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Lessons of the Russian-Ukraine Armed Conflict on Marine Insurance, Shipping and Food Security: A Matter of Blockade or Starvation?

Adriana Ávila-Zúñiga-Nordfjeld^{1,*}, Dimitrios Dalaklis², Harold Thomas Workman³, Johan Granholm⁴

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ARSTRACT

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Keywords:

Blockade; Food Security, San Remo Manual, Law of Armed Conflict, Marine War Insurance, Ukrainian war, Maritime Power. The ongoing Russia/Ukraine armed conflict has had a severe impact in the maritime transport industry. There was a steep increase in marine insurance premium rates (literally doubled in 2022), while in 2023 several marine insurance P&I clubs cancelled war-risk coverage across Russia, Ukraine, Belarus and the Republic of Moldova, leaving shipping companies liable for substantial losses linked to the specific military activities.

War is excluded from conventional insurance policies, as established for example in the Nordic Marine Insurance Plan, which requires ship-owners and shipping companies to buy extra war coverage on top of the normal Hull Insurance and P&I insurance premiums.

However, most P&I insurance clubs have stopped providing such coverage for the region under discussion. This has also increased the related maritime transport rates, with a rise of over 50% after the escalation of military operations, according to the latest reported price index. The shipping industry has been severely affected; these higher shipping rates have also been reflected in final food prices, due to the higher demand of grain and other food products, even after the intervention of the United Nations, which in July 2022, brokered an agreement with several marine insurer companies for insuring ships transporting grain from Ukraine's ports. The argument behind such voyage prices is the high risk of the area, and a so-called "blockade" of the Ukrainian ports and respective territorial waters. Thus, this article analyses the lessons from the Russian military intervention in Ukraine focusing on the maritime security situation of the area and especially its impact in food security within the framework of defence systems. It is examining the conceptual framework of a blockade and related legal aspects, while trying to limited provide a response towards a number of legal questions for international law applicable to armed conflicts that might lead to possible solutions from a diplomatic and political perspective within humanitarian law and the law of war applicable to armed conflicts at sea.

Recommendations and future research directions are also provided.

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1. Introduction.

Whether the overall situation is termed as a "special military operation", or just an "invasion" in a sovereign country, there are intensive military activities conducted by Russia within - Ukrainian territories and the Black Sea; they were heavily intensified after the 24 February 2022, in a significant escalation of an armed conflict that in reality started during 2014 (Workman, Dalaklis, & Ávila-Zúñiga Nordfjeld, 2022). This is the largest case of utilising military violence in order to achieve political aims on European soil since World War II, clearly ex-

¹Associate Senior Lecturer, Swedish Defence University, University PhD 7 (Maritime Administration: Law, Policy, Defence and Security) Stockholm Sweden, Adriana.Nordfjeld@fhs.se.

²Professor, (Safety & Security), World Maritime University (WMU), Malmö-Sweden, dd@wmu.se.

³Ph.D. Candidate - World Maritime University (WMU), Malmö-Sweden, w1010957@wmu.se

⁴Lecturer- Swedish Defence University, Department of Systems Science for Defence and Security Stockholm Sweden, Johan.Granholm@fhs.se.

^{*}Corresponding author: Adriana Ávila-Zúñiga-Nordfjeld. E-mail Address: Adriana.Nordfjeld@fhs.se.

posing training and leadership shortfalls in tactical effectiveness of offensive operations on both sides. Also uncovered, were a lack of knowledge and understanding of the international law applicable to armed conflicts at sea among representatives of countries and/or international institutions, as well the various stakeholders of the maritime industry, contributing to deepening a worldwide food crisis. Therefore, this paper analyses the legal implications of intensive military operations at sea and aims to provide a better understanding of the maritime security situation around the wider Black Sea region.

The Black Sea is a vast inland sea, which extends along 163,000 square miles approximately, but about 178,000 square miles including the Sea of Azov, with a maximum depth of 7,250 feet in the south-central sector of the sea. It is located between Europe and Asia, bordered by Ukraine to the north, Russia to the northeast, Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west (Britannica, 2024). This water basin represents a huge strategic and economic factor for Russia to maintain its "sea power" and hegemonic position from a geopolitically perspective and security reasons, since three of the above-mentioned nations (Turkey, Bulgaria and Romania) are members of the North Atlantic Treaty Organization (NATO) which, with the two newly added members of Sweden and Finland, puts a large part of its mainland within range of US intermediate-range missiles.

Moreover, the Russian Federation depends on the large ports of Sevastopol and Novorossiysk for maritime trade to the rest of the world, as well as for effective projection of naval power. The Black Sea is crucial for Russia since it provides transit routes to the Sea of Marmara through the strait of Istanbul and subsequently to the Aegean and Mediterranean sea and the Atlantic Ocean, giving this nation the opportunity to ship its cargo anywhere worldwide through the whole year. While the access to the Sea of Marmara, which connects Asia with Europe, is through the strait of Istanbul, the Bosphorus and Dardanelles straits are controlled by Turkey. As Andy Hall (2022) explained, under the 1936 Montreux Convention regarding the Regime of the Straits, the government of Turkey has the right to close the Bosphorus and Dardanelles straits to warships from belligerent countries in times of conflict, action requested by Ukraine on 24 February 2022 under Article 19 of this Convention. The Turkish Government announced the closure of the Straits to Russian warships on 27 February same year, but stressed that under the same provision of this international agreement they could not prevent Russian military vessels from returning to their bases.

The deep-water, ice-free Russian port of Novorossiysk is one of the largest in the Azov-Black Sea basin. It has 11 berths with a berthing line stretching 8.3 km, known as the longest of all of Russia's ports

Its container terminal processed almost 143 million metric tons of cargo in 2021, and was considered the fourth busiest port of Europe handling a wide range of cargo including crude oil, grains, timber, metals, general cargo and wine materials, according to Andy Hall (2022).

Regarding Ukraine, they have 18 maritime trade ports and 12 terminals on the coasts of the Black and Azov seas. All

of them are state-owned and nine of these are currently occupied by Russia, including all ports on the Azov Sea and ports in the Crimea, which are the following: Mariupol, Berdyansk, Genichesk, Skadovsk, Yevpatoriya, Sevastopol, Yalta, Feodosia and Kerch. The largest Ukrainian ports along the Black Sea coast are Chornomorsk, Odesa and Pivdennyi, since about 60% of all goods turnover is managed through these main ports, which have the best infrastructure from the area to accommodate large vessels with a draft ranging from 11.5 m to about 14 m. The major container terminals are located in the Odessa and Chornomorsk ports and even if they are partly damaged, are still considered operational. The total berthing space across the 18 seaports in Ukraine was around 38 km. From these 11 km corresponded to bulk and dry-bulk cargo; about 15 km for general cargo; 4.5 km for passenger operations; 1.5 km for liquid cargo; and 4 km for auxiliary functions (Logistics Cluster, 2022). The ports were equipped with over 600 gantry cranes, approximately 1,500 forklift trucks of different types, over 400 other units of port machinery, more than 500,000 m² of covered warehousing and more than 2.5 million m² of open storage/yard space (Logistics Cluster, 2022). This source informed in its ports' assessment that though the largest Ukrainian ports along the Black Sea coast are partly damaged, but operational, the ports along the Dnipro River - Kherson, Mykolaiv - are "blocked" by the Russian army and navy and that by September 2023, only a few vessels managed to penetrate the so-called "blockade". It further clarifies that while other ports located along the Danube River like Izmail, Reni, Ust-Dunaisk are also damaged, yet operational after attacks from the Russian forces, they represent only a fraction of the capacity of the bigger ports and cannot compensate for the loss or "blockade" of those mentioned above.

It is important to highlight that the use of the term "block-ade" to illustrate the maritime security of the area by academic, practitioners, lawmakers and diplomatic representatives contributed to further deteriorate the situation in the Black Sea. Marine insurance clubs powerfully increased the premium to navigate in the area requesting war insurance and, in some cases, cancelled completely the coverage for the Black Sea. This resulted in shipowners increasing voyage transport rates, which effect was further transferred to final goods consumers. Some of the most affected industries due to the disturbances in the supply chain was the grain and food producers.

Prior to the war, Ukraine was one of the major supplier of grain to the world and particularly to the World Food Programme (WFP) (Kottasova, 2022). It was considered the world's seventh-largest producer of wheat (33 million tons in 2021/2022) and an annual supplier of approximately 45 million tonnes of grain to the global market (50% of world's sunflower oil, 15% of world's corn, 13% of world's barley, 10% of world's wheat) (United Nations, 2022; Eisele, 2022; Sullivan, 2022). Thus, reduction/loss of key Ukrainian exports negatively impacted upon world food security and deepened the growing global hunger crisis (United Nations, 2022). Additionally, EU sanctions that impede the trade and distribution of Russian grain must be considered.

Besides the distribution of information warfare and the de-

struction of land/air campaigns that define the Russia/Ukraine conflict, the Black Sea Grain Initiative (BSGI) clearly illustrates the global significance of this conflict's maritime component. It was implemented in July 2022; renewed three times (November 2022, March 2023, and May 2023); and halted in July 2023 (United Nations. Black Sea Grain Initiative, Joint Coordination Centre., 2024). The BSGI's composition and objectives denoted not only maritime centricity, but also unique diplomatic, military, and economic implications for Ukraine, Russia, and the international community and its significance should not be assessed as success or failure, but rather by its scope of impact in the military tactical, commercial, and international relations arenas.

The objective of this research effort is to analyse the maritime security situation of the Black Sea, focusing on the Ukrainian ports, both from the ISPS Code and under the framework of the legal concept of blockade, including its impact in the supply chain. The idea is to help the reader to determine on his/her own if there is a type of 'blockade' framework applicable. And at the same time facilitate certain stakeholders within the shipping industry to identify relevant legal aspects from the law of armed conflicts at sea that might set new light to the conflict and contribute to future legal reforms and strategical solutions. It is structured in the linear form of introduction, followed by sections discussing first, relevant laws and regulations. Next, the topic of Marine Insurance & the Black Sea is presented, followed by certain important elements relating to food security and the BSGI. Following that, a general discussion is provided, leading to the necessary conclusions and recommendations, including future research directions. The views herein are solely of the authors and do not represent the views of the Swedish Defence University (SEDU), the World Maritime University (WMU), United Nations (UN), the United States Government, or any other organization with a similar scope.

2. Laws and Regulations.

2.1. San Remo Manual on International Law Applicable to Armed Conflicts at Sea (1994), Relevant Provisions.

2.1.1. International Straits and Archipelagic Sea Lines.

The San Remo Manual on International Law Applicable to Armed Conflicts at Sea (1994) is one of the most important set of regulations for this area, however, as it is stated on Part I of the general Provisions, Section 1, "the parties to an armed conflict at sea are bound by the principles and rules of international humanitarian law from the moment armed force is used" (International Institute of Humanitarian Law HIHL, 1995).

Provision 2, further specifies that in cases not covered by this manual or by other international agreements, "civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of the public conscience".

Regarding maritime transport, it is important to acknowledge the established in Section II of this document regarding transit and innocent passage on international straits. Though

Ukraine has requested the closing of the strait of Istanbul and specifically the Bosphorus and Dardanelles straits; it must be recalled that according to Provision 23 of the general rules on international straits and archipelagic sea lanes, "belligerent warships and auxiliary vessels and military and auxiliary aircraft may exercise the rights of passage through, under or over neutral international straits and of archipelagic sea lanes passage provided by general international law" (HIHL, 1995). Provision 27 adds that such rights applicable to international straits and archipelagic waters "in peacetime continue to apply in times of armed conflict. The laws and regulations of States bordering straits and archipelagic States relating to transit passage and archipelagic sea lanes passage adopted in accordance with general international law remain applicable" and Provision 28 writes, "belligerent and neutral surface ships, submarines and aircraft have the rights of transit passage and archipelagic sea lanes passage through, under, and over all straits and archipelagic waters", while Provision 29 makes it clear that "neutral States may not suspend, hamper, or otherwise impede the right of transit passage nor the right of archipelagic sea lanes passage" (HIHL, 1995).

In addition to the exercise of the rights of transit and archipelagic sea lanes passage, belligerent warships and auxiliary vessels may, "exercise the right of innocent passage through neutral international straits and archipelagic waters in accordance with general international law", according to Provision 31 of this document. This also applies to neutral vessels, which may likewise "exercise the right of innocent passage through belligerent international straits and archipelagic waters", according to Provision 32 and it must be emphasized that "the right of non-suspendable innocent passage ascribed to certain international straits by international law may not be suspended in time of armed conflict", pursuant to Provision 33.

2.1.2. Blockade.

The term of "blockade" has often been wrongly used to illustrate the maritime security situation in the Black Sea constantly by academic, practitioners and even lawmakers at institutions from different levels, to condemn the status in the area. However, even amidst extensive disagreements on the subject, it remains as one of the different legal methods of warfare and it is included in Article 41 and 42 of the of the United Nations Charter as a possible mode of enforcement action, "Should the Security Council consider that measures provided for in Article 41, would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations." (United Nations, 1945).

A blockade is "the blocking of the approach to the enemy coast, or a part of it, for the purpose of preventing ingress or egress of vessels or aircraft of all States". San Remo Manual (SRM) on International Law Applicable to Armed Conflicts at Sea, p. 176. Yet, it must comply with certain requirements. "It shall be declared and notified to all belligerents and neutral States" according to provision 93 of SRM. "The declaration

shall specify the commencement, duration, location, and extent of the blockade and the period within which vessels of neutral States may leave the blockaded coastline" (SRM p. 94). Furthermore, "the blockade must be effective. The question whether a blockade is effective is a question of fact". SRM 95

This is consistent with the established in the 1856 Declaration Respecting Maritime Law as one of its main principles: "Blockades in order to be binding, must be effective, that is to say, maintained by a force sufficient really to prevent access to the coast of the enemy" (Ronsitti, 1988).

The requirements established in the SRM reflect those addressed in the 1909 London Declaration Concerning the Laws of Naval War: Art. 8 "A blockade in order to be binding, must be declared" Art. 8. The declaration can be made either by the blockading power or by the naval/maritime authority acting on its name, but it must specify: "(1) the date when the blockade begins; (2) the geographical limits of the coastline under the blockade; (3) the period within which neutral vessels may come out", Art.9, (Ronsitti, 1988).

Based on these principles of law, "merchant vessels believed on reasonable grounds to be breaching a blockade may be captured. Merchant vessels which, after prior warning, clearly resist capture may be attacked" SRM p.98. However, "the blockade must be applied impartially to the vessels of all States" SRM p. which encompasses the principle of impartiality from Article 5 of the 1909 London Declaration, meaning that it applies to all vessels of any country, including merchant ships flying the flag of the blockading power.

Though a blockade is a legal method of warfare, it is prohibited in some cases if "(a) it has the sole purpose of starving the civilian population or denying it other objects essential for its survival; or (b) the damage to the civilian population is, or may be expected to be, excessive in relation to the concrete and direct military advantage anticipated from the blockade", SRM, p.102. This must be understood in the way that starvation of the civilian population as a method of warfare is prohibited under the principles of international law.

3. Food Security & the BSGI.

3.1. Food Security.

The Committee on World Food Security (CFS) from the Food and Agriculture Organization (FAO) (2014), defines food security as follows: "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. The four pillars of food security are availability, access, utilization and stability".

In a historical perspective, food security was a local or regional concern. Availability was mainly linked to local farming, with food traded mainly between neighbouring countries. Crop failures in a country would lead to famines in the same area. Today's modern globalized food markets reduce this risk. Huge quantities of food are now being transported between continents, at an increasing rate (Duan et al., 2022). This has made

it possible to improve food security by providing availability at several sources. An important indicator for food security is the share or percentage of undernourished people. As a general trend, hunger has decreased (FAO, 2022). Importing food therefore does not necessarily increase the risks of food insecurity. In addition to the global markets, the local balance between food import and export must be considered. In some circumstances, a country could compensate interrupted imports by stopping exports. However, the international food trade networks should be viewed as a complex system with high levels of interaction. As noted by Duan et al. (2022), "every country has direct or circuitous ties with other countries, which means that the food security of each country is linked".

Russia and Ukraine are among the key supplier countries in food trade. Among the most important export crops is wheat, a staple food for many poor countries. "Between 2018 and 2020, 56 million tonnes of wheat [..] were exported annually from Russia and Ukraine to 123 [..] countries", (Glauben et al., 2022). Several poor countries source more than 40% of their wheat from Russia and/or Ukraine, according to Glauben et al. In addition to the availability problems when their supply ability goes down, this will also cause the wheat prices to go up for all wheat, possibly even for domestic consumption within wheat producing countries.

Thus, maintaining global food security is dependent on not only available supply, but also that food can flow smoothly through the vast, interconnected network. However, the interconnectedness means that alternative routes can be found. Ahn et al. (2023) show that the war has substantially impacted the trade of Russia and Ukraine, but has had limited effects on global quantity of traded grain. Ahn et al. also point out that most of the Ukrainian exports made possible by the BSGI went to developed countries. Specifically, of the 32+ million tons of grain and other food items transported to 45 countries under the BSGI, the purchases were not evenly distributed across national income levels (44% were purchased by higher-income countries, 37% by higher middle-income countries, 17% by lower middle-income countries, and a mere 2.5% by lower-income countries) (United Nations, 2022). In keeping with BSGI objectives, however, the addition of BSGI cargo into global markets lowered global food prices for all buyers, thus increasing food accessibility to lower-income nations. Resultantly, 8% of wheat exported under the BSGI was purchased by the UN World Food Programme (WFP), which transported 725K tons to nations in need (United Nations, 2022). These Ukrainian wheat grain purchases accounted for approximately 80% of 2023 total WFP purchases, which represents a notable increase from the 50% levels observed in 2021 and 2022 prior to BSGI implementation (United Nations, 2022). The BSGI-facilitated exports, increased 2023 WFP purchases of Ukrainian wheat grains by over 50% relative to 2021 and 2022 purchase levels (United Nations, 2023).

Bentley et al. (2022) suggests that the global food insecurity must be mitigated by improving the resilience of the wheat supply and trade systems, on medium and long term.

Ensuring global food security requires that the trade system is robust enough to function, even if some key suppliers are

temporarily unavailable.

3.2. The BSGI - An Overview.

As Russia invaded Ukraine in February 2022 and achieved Black Sea maritime dominance within the first 100 days of warfare, foreboding economic and food security challenges arose for which the international community was unprepared. As the "breadbasket of Europe," Ukraine's corn, wheat, barley, and other food products (all of which are integral to feeding populations, stabilizing food prices, and promoting world order) were stranded in Ukraine by an uncontested so-called "Russian naval blockade" (Olson & Hernandez, 2023). Specifically, 20–25 million tons of grain were unable to reach international markets, silos were full, fields were approaching harvest, and global food prices were increasing exponentially (Eisele, 2022).

The UN, with specific endorsement from Turkey, responded by brokering the BSGI agreement that reopened Ukraine ports of Odesa, Chernomorsk and Yuzhny for safe export of grain and related foodstuffs and fertilizers (United Nations, 2022). In the most practical terms, the approximate one-year BSGI duration was dramatically successful in promoting global food security by: increasing market supply; decreasing worldwide food prices by over 23 percent since March 2022; stabilizing global food markets; and likely protecting 100 million people from extreme poverty (Kottasova, 2022; The Conversation, 2023; Kusa, 2023).

Not surprisingly, BSGI renewal is insufficient to foster longterm regional stability and global food security (Sullivan, 2023). While addressing the immediate challenges at hand, the international community must concurrently address all the following requirements:

- I. Protection of Ukrainian port, transportation, and grain storage facilities and their underlying infrastructure. Since its most recent BSGI withdrawal, Russia destroyed over 60,000 tons of grain in the port of Odesa, and concurrently attacked Danube River ports (Conversation, 2023; Briancan, 2023).
- II. Increases in alternate Ukrainian grain distribution options. Export limitations and war destruction render an approximate 40 percent decrease in Ukraine grain shipments from pre-war distribution levels (Bonnell, 2023).
- III. Increases in global food production, storage, and distribution by other nations to create a more resilient global food system and minimize acute food insecurity potential for as many worldwide inhabitants as possible (Sullivan, 2023).

Besides ensuring global food security, the BSGI fostered maritime security rules and order for ships transiting the Black Sea — which had deteriorated to the point of irrelevance amidst uncontested Russian maritime dominance (Kusa, 2023).

4. Maritime Security & Marine Insurance.

4.1. Maritime Security in the Black Sea.

Maritime security is defined by Mejia (2007) as "the state of being free from the threat of unlawful acts such as piracy,

armed robbery, terrorism, or any other form of violence against ships, crews, passengers, port facilities, offshore installations, and other targets at sea or in coastal areas". While port security "is the state where a port facility, including its terminals, personnel and all its related infrastructure, as terminal berths and navigations channels, vessels at the port, its crew, passengers, service providers during operations at the port, Customs Maritime Units and in general, customers of the port, are free from any unlawful act of violence such as terrorism, sabotage, armed robbery and illegal transportation of drugs and weapons among others" (Ávila-Zúñiga Nordfjeld, 2018).

These concepts involve different type of risks or threats, but in practice they are interdependent. The most important set of regulations regarding maritime security in particular is the International Ship and Port Facility Security (ISPS) Code, enacted in the International Convention for Safety of Life at Sea (1974) with amendments, also called the SOLAS Convention, Chapter XI-2 on special measures to enhance maritime security. These measures apply to port facilities serving SOLAS ships and to SOLAS vessels. One of the main responsibilities of Contracting Governments to the SOLAS Convention under the Code is the setting of the maritime security risk level, through its Designated Authority, which is also responsible to communicate any changes in security levels and for responding to such changes (International Maritime Organization, 2012).

The term security level addresses the likelihood of risk that a security incident would occur or be attempted. The ISPS Code establishes the following three security levels which are currently applied internationally:

- 1. Marsec level 1 (ordinary) requires the minimum protective security measures at all times.
- 2. Marsec level 2, which requires additional and appropriate protective security measures during time that the risk of a security incident is heightened.
- 3. Marsec Level 3, which requires specific protective security measures which shall be implemented for a limited period of time when risk for a security incident is probable or imminent, even when it is not possible to identify the target.

Security Level 3 encompasses the strictest security measures and its priority is the security of the port, port facilities, vessels and society that may be affected by a security incident, including vessels calling such ports or transiting those sea lanes and may result in the suspension of commercial operations. Security response under Level 3 shall be transferred to the government or other organizations responsible for dealing with significant incidents. When there are other reason than the risk of a terrorist attack to heightening the risk to level 3, a brief description of the type of threat that leads to the change of levels shall be communicated or transmitted to relevant stakeholders and ships calling those ports. It might be communicated to the entire international maritime community, only if necessary, since they have discretion on the extent they choose to share information on security threats with others nations.

Contracting governments to the SOLAS Convention may apply the same security level to all their ports and port facilities,

but they can also set different security levels to different ports and ships operating in specific areas. The same choice applies to the territorial sea, where they can apply different security levels to different parts (International Maritime Organization, 2012).

To meet such legal requirements explained above and to prevent the imminent risk of vessels being attacked by the Russian Federation and avoid merchant crews becoming war prisoners, the Government of Ukraine have set the Marsec to level 3 for all Ukrainian ports and informed the international community through circular number 6124/23-327/2-49 with character of urgent and dated on 26 February, 2022, addressed to the IMO. In this document, they informed that in connection with the military aggression of the Russian Federation against Ukraine and the requirements of the ISPS Code, their cabinet of ministers adopted the order nr. 183, dated February 25, 2022, on establishing the level of maritime security in sea and river ports of Ukraine, port facilities, vessels entitled to sail under the flag of Ukraine to the MARSEC Level 3 exceptional, based on the grounds of an imminent attack for the duration of the martial law in Ukraine and therefore the ports of Ukraine were closed for entry and exit (Government of Ukraine, 2022).

4.2. Marine Insurance for Ships Sailing in the Black Sea.

Most of marine insurance clubs set up a series of requirements to ship-owners to sail only "within an approved safe area" after a throughout risk evaluation of sea lines and specific routes. Usually, they exclude of normal coverage to war perils, for which it is demanded an extra premium. Perils covered by an additional marine insurance against war perils commonly include war and war-like conditions, civil war, riots, sabotage, acts of terrorism, strikes or lockouts, piracy and mutiny, among others, as established, in Clause 2-9 of the Nordic Marine Insurance Plan of 2013, version 2019 (The Nordic Association of Marine Insurers (Cefor), 2018).

In this respect the BIMCO VOYWAR 2013 clause, also called the "War Risks Clause for Voyage Chartering" specifies in provision a subsection in that war risk include: "war, act of war, civil war or hostilities; revolution; rebellion; civil commotion; warlike operations; laying of mines; acts of piracy and/or violent robbery and/or capture/seizure (hereinafter "Piracy"); acts of terrorists; acts of hostility or malicious damage, blockades (whether imposed against all vessels or imposed selectively against vessels of certain flags or ownership, or against certain cargoes or crews or otherwise howsoever), by any person, body, terrorist or political group, or the government of any state or territory whether recognised or not, which in the reasonable judgement of the Master and/or the Owners, may be dangerous or may become dangerous to the Vessel, cargo, crew or other persons on board the Vessel" (NorthStandard Limited, 2023).

Most ship-owners include in the voyage parties this BIMCO clause or the BIMCO CONWARTIME 2013, for time charter parties, which addresses the same perils.

During the springs of 2022 at the increasing increase of 60% of marine insurance war risks registered ships navigating the Black sea, according to IUM, (2022). However, during

the summer, most insurance clubs cancelled the war risk insurance, leaving ship-owners and ship operators unavailable to transit this area, this action left many grain producers without being capable of exporting their grain products, which aggravated the world hunger crisis. Thus, the UN had to negotiate the Black Sea Grain Initiative (BSGI) with marine insurers to provide coverage to vessels sailing the black sea allowing the transport of corn and grain from the area.

Marine insurer clubs expect that the number of insurance claims will be limited in 2024, despite the rising of war and armed conflicts at different parts of the world, since cargo damage, hull and fire have usually been the biggest causes of claims, with a limited percent related to wars. Additionally, the average number of claims have been low during the last years (see the figure below), reporting positive loss ratios for the most significant shipping routes around the globe. According to the Nordic Association of Marine Insurers CEFOR (2024), it was not until 2019 that insurance claims exceeding US\$30m were reported. The impact of the Israel-Hamas war, the Russia-Ukraine war and Houthi attacks will be reflected on a stronger global inflation, principally if oil tankers are attacked. However, adjustments in marine insurance policies, not only related to higher premiums but also perils and coverage areas are expected, along with calls for government support and international actions. For example, Lloyd's of London insurers launched a programme with a series of actions aimed to cut losses related to damage claims for ships and crew navigating through the Black Sea Corridor back in November 2023. Additionally, significant funds were transferred to Ukrainian State banks like Ukrgasbank and Ukreximbank allowing them to issue letters of credit to cover ship-owners for the transport of goods through the Black Sea, (Economist Intelligence Unit, 2024).

5. General Discussion.

The maritime security situation in the Black Sea, including the high risk associated to war perils have been reflected in a steady increase to marine insurance premiums for vessels navigating this area, since marine insurance clubs demanded an additional "War Premium Coverage" and in many cases even cancelled the war insurance.

It should be highlighted that there is not any declaration of a blockade currently, neither for a "war zone" and the risks are associated to the establishment of the Marsec level 3 from the Ukrainian Maritime Designated Authority, due to the high uncertainty that Russia might declare the blockade at any time. In addition to the fact that Russia warned after denying to renew the Black Sea Grain Initiative (BSGI) in July, 2023, that they will consider merchant ships navigating to Ukraine's Black Sea ports as carrying military cargo and thus, enemy ships, with their flag states parties to the conflict and therefore could be attacked (France 24, 2023). However, it must be acknowledged that Ukrainian drones, constantly intimidated Russian warships during the running period of the neutrality agreement BSGI, which imposed certain obligations to both countries, which were violated by Ukraine. Russia on the contrary waited to the end

of the diplomatic deal to shoot fire to Ukrainian warships and merchant vessels (Tanis (2022), Bonnell, (ABC) News, (2023)).

This helped the Russian Federation to retain public perception and wide-reaching goodwill with international counterparts who did not validate sanctions against Russia due to a dependence upon Russian products, such as fertilizer (United Nations, 2022), plus the fact that during the brokered agreement they facilitated cargo shipments of fertilizers and grain to the international markets. This illustrates the significance of incorporating the law and its principles as part of the total defence strategy and a significant method of warfare.

Later, in August 2023 it was reported that Russia fired warning shots to the Palau-flagged Sukru Okan vessel after the ship's master rejected an inspection requested by the Russian Vasily Bykov naval patrol. After the fire attack and respective inspection, the vessel continued its journey towards the Ukrainian port of Izmail along the Danube river. This led to a large number of ships backed up in lanes around the Black Sea as ports struggled to clear backlogs amid growing tensions among insurers and shipping companies (Saul, 2023). The withdrawal of Russia from the BSGI and its threats to merchant vessels navigating the Black Sea, had severe consequences for the shipping industry and the world in general. These effects included the incapacity of Ukrainian grain to reach global markets and contribute to the reduction of world food prices; that worsened the global food crisis that arose within the first 100 days of the armed conflict.

Though there is not an official blockade declaration the naval strategy implemented by Russia points to the use of this method of naval warfare, since they are requesting inspections to vessels navigating Ukrainian territorial waters and warning for fire attack if such actions are rejected. The question is if the wrong use of the blockade term by politicians and diplomats in the early phases of the conflict contributed to this practice implemented by Russia after its withdrawal from the BSGI. According to the provisions of international law previously discussed, belligerent countries have a number of rights and obligations during an armed conflict. If and only if there was a declaration of blockade, Russia would acquire the belligerent right to capture and attack any merchant or war (enemy) vessel crossing the line according to the specified geographical blocked area.

The other alternative is that they could declare a "war zone", but the requirements regarding its declaration are similar to those for the blockade and in such case the Russian Federation would not obtain further belligerent rights and holds the obligation to respect the freedom of navigation for neutral shipping. It could be argued that it is a sea control operation, but in that case, Russia would not have the right of inspection or the right of visit of merchant shipping in Ukrainian territorial waters and ports. However, they do so arguing that they are searching and targeting war-sustaining objects.

Yet, under international law, as established in the 1856 Paris Declaration, which addresses the old principles of maritime law under time of war and particularly the doctrine regarding "Principle 2: Free Ships, Free Goods", neutral ships transporting grain cargo, which constitutes the exception to the rule that a belligerent country may target and appropriate enemy goods at

sea, excepting war contraband and specifically, private no public goods, which means that maritime transport of grain cargo should be covered and protected. This aligns with the Principle 3 of this Declaration regarding "Neutral Goods under Enemy Flag", which writes that neutral goods, with the exception of contraband of war are not liable to capture under enemy flag, principle that confirms the protection of maritime transport of the grain. Still several academics pointed out the inaccuracy of such principle since a vessel violating a blockade would be arrested by the violation itself and the cargo condemned as it was on board a considered enemy ship running a blockade (Ronsitti, 1988).

However, in the case of the Ukrainian-Russia war there is not a declaration of blockade.

Even if it could be contended that these principles are not currently applicable, because this Convention is from 1856, before the establishment and Charter of the United Nations, it is the same case for the 1936 Montreux Convention, regarding the Regime of the Bosphorus and Dardanelles straits and the sight of Turkey to close them to warships from belligerent countries in times of conflict, which was applied by Turkey on the bases of Article 19 of such Convention, granting the right to Russia to return their military vessels to their bases.

And even so, the provisions established in the San Remo Manual Applicable to Armed Conflicts at Sea are currently in force. As provision SRM 102 establishes, the declaration or establishment of a blockade is prohibited if it has the only purpose of starving the civilian population or denying it other objects essential for its survival; or if the damage to the civilian population is excessive in relation to the concrete and direct military advantage of the blockade. Certainly, starvation is the act of extreme suffering or death caused by lack of food over a long period and according to previous research it is the intake of nutrients below the necessary minimum levels to maintain an organism's life. In line with the established in the San Remo Manual, Resolution 2417 (2018) from the Security Council of United Nations condemns the use of starvation of civilians as a method of warfare, depriving civilians of objects indispensable to their survival, including obstruction of relief supply and access for responses to conflict-induced food insecurity in situations of armed conflict by will, which constitutes a violation of international humanitarian law (United Nations Security Council, 2018). Yet, it could be argued that since there is not a declaration of blockade consequently there is no starvation strategy applied in the conflict, though in practice the results are the same.

It must be acknowledged that any blockade is also subject to three international legal principles, which is the "principle of effectiveness", enacted in SRM §95, regarding to which extent must the blockading country allocate naval and armed forces for this action to be considered as "effective"; second, the "principle of impartiality", SRM §100 & 1909 LD Art. 5, regarding the generalization to which the blockade applies to vessels, including those from the blockading nation and finally, "the principle of proportionality" according to SRM §95, regarding the extent to which this action is necessary to win the war.

It is clear that the effects of this Russian naval operation on

Ukrainian ports and territorial waters has had a negative impact in the global food crisis. The legal question to apply this rule would be if the people suffering the starvation must belong to one of the parts in the conflict or if it could be the civilian population from any country around the world. The wording of this provision is not precise enough and it could be used as a legal solution to open the corridor and force Russia to respect the principle of "Freedom of Navigation".

Conclusions and Recommendations.

Immediately following the intensification of military activities during 2022, the northern Black Sea and entire Sea of Azov were designated as "Warlike Operations Areas," a decision that carries significant insurance implications. It is true that commercial shipping traffic shifted to alternative ports as best possible, however, transit times and associated shipping costs were significantly increased, and more stress upon an already challenged global supply chain was created. Russian military operations against Ukraine does not only threatens Ukrainian sovereignty, but also impacting negatively global food security, including nations reporting the highest gross domestic product (GDP), as well as those associated with a very modest one.

Food prices have increased worldwide and with inflation maintaining an upward trend there are significant concerns for low-income countries, where the possibility of famine is clearly intensifying. It is estimated that more than half of Ukraine's food exports are towards lower-income countries, predominantly in Africa and the Middle East. In those regions, hundreds of millions of people face chronic hunger, and bread and other food made with grain often hold particular cultural importance. The United Nations' World Food Program (WFP) has estimated that Ukraine's farmland could feed some four hundred million people, though its exports have faltered in the wake of Russia's invasion. The Russian government's decision on July 18, 2023 to withdraw from the Neutrality Agreement called "The Black Sea Grain Deal", aggravates the need for robust global food supply and clearly opens up the possibility of famine and more poverty.

Russia has moved aggressively to put a stop at Ukraine's grain exports, aiming to crush a critical economic sector. On the positive side, Ukrainians (definitely with external help and especially support from the EU providing crucial help) have found innovative ways to keep the crucial food supplies flowing; the success of grain transport efforts is clearly a welcomed relief to various countries in Africa and the Middle East. The Russian naval operation in the Black Sea to prevent merchant vessels from sailing into Ukrainian ports and territorial waters lacks a legal foundation, since there is not any formal declaration of a blockade, which could then provide the belligerents with appropriate "rights" to stop maritime traffic in the area. Furthermore, there is inaccuracy in the provision 102 from the San Remo Manual regarding the prohibition of a blockade regarding the starvation and the extent of the civilian population it applies to whether within the national borders or the whole world.

The international community can further protect the "rule of law" in the wider Black Sea region by effectively combating the long-standing Russian commitment to "lawfare" and/or "unlawfare" type of activities. To help the reader better understand those terms, "lawfare" leverages existing law(s) and legal processes to accomplish military ends, while "unlawfare" uses the illicit interpretations of internationally recognized standards to do the same. For example, the strategy implemented by Russia concerning the respect of the obligations of neutrality for the Black Sea ports, imposed by the BSGI, despite the fact their warships were constantly attacked by Ukraine during the running period of the grain deal, violates such obligations.

Future research directions.

This paper identified the need for the correct interpretation of Provision 102 of the San Remo Manual, since it could provide the grounds for solving related future conflicts. Thus, it is recommended that expert legal advisers analyse this rule of law.

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