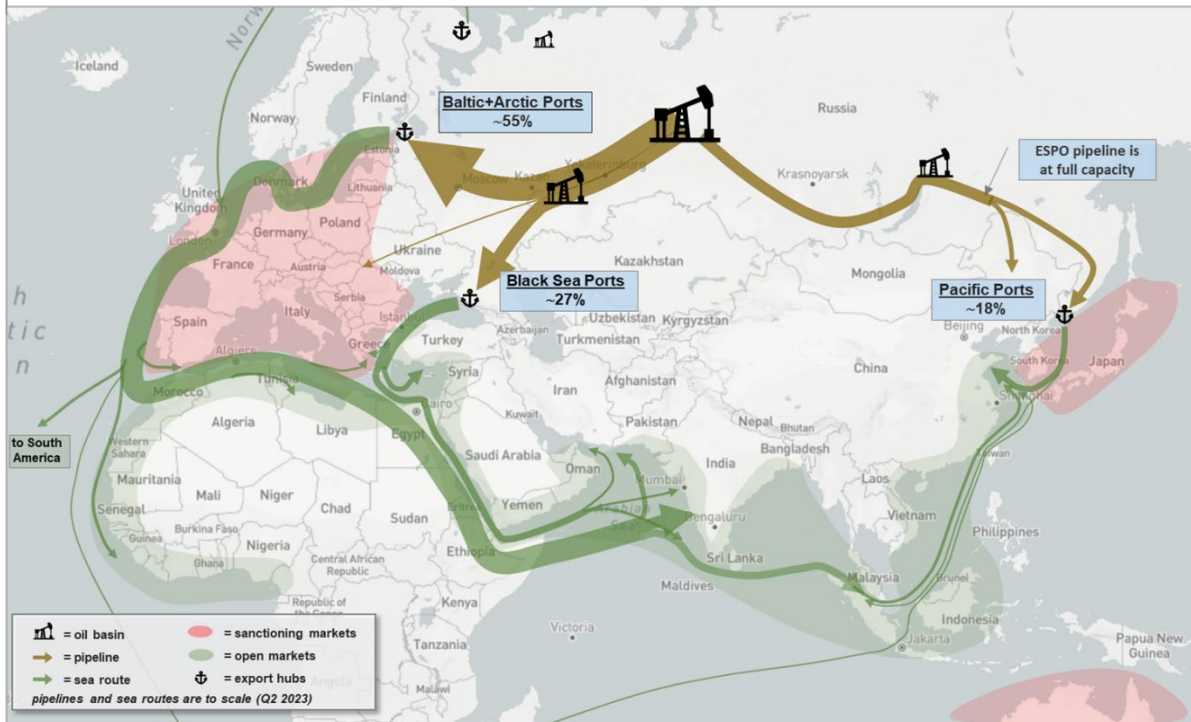
The vessel managed, in a last-ditch effort, to drift across the channel into safer, deeper waters where it eventually dropped anchor and undertook repairs. Commenting on the incident, the head of the Danish maritime pilots union called it symptomatic of “a drop in the standard” of the ships and crew “serv[ing] the Russian oil ports. The ships are older, and the crew has a different standard than we are used to.” He added that the increased presence of such ships in Denmark’s crowded waterways could have “potentially catastrophic consequences for the marine environment.”¹

Today, some 175 tankers laden with Russian oil transit the Baltic each month. Roughly half are suffering from the “drop in standards” that helped cause the near disaster off Langeland.²

¹ [Tradewinds, Lloyd's List](#).

² Unless otherwise noted, shadow fleet statistics used in this report are based on the author’s analysis of open-source shipping data. For further fleet analytics, see the author’s substack, [Navigating Russia](#).

Russia's shadow tankers pose an environmental threat to coastal communities around the world



This sharp deterioration in the quality of tankers in the Baltic is the direct result of a policy miscalculation by the Kremlin in the run up to its full-scale invasion of Ukraine in February 2022. Prior to 2022, Russia had depended almost entirely on tankers owned, financed, and/or insured by the West to transport its oil to global markets. As it launched its invasion, the Kremlin assumed Western companies would remain fully engaged with the Russian oil trade, come what may.

But that assumption turned out to be wrong. In the wake of the Bucha atrocities, the EU began debating a full ban on oil imports and marine shipping services. Moscow belatedly realized its mistake and recognized the risk it posed to Russia's oil revenues—which account for between a quarter and a third of state revenues. It launched a crash program to acquire aging tankers in the second-hand market.

Over the next 18 months, an estimated \$8.5 billion was spent acquiring vintage tankers in pursuit of a stand-alone export capability.³ The Western press dubbed Moscow's rapidly expanding flotilla of clapped-out vessels "the shadow fleet," which has since become the subject of extensive media reporting and commentary.

There is one fact about the fleet that most everyone agrees on: It poses a significant and growing environmental threat to the global community. Beyond that, the shadow fleet also helps Moscow unlock additional funding for its brutal, revanchist war against Ukraine and encourages similar aggression elsewhere. The shadow fleet also represents an assault on the integrity of the hard-won international regulatory framework designed to reduce oil spill risk.

³ See Craig Kennedy, "The Shadow Fleet in Crisis," in [Navigating Russia](#).

Essay structure

Part 1 provides relevant background on Russia's shadow fleet.

Part 2 outlines a two-part sanctions mechanism coming an insurance verification program with a deterrent threat of OFAC sanctions against noncompliant or underinsured vessels.

Part 3 concludes with an assessment of the impact of the proposed mechanism.

Part 1: Two key vulnerabilities of the shadow fleet: (i) OFAC blocking orders and (ii) spill insurance requirements.

OFAC blocking orders have helped slow the expansion of the shadow fleet but have not yet reversed it

After rapid expansion through mid-2023, shadow fleet growth has slowed significantly. One major deterrent to further large-scale expenditures on the fleet has been OFAC sanctions. Since October 2023, 40 shadow tankers have been subjected to blocking orders. These vessels represent some 15% of current fleet capacity with a market replacement value of an estimated \$1.5 billion.

OFAC blocking orders have proven highly effective. Once blocked, no tanker has been able to resume normal export operations. Their effectiveness relies in large measure on the status of the U.S. dollar as the functional currency of the global oil markets. For most market participants, the ability to transact in dollars is critical. They will avoid behavior—such as involving a blocked vessel in their trades—that could put their dollar accounts at risk.

But the pace and scale of the blocking campaign has been too measured to materially reduce the size of the shadow fleet. The loss of blocked vessels has been offset by the entry of additional tankers into Russia's shadow trade, though at a much slower rate than before.

Arranging adequate spill liability insurance at scale outside the IG system is challenging.

Blocking orders aren't the Russian shadow fleet's only vulnerability. It's likely that most, perhaps all, of the fleet fails to carry adequate spill liability insurance—mandatory under international maritime law. Under the 1992 Convention on Civil Liability for Oil Spills, all vessels are required to carry adequate oil spill liability insurance (often known as "P&I") as a condition of renewing their annual flag registration. Without a valid registration, tankers cannot conduct normal cross-border trade.

Because of the large size of the global tanker fleet, the financial risk involved is too great for the commercial insurance and re-insurance markets to manage on their own. Consequently, shipowners pool resources and assume collective liability. Some 95% of the global tanker fleet arrange their mutual insurance through a sophisticated, not-for-profit network of mutual assurance societies known as the International Group of P&I Clubs (the "IG"). The IG can provide reliable insurance on a low-cost basis thanks to very large economies of scale and supplemental re-insurance in the commercial markets.

The IG is headquartered in the U.K. and all the major clubs are based in coalition countries. Consequently, the IG routinely requires covered tankers to comply with Western and international sanctions—regardless of where the vessels are flagged or owned. For example, China's large, state-owned tanker fleet, which is co-insured through the IG, is

required to comply with the price cap and has done so by withdrawing its ships altogether from the Russia trade.

Inadequacy of non-IG insurance has become a matter of persistent concern for the IMO

For many years, however, there has been a small group of tankers that don't insure through the IG. These include shadow tankers active in other sanctioned oil trades, such as Iran's and Venezuela's. Unlike IG-insured tankers, shadow tankers tend to not disclose details of their insurance arrangements. A series of incidents over the years, however, has exposed a high incidence of inadequate or fraudulent insurance arrangements among shadow tankers. This has been of concern to the Legal Committee of the International Maritime Organization, the UN agency charged with international maritime regulations.

Inadequate insurance increases oil spill risks. Adequate funds might not be available for long-term clean up—especially in poorer communities lacking their own resources. Early disbursement of funds to limit the extent of a spill might not materialize. And proper insurers—with significant capital at stake—will make certain covered vessels are adequately maintained, since this reduces the risk of an incident. By contrast, sham insurers—those prepared to walk away from a claim or lacking the capital for a payout—have less incentive to pressure covered vessels to comply with best practices.

Negligent flag-state oversight: The weak link in the global shipping regulatory framework

While the IMO sets regulations, it lacks enforcement authority. That lies *primarily* with the country that provides registration documentation for the vessel—commonly known as the “flag state.”

In times past, ships were usually flagged by the state where they were owned. In modern times, ownership is often structured in offshore tax havens, and ships fly “flags of convenience,” provided by for-profit ship registration services run by a range of countries. The flagging states take responsibility for certifying that the vessels on their registers comply with international regulations, including statutory structural surveys and spill insurance requirements.

But standards of enforcement are not uniform across all flag states. Some registries are notorious for lax standards of enforcement. To address the problem, the IMO has developed detailed diligence guidelines for flag states to assess the adequacy of non-IG spill insurance. They include a review of three years of the insurer's audited financial statements and the submission of a satisfactory credit rating report from a reputable international rating agency.⁴

The issuance of guidelines, however, has not solved the problem. In some cases, the reason likely boils down to willful negligence on the part of certain flag states, which may sometimes be motivated by corruption. And as Moscow's fleet expansion program creates still greater demand for non-IG insured tankers, the problem is getting worse.⁵

Coastal states suffer from flag-state negligence

The parties most at risk from negligent oversight are usually not the flag states or the ship owners but coastal communities where these underregulated vessels operate. Thus, there is an inherent tension between the interests of flag states and coastal states when it comes to

⁴ See International Union of Marine Insurers [Policy Agenda](#), 2022; IMO [Circular Letter](#) No. 3464, July 2, 2014
⁵; [Splash](#), May 23, 2023; [Lloyd's List](#), February 16, 2021; ; [Lloyd's List](#), December 6, 2023; and IMO [Resolution A.1192\(33\)](#), Dec. 6, 2023.

jurisdiction over shipping. The U.N. Convention on Law of the Sea (UNCLOS) addresses this tension by providing certain limited rights to coastal states. And while some coastal states have been increasingly assertive in interpreting these rights in recent years, flag states remain primarily responsible for enforcing insurance and other regulatory requirements.⁶

Moscow's alternative insurance arrangements are opaque

Moscow relies on negligent flag state enforcement to manage the challenge of insuring ships outside of the IG system. Most of the second-hand tankers that have been bought for the Russian shadow fleet were IG-insured prior to the sale. To make them fit for the shadow trade, IG coverage must be dropped in favor of more lenient arrangements. Initially, Moscow had tried to create an alternative insurance scheme similar to the IG that would be supported by "friendly states" (presumably China and India). But these states showed little interest in swapping their IG policies for some inferior, untested product so that Moscow could more easily sell them oil at prices above the cap.

Consequently, Moscow has been forced to rely on its domestic insurance industry to write P&I policies for Russia's shadow fleet. That should raise alarm bells for coastal states. To start with, the Russian insurance industry has little track record in the supertanker P&I business and is suppressing vital information, such as the identity of a tanker's insurers and the basic terms of coverage. From what little we know, it appears some Russian policies could be invalidated if tankers violate coalition sanctions, such as the price cap.⁷

Then there are major questions about capital adequacy. Insurers writing new P&I policies for several hundred tankers would normally need a major increase in reserve capital along with underwriting from major reinsurance companies. That's unlikely to be happening. Russia's insurance industry has been in a state of great upheaval following the full-scale invasion of Ukraine, as major European re-insurers withdrew from the country, forcing rapid adjustments and creating great uncertainty.⁸

Which leads to the next problem—the lack of reliable, independent assessment of creditworthiness. Since February 2022, major international credit rating agencies have also withdrawn from Russia, thus depriving us of the standard means of assessing the creditworthiness of Russian insurers.

Finally, there are reports that some Russian P&I insurers are relying for re-insurance on the Russian National Re-insurance Company.⁹ But that entity is under EU sanctions, thus raising further questions about the adequacy of Russian P&I insurance.

⁶ Black, James Andrew. "[A New Custom Thickens: Increased Coastal State Jurisdiction within Sovereign Waters.](#)" *BU Int'l LJ* 37 (2019): 355; Qi, Jiancuo, and Pengfei Zhang. "[Enforcement failures and remedies: Review on state jurisdiction over ships at sea.](#)" *JE Asia & Int'l L.* 14 (2021): 7; Whomersley, Chris. "The Principle of Exclusive Flag State Jurisdiction: Is It Fit for Purpose in the Twenty-First Century?." *Asia-Pacific Journal of Ocean Law and Policy* 5.2 (2020): 330-347; Yu, Yaodong, Yue Zhao, and Yen-Chiang Chang. "Challenges to the primary jurisdiction of flag states over ships." *Ocean Development & International Law* 49.1 (2018): 85-102; Molenaar, Erik J. "[Multilateral creeping coastal state jurisdiction and the BBNJ negotiations.](#)" *The International Journal of Marine and Coastal Law* 36.1 (2021): 5-58; Nguyen, Trung. "[The Challenges of Dark Ships to the Safety and Security of Commercial Shipping and the Way Forward.](#)" *Asia-Pacific Journal of Ocean Law and Policy* 8.2 (2023): 310-328.

⁷ *Financial Times*, March 15, 2024.

⁸ *Interfax*, Feb. 13, 2023

⁹ *Reuters*, June 10, 2022

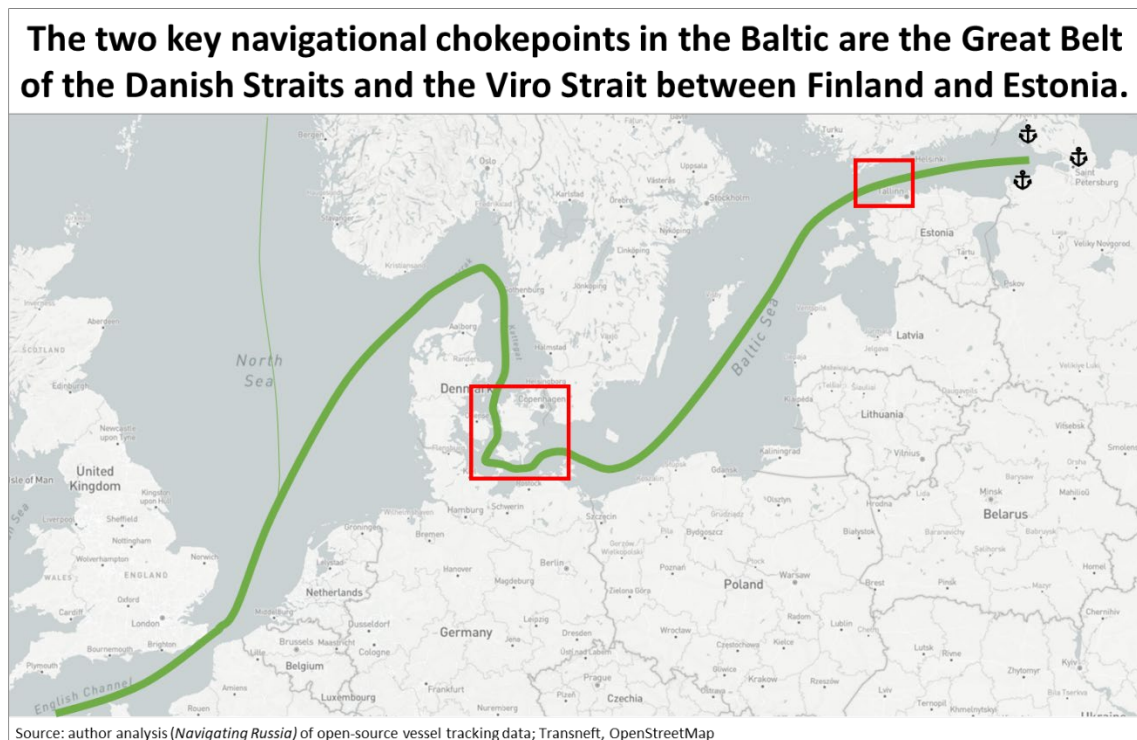
Coastal states seek verifications directly from insurers: The case of Turkey

Russia's shadow fleet's insurance is black box with plenty of disturbing noises coming from within. Public disclosures are entirely out of line with industry standards. But how can coastal states compel better disclosure that will enable them to assess for themselves the adequacy of a tanker's spill insurance?

Turkey faced a somewhat similar situation in December 2022 as the price cap was being introduced. It was concerned that a tanker's insurance might be invalid if its cargo turned out to be priced above the cap. To address the concern, it made passage through the Straits conditional on receiving satisfactory assurances directly from insurers that vessels would remain adequately insured. This marks an assertive interpretation of coastal state rights. But tankers complied and delayed their passage through the Straits until the Turks were satisfied with their insurance coverage¹⁰

Key concerns of insurance verification: Litigation and escalation

Does Turkey's verification policy provide a model for Baltic states? Yes and no.



Like certain Baltic states, Turkey sits athwart navigational “chokepoints”—narrow passages which force shipping close into coastlines, thus increasing the potential for jurisdictional conflicts between flag and coastal states.

Shadow tankers routinely pass through the coastal waters of Denmark, Sweden, Finland, and Estonia as well as France and the United Kingdom. But these states may be reluctant to act as assertively as Turkey. Two concerns loom large. The first is litigation risk. A Turkish-style regime relies for its enforcement on legal arguments that coastal states are acting within their rights under maritime law. But jurisdictional rights in these waters involve the complex interplay of several agreements, such as UNCLOS, the 1857 Copenhagen Convention and bi-lateral agreements between Estonia and Finland. Russia would almost

¹⁰ [Bloomberg](#), Dec. 5, 2022

certainly instigate legal challenges. Given these legal complexities, the ultimate outcome would be uncertain.

The second concern is enforcement. In Turkey, tankers dutifully queued outside the Turkish Straits while assurances were being negotiated. But shadow ships in the Baltic might be less compliant. They could, for example, refuse orders to stop. Moscow could exploit the situation to engage in bellicose brinkmanship, aimed at rattling nerves and breaking coalition resolve.

Mobilizing the political will needed to accept the litigation and enforcement risks of the Turkish model might only be possible in response to an actual spill—when it’s already too late. If insurance verification is to be introduced sooner, a different enforcement mechanism is needed.

Part 2: Proposal for a voluntary insurance verification program backed by the deterrent of a coordinated OFAC blocking threat

The proposed mechanism retains the core element of the Turkish policy—direct verification of insurance—but does not rely on coastal state jurisdictional rights to enforce compliance. No conditions of passage are introduced. No orders to stop are issued. Instead, the coalition would use deterrence to compel compliance by threatening noncompliant vessels with a blocking order. In the case of OFAC, blocking orders can be made on the basis of U.S. presidential decree 14024, which has a low burden of proof. This greatly reduces litigation risk.¹¹ And because a blocking order involves no kinetic confrontation at sea, it eliminates the risk of brinkmanship.

Administration through a consortium of EU Baltic coastal states in coordination with OFAC

Under this proposal, coalition coastal states, in coordination with OFAC, would introduce an insurance verification program.

Under the program, all tankers carrying oil cargoes through the waters of coalition states would be requested to provide specified disclosures demonstrating the adequacy of their insurance. This involves two sets of disclosures. First, vessel owners would be responsible for disclosing the identity of their P&I insurer by providing this information to Equasis, a multilateral, open-access database dedicated to safety in the shipping industry. Second, insurers covering these tankers would need to make certain standard financial disclosures on their website—in line with well-established industry norms. The required disclosures are also in line with IMO guidelines for insurance verification.¹² Specifically, they would include (i) three years of IFRS audited financial statements, (ii) a satisfactory credit rating report issued by a reputable international rating agency, and (iii) full terms and conditions of their P&I policies. Appropriate disclosures would also be required for their re-insurers.

IG-insured tankers already provide these disclosures online. As for shadow tankers, these disclosures should pose no undue burden if they are following IMO disclosure guidelines in their annual flag-state registration renewal.

If disclosures are satisfactory, these shadow tankers would be free to continue operating in the Baltic. If, however, a tanker refuses to make disclosures or the program administrators deem its insurance inadequate, the ship would be publicly declared noncompliant. It would

¹¹ The decree allows sanctions on entities simply for “furthering specified harmful foreign activities of the Russian Federation.”

¹² IMO [Circular Letter](#) No. 3464, July 2, 2014.

be allowed to exit the Baltic unimpeded but would be warned that OFAC and other coalition enforcement agencies will impose blocking orders on it if it attempts to transport another cargo out of the Baltic in the future.

Part 3: Impact of the proposed voluntary verification program.

The voluntary insurance verification scheme promises to significantly reduce Russia's ability to use its shadow fleet. OFAC blocking orders have been highly effective at preventing shadow tankers from conducting normal commercial activities. Given the significant acquisition costs of these shadow vessels, any credible threat of a blocking order should effectively deter noncompliant tankers from returning to the Baltic. Moscow will almost certainly test coalition resolve by sending a handful of noncompliant tankers back into the Baltic. If, however, blocking orders are quickly imposed, it's likely Moscow will soon desist. At \$40 million dollars each, these vessels are too expensive and difficult to sacrifice for no gain.

Russia could lose the ability to use shadow ships to circumvent sanctions on 50% to 75% of its export oil

Some 250 unique shadow tankers—more than 75% of Russia's total shadow fleet—have recently been active in the Baltic. Once the verification scheme is in place, it could take several months for each of these tankers to cycle through for a final load and be subject to verification. Most, if not all, are likely to fail verification and will not opt to return to the Baltic. At that point, shadow loadings in the Baltic should begin dropping sharply. Mainstream tankers will expand their operations in the Baltic to take up the slack.

Where will these displaced tankers go? Some will likely migrate to Russia's Black Sea trade. But the current need there for additional shadow-fleet capacity isn't nearly large enough to absorb all these displaced vessels. Moreover, if the insurance verification program is successful in the Baltic, a similar one could be implemented in the Aegean. Together with the Baltic, this would deny Russia the ability to load up to 80% of its oil exports on shadow tankers. Instead, Russia would be compelled to use mainstream tankers, thus increasing the exposure of export revenues to price cap constraints.

As for Russia's Pacific trade, shipping capacity needs there are very small, owing to the short voyage to China. Shadow tankers already handle 90% of it.

If the verification mechanism is well executed, Moscow could soon find itself with a surplus of shadow tanker capacity. These displaced shadow tankers would likely be put to work in other markets, sold at a loss, or—given that a fifth are at least 20 years old—simply dispatched to the ship-breaking yards for scrap.

If mainstream price cap compliance is better enforced and the cap ratcheted down, the revenue losses to the Russian budget could well measure in the tens of billions of dollars. A 10% to 20% reduction in federal budget revenues is achievable, imposing difficult deficit spending decisions on Moscow.

Conclusion: This mechanism avoids key risks

The proposed verification program could sharply reduce the footprint of the shadow fleet while also avoiding certain risks and pitfalls. These include:

- self-defeating destabilization of global oil and shipping markets
- litigation risk arising from the complexities of maritime law

- escalation and brinkmanship risks associated with interdiction at sea

Moreover, by leveraging the deterrent potential of OFAC blocking orders, this mechanism shrinks the shadow fleet without resorting to long lists of blocked vessels.

Finally, by exposing Moscow's disregard for international safety rules, this mechanism works for the good of coastal communities everywhere, including the Global South, while exposing Moscow as a bad actor. It can also put pressure on negligent flag states to improve their enforcement of international shipping standards.