

Maritime Meeting Reveals a New Phenomenon: Alleged Russian Grain Laundering

Executive Summary

Russia's grain theft from Ukraine and subsequent potential smuggling via cargo vessels have received a significant and justified amount of [mainstream media attention](#). Windward's unique Maritime AI™ technology has identified a worrisome new phenomenon: alleged **Russian grain laundering**. This analysis covers how it is happening based on our proprietary insights.

Windward's report offers previously unreported information on **five vessels** engaging in dark activities and ship-to-ship (STS) operations in the Kerch Strait in June 2022 as part of what appears to be a coordinated effort to launder grain allegedly stolen from Ukraine.

There has been a **160%** increase in dark activities in the Black Sea by bulk carriers flying either the Russian or Syrian flags when comparing July 2020-June 2021 to July 2021-June 2022. Of the events that happened between July 2021 and June 2022, **73%** took place after the war began.

There's a second component: ship-to-ship (STS) meetings. Mostly Russian-flagged cargo vessels and other ships operating under flags of convenience appear to be meeting with **one to four** cargo and service vessels simultaneously in the Kerch Port offshore waiting area. This analysis will take a close look at both of these aspects and will detail the journeys and behaviors of the vessels involved in the coordinated effort.

The report ends with some brief guidance for the maritime industry regarding risk mitigation in this evolving environment.

Trade Flow Brief

Windward's AI-driven, proprietary data has identified leading suspects of potential Ukrainian grain smuggling. The trade flow map (below) helps visualize the common routes sailed by vessels Windward's technology has flagged and tracked.

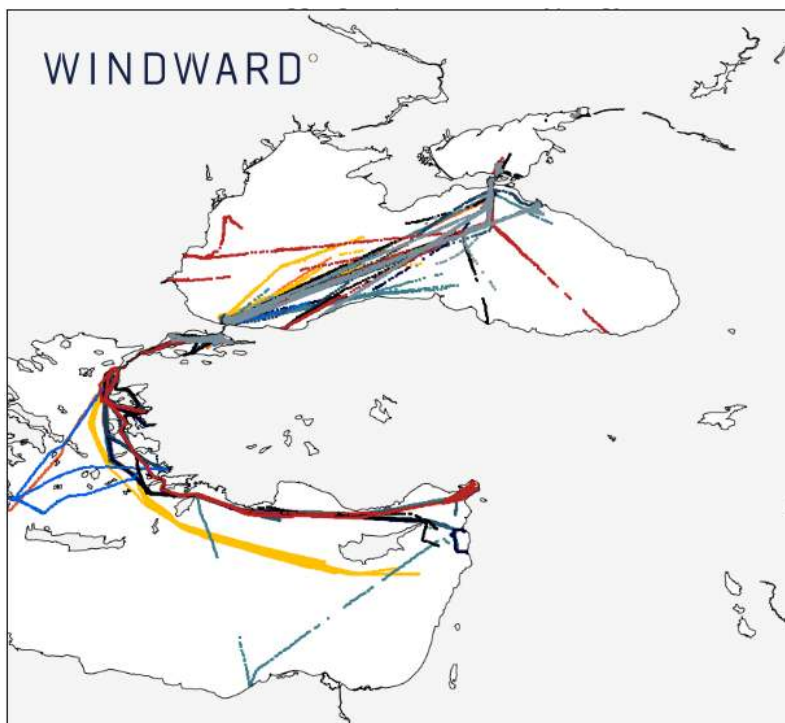


Image 1: Windward map shows grain smuggling trade flows

An analysis of the routes shows that the grain smuggling tradeflow goes through both the Kerch and Bosphorus strait. The grain is allegedly smuggled from Ukraine to Syria and Turkey mainly. But how, exactly?

Dark Activity Skyrockets

One of the most basic deceptive shipping practices used to conceal vessels' location, operations at sea, and illicit activities is going "dark" (temporarily or permanently disabling the automatic identification system). Unlike instances where the vessel loses its signal due to lack of reception, bad weather, legitimate security considerations, etc., going dark is an intentional choice to avoid transparency.

Windward's behavioral insights indicate that old behavior is now being applied in a new way. Dark activities were traditionally focused on crude oil smuggling, but we are seeing vessels go dark to load smuggled grains from Ukraine and then either make a visible port call, or a dark discharge of cargo in either Turkey or Syria.

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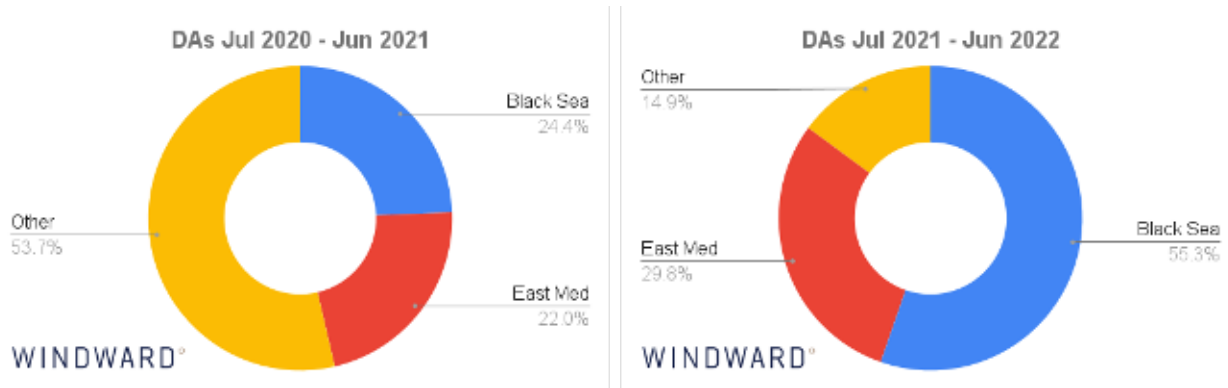


Image 2: Comparison of Black Sea dark activities (July 2020-June 2021 vs. July 2021-June 2022)

The shift in dark activities was not only noticeable for event location but also regarding vessel identity. Windward's data indicates that in 2020-2021, there was **a monthly average of 0.83** dark activities in the Black Sea by Russian or Syrian-flagged and owned bulk carriers. That number increased to a staggering monthly average of **2.25 dark activities in 2021-2022**, with a boost in March 2022.



Image 3: Black Sea dark activities by bulk carriers flying the Russian or Syrian flags (2020/2021 vs 2021/2022)

Returning to the above trade flow map (image 1), the first area of operations on vessels' voyages out of the area would be the Bosphorus Strait. Windward's data shows that the number of area visits by bulk carriers has doubled since February 2022. From July 2021-February 2022, the monthly visits average was **4.75**. Since the invasion, that monthly average has gone up to **10 visits to the area!**

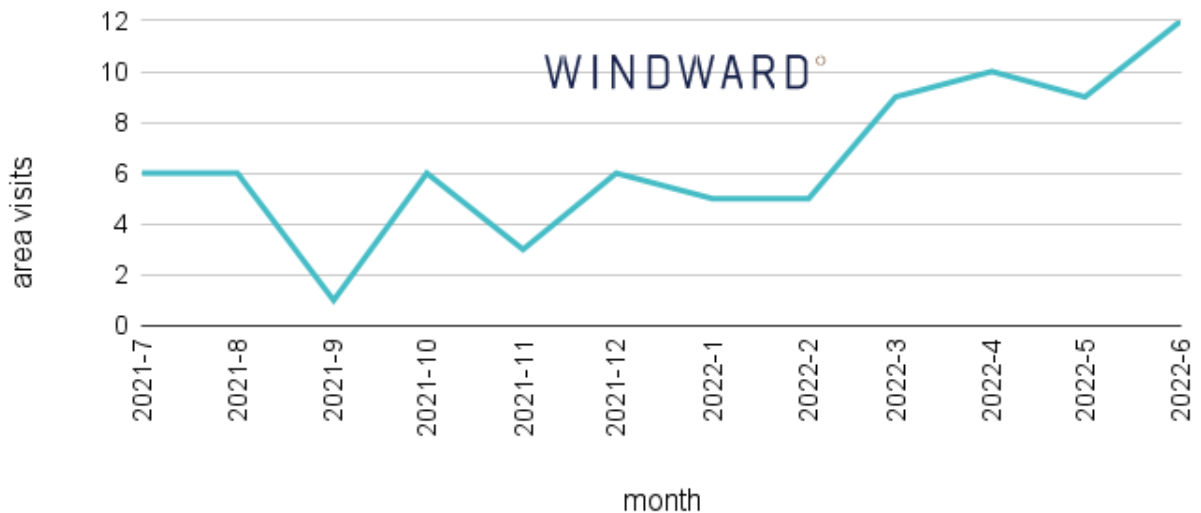


Image 4: Bulk carrier visits by month

To obtain a deeper understanding of the dark activity trend, we looked at all general cargo and bulk carriers, regardless of their flag, from March 1, 2022 through July 15, 2022.

Windward's platform flagged **a total of 170 events** where cargo and bulk carrier vessels went dark in the Azov Sea and then resurfaced on their way out through the Bosphorus Strait.

One hundred and fifty-six (**156**) of the events showed a similar pattern: vessels calling port with the allegedly smuggled grain while their AIS were turned on. Out of these visible port calls, **71% were in Turkey** and **20% in Bulgaria**.

The remaining 14 events showcased a different pattern. Cargo and bulk carrier vessels went dark twice during their travels – once in the Azov Sea and again at their port of destination. In **85%** of these identified events, the destination for the alleged smuggled grain was **Syria**.

During the same timeframe last year (March-mid-July 2021), for comparison, Windward only identified **one dark-to-dark activity** (a vessel going dark to load the grain and then to discharge it). This type of behavior is emergent, meaning Windward expects to see the trend grow as the conflict continues.

Going Beyond Dark Activities to STS...

Grain smuggling goes beyond mere dark activities to conceal the origin, transportation, and destination of stolen grain. Windward's platform identified an additional behavioral trend: **"grain laundering."** It features **a combination of dark activities and ship-to-ship (STS) meetings** in the open sea.

It appears that mostly Russian-flagged cargo vessels and other ships operating under flags of convenience are meeting with one to four cargo and service vessels simultaneously in the Kerch Port offshore waiting area.



Image 5: Kerch Strait, with at least four STS meetings happening simultaneously

Some vessels stay in the area and only make trips up North and then back to the Kerch area, while others make the voyage outside of the disputed area to distribute the potentially stolen grain.

Meeting in June

When overlaying Windward behavioral vessel data and insights with Planet Labs' daily satellite images, an intriguing example of the new grain typology was discovered.

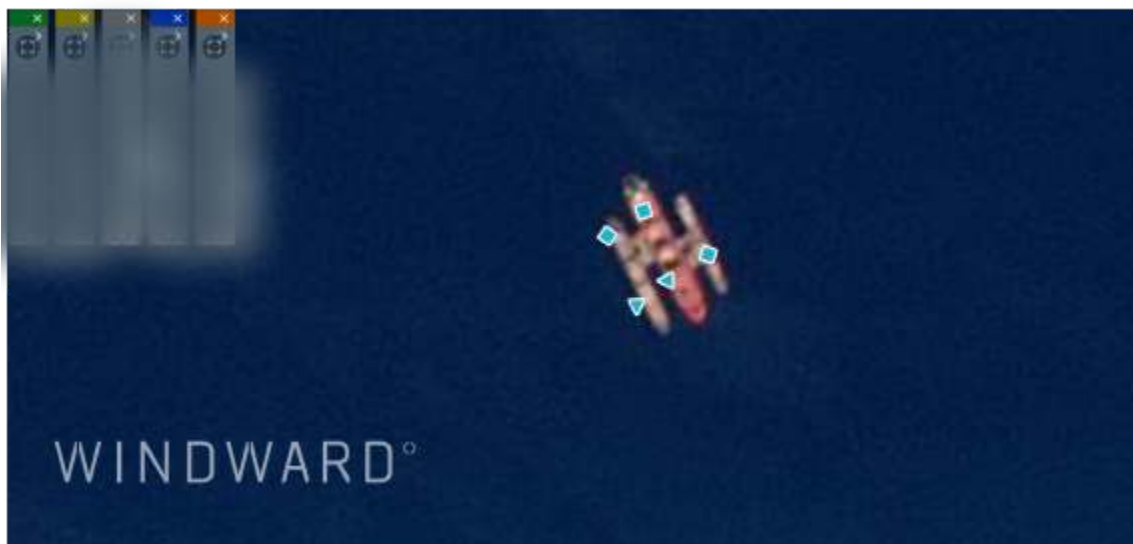


Image 6: Meeting on June 10 involving three cargo vessels and two service vessels

On **June 10, 2022**, there were **five vessels** engaging in ship-to-ship operations in the Kerch Strait: three cargo vessels that Windward flagged for alleged grain smuggling (vessels “D,” “L,” and “K”), and two service vessels.

All vessels are sailing under the Russian flag, except for one cargo vessel under the Belize flag. Let's deep dive into the details of this event:

Vessel D

Vessel D is a bulk carrier sailing under the Belize flag. Since June 2022, it has been owned by a Turkish-based company.

On May 21, the vessel called port in Misurata, Libya and stayed there for nine days. Following the port call, the vessel changed its reported draft from 10.1 to 6.2, indicating that it likely discharged its cargo. After this port call, the vessel had six meetings over six hours in the Kerch Strait area, including the specific meeting that is the focus of this analysis.

On June 13, the vessel updated its reported draft from 6.2 to 9.9. After the meeting on June 10, it called port in Metalurji, Turkey, and updated its draft to 6.2 – indicating a potential discharge of cargo.

Vessel D is currently in Libya (as of July 19, 2022) following yet another journey to the Kerch Strait and several ship-to-ship engagements.

Analysis shows that following the potential ship-to-ship grain smuggling, where it collected Ukrainian grain via an STS meeting in the Black Sea, it distributed the cargo mainly to Turkey and Libya.



Image 7: Vessel D's path since March 1, 2022

Vessel L

Vessel L is a Russian-flagged general cargo vessel that is currently owned by a Russian-based company. During the past six years, L engaged in a total of **19 dark activities**, **ten** of which took place since the war started.

Just prior to the recorded meeting, the vessel went dark for one day in the Kerch area and resurfaced again near the Azov port – similar behavior to [Zhibek Zholy](#), the ship that made international headlines after being detained in Turkey a few weeks ago. At Azov port, L updated its reported draft from 2.6 to 3.6. It then engaged in a few dark activities before and after the five-vessel meeting, and only updated its draft again on July 5 (from 3.3 to 2.6).

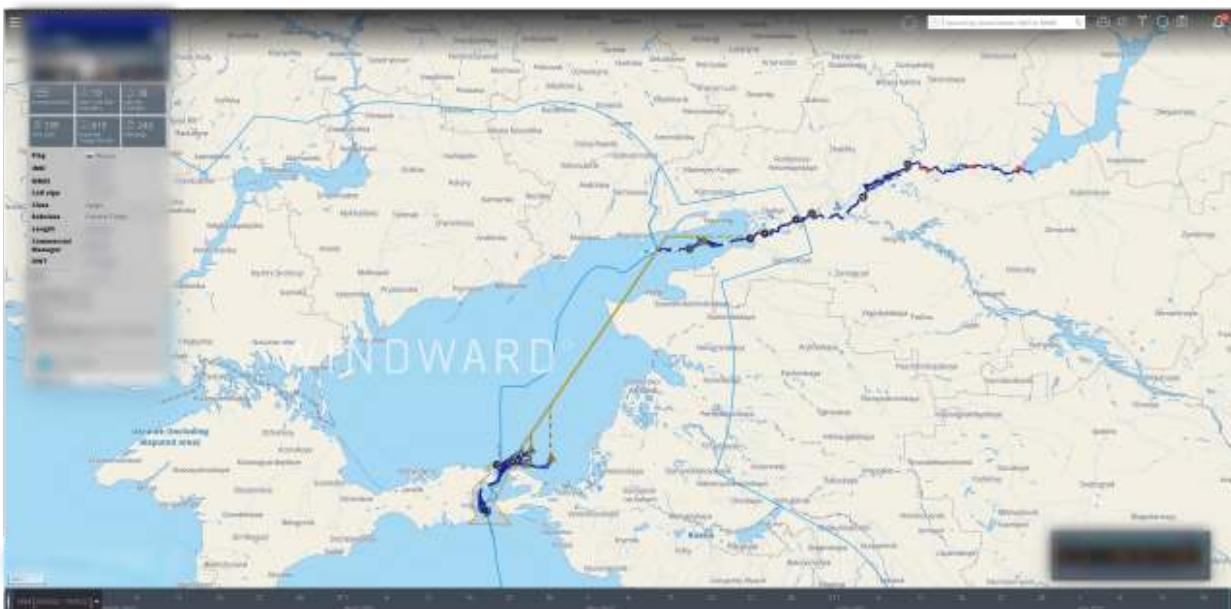


Image 8: Vessel L's path since March 1, 2022

Vessel K

Vessel K is the third cargo vessel that participated in the five-vessel meeting described above. It is a general cargo vessel that sails under the Russian flag and is owned by a Russian-based company.

It has been operating in the port of Sevastopol since before the war and has not left the area since. On May 30, the cargo vessel went dark in the Kerch area and reappeared near the Azov port, demonstrating the same pattern of behavior as Vessel L and Zhibek Zholy. During its Azov port call, it updated its reported draft from 2.6 to 3.6, suggesting it potentially loaded cargo. Following this port call, Vessel K met with vessels L and D, and then updated its reported draft back to 2.6.

Windward behavioral data indicates that vessels L and K potentially transferred their cargo to vessel D, which seems to be the one taking the grain out of the disputed area.

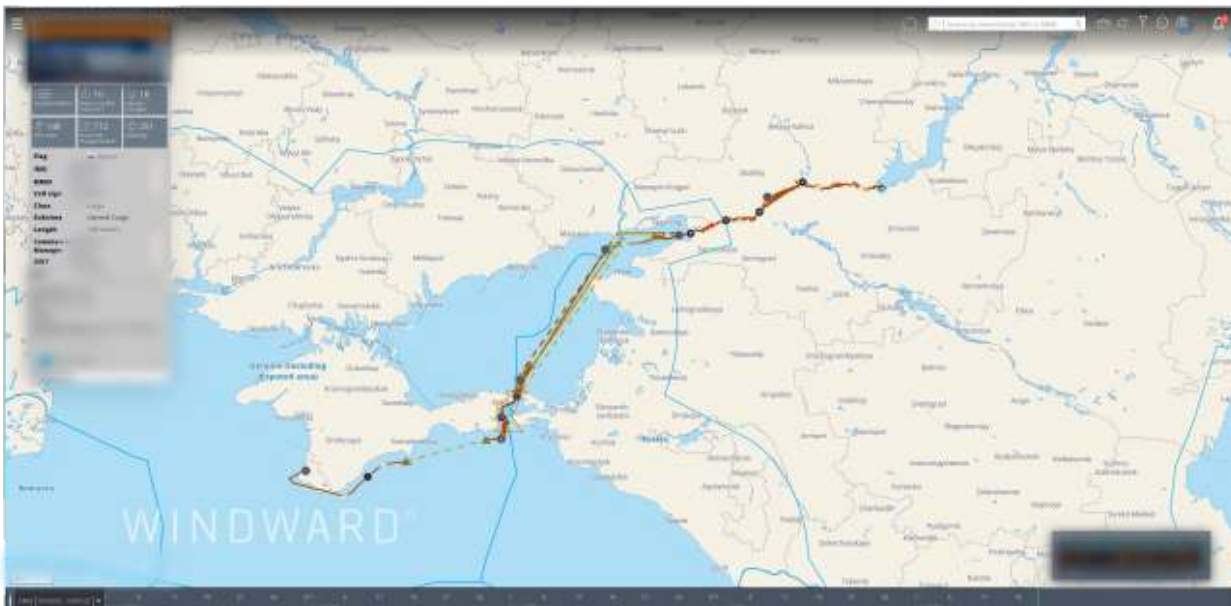


Image 9: Vessel K's path since March 1, 2022

Another Vessel Gets Involved Post-Meeting

After the conclusion of the five-vessel meeting, Vessel K left the area and sailed to Ukraine. The rest of the vessels were joined by a sixth vessel – Vessel A.

Vessel A is a general cargo vessel sailing under the Russian flag and owned by a Russian-based company, with a commercial manager based in Turkey. Its beneficial owner company also owns an Iran-based company.

Vessel A conducted a few dark activities in the area and visited the Azov port right before joining the big meeting. After the meeting, it went to Azov again and updated its reported draft after the port call from 2.8 to 4.0. This indicates it loaded cargo while in Azov. It then continued to meetings in the Kerch area – strengthening Windward's hypothesis regarding dark activity and STS meeting patterns.

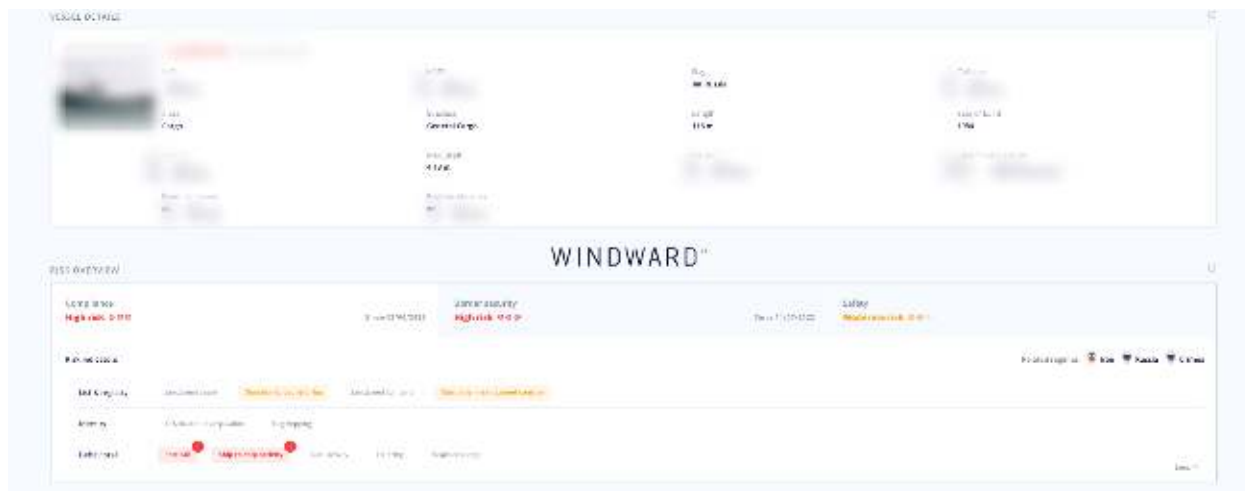


Image 10: Vessel A's risk profile in the Windward platform

Next Steps for Risk Mitigation

The first step in risk mitigation is fully understanding both recent history and the current situation.

The maritime domain has substantially changed since OFAC's initial introduction of deceptive shipping guidelines back in 2020. Not only have bad actors continued to evolve and look for new ways to conceal their illicit activities, but the scope of deceptive practices has gone far beyond the initial "crude tankers + smuggled oil to avoid sanctions" equation.

In addition to a proliferation of dark activities in the Black Sea area since the Russian invasion of Ukraine, we are now witnessing coordinated cargo ship-to-ship meetings involving multiple ships in what looks like a clear attempt to evade restrictions and sanctions via smuggling.

It is now clear to every shipping stakeholder dealing with trade that deceptive shipping practices and risk mitigation are relevant to all vessels and types of commodities – oil is no longer the main driver of the maritime economy.

Knowing who you are doing business with, and where your counterparties have been prior to your current deal, is crucial if you are looking to protect your business from reputational, financial, and legal/criminal risk in this new era of alleged grain laundering and other forms of smuggling and deception.

The main question that needs to be addressed is: "How can we protect our business?"

Governmental and law enforcement entities should of course lead the way, but all players in the maritime ecosystem would be wise to proactively pursue real-time, predictive insights that will help significantly reduce and manage their risk.