



Centre for
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Ukrainian storm warning:

A Grave Danger to Europe
in the Maritime Domain

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The Black Sea region's security environment has dramatically deteriorated. Having militarized Crimea, Russia has achieved its dominance in the Black Sea and renewed its power projection ability into the Middle East, Northern Africa, and the Eastern Mediterranean. Along with the undeclared war in Donbas, this illegal annexation is an additional hot spot on Europe's frontier.

Russia's expanded missile, naval and air force capabilities, including nuclear, are security threats to Europe as a whole and an apple of discord between allies. With the approval of its new nuclear posture, the Black Sea region de jure has become an arena of nuclear confrontation and there has been an increased likelihood of an incident that could potentially lead to conflict that involves Russian use of tactical nuclear weapons.

Though this paper is focused primarily on the Black Sea, it is worth noting that Russia is contesting the Barents Sea and the Baltic Sea for it has similar interests. Thus, it is necessary to see the Kremlin's actions in distant geographic areas as elements of its grand design and to respond in a comprehensive manner.

Ukraine is extremely vulnerable to maritime threats and might face grave consequences as a result of Russian actions at sea that might be considered below the threshold of military aggression. Thus, it is high time for Ukraine and its partners to forge a common Black Sea strategy and take immediate action in a coherent and coordinated manner to counter the growing threats posed by the Kremlin's aggressive policies.

The paper sets the wider strategic framework that allows to grasp the state of play, describes key stakeholders' interests, introduces scenarios' constructor as well as outlines key ideas of a strategy to develop.

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GLOSSARY

A2/AD	Anti-Access/Area Denial	MAP	NATO Membership Action Plan
AIS	Automatic Identification System	MARCOM	NATO Allied Maritime Command
BMD	Ballistic Missile Defence	NATO	North Atlantic Treaty Organisation
CRDLO	Certain Regions of Donetsk and Luhansk Oblasts	NAVTEX	Navigational Telex
DDG	Guided-Missile Destroyer	OSI	Opens Source Intelligence
EEZ	Exclusive Economic Zone	PSYOPS	Psychological Operations
eFP	NATO Enhanced Forward Presence	SLOC	Sea Lines of Communication
EOP	NATO Enhanced Opportunities Partnership	SNMG	Standing NATO Maritime Group
EU	European Union	SOF	Special Operations Forces
FDI	Foreign Direct Investments	SOLAS	International Convention for the Safety of Life at Sea
FSB	Federal Security Service of the Russian Federation	tFP	NATO Tailored Forward Presence
GPS	Global Positioning System	UAV	Unmanned Aerial Vehicle
ICJ	International Court of Justice	UN	United Nations
IMS	NATO International Military Staff	UNCLOS	United Nations Convention on the Law of the Sea
INF	Intermediate-Range Nuclear Forces Treaty	USSR	Union of Soviet Socialist Republics

FOREWORD

It is common knowledge that parts of Ukraine are under temporary occupation, these include certain regions of Donetsk and Luhansk Oblasts (CRDLO) and Crimea. Very few realize, however, that as of today Ukraine has no control over three-fourths of its maritime space: its territorial waters and exclusive economic zones in the Sea of Azov and the Black Sea (100 out of 137 thousand square kilometres). This area is more than twice as large as the territories of CRDLO and Crimea taken together.

The length of Ukraine's seashore is equal to one half of its land borders, i.e. one third borders the sea. Ukraine is a maritime nation. The sea plays an important role in Ukraine's economy and is critical for millions of citizens. The seaports are Ukraine's gateway to the world. Neither Ukrainian agribusiness, nor its metallurgical industry, nor any other sectors can flourish without access to the sea. Most of Ukraine's import and export are transported by ships. Losing access to the sea or freedom of navigation would cripple the Ukrainian economy. Additionally, our maritime exclusive

economic zone (EEZ) has large deposits of gas, oil, and minerals, which could help Ukraine to not only become self-sufficient in natural gas, but even to become a net exporter.

Russia deliberately exploits these facts. The threat from the sea is a real, ever present one; it is an arena of the current hybrid war. The aim of Russian aggression is to expand and retain control over the sea, to transform it into a Russian mare nostrum – under the slogan/hashtag: 'Крымнаш' (Crimea-is-ours). Ukraine's dependence on the sea might be exploited to achieve the Kremlin's strategic goals of securing absolute dominance over Ukraine, limiting its sovereignty, and reversing course towards the EU and NATO. At least Russia might try to employ this leverage to plunge Ukraine into chaos.

Ukraine possesses leading experts in the subjects of maritime affairs and security. Many of them have been involved in this research herein. They offer some potential solutions to address the maritime challenge, but these need to be

assessed in their totality and placed on the foundation of a renewed national policy. Many efforts have been already taken, in particular, the Navy is already augmenting its capabilities, diplomatic steps are being taken, and partnerships are being created and deepened, but a major part of the work is still to be done.

We hope this research will contribute to shaping a clear picture of the geo-strategic challenges and threats for a wide audience, as well as for Ukrainian politicians and officials, by focusing discussion on specific measures and a number of commonly acceptable suggestions which are not necessarily exhaustive, but still allow Ukraine to start moving things forward.



Andriy Zagorodnyuk

Chairman of the Board, CDS

Minister of Defence of Ukraine, 2019-2020

Leader of Project Office of Reforms of MOD Ukraine, 2015-2018

We are confident that Ukraine will be able to reduce and neutralize the maritime risks in the future. But that requires political will, tough decisions and a clear priority today. We hope the proposals outlined in this paper will be supported by society and promoted by our international partners. We strongly believe that we will see our maritime space return, as well as the temporarily occupied territories which belong to the Ukrainian people by right. The flagship of the Ukrainian Navy, the frigate 'Hetman Sahaydachniy', is pictured above. The photograph was taken in its homeport – Sevastopol Bay. One day, it shall return to its homeport.

A handwritten signature in black ink, consisting of a large, stylized initial 'A' followed by a cursive name.

INTRODUCTION

The illegal annexation of Crimea and Russia's proxy war in Donbas were strategic surprises. The Kremlin's aggressive foreign policy poses an existential threat to Ukraine and to Georgia, states that have not yet succeeded in joining NATO. The accelerated militarization of the Crimean Peninsula turned it into a bridgehead for Russian power projection well beyond the Black Sea region. With its new officially declared nuclear posture, the deployment of nuclear weapons delivery systems to Crimea, and the speedy build-up of its Kalibr cruise missile salvo capabilities, Russia has de jure turned the Black Sea region into an area of nuclear confrontation. Russia's interests in the Black Sea are similar to its interests in the Barents Sea and the Baltic Sea. Thus, developments in the Black Sea security environment will be mirrored in the North as well, turning local developments into international problems. In spite of all of this, Ukraine and the international community have yet to come up with a clear strategy for countering the Kremlin's geopolitical ambitions.

Ukraine is extremely vulnerable to maritime threats and might face grave consequences as a result of Russian actions at sea that might be considered below the threshold of military aggression. Thus,

we believe that it is high time for Ukraine and its partners to forge a common Black Sea strategy and take immediate action in a coherent and coordinated manner to counter the growing threats posed by the Kremlin's aggressive policies.

This report contributes to the discourse on Black Sea security and the steadily increasing number of research and policy papers on this topic. Given the complexity of the issue, this report focuses on the key aspects that, when combined, may present a clear picture of the regional security environment, Russian goals and means, as well as possible Russian actions. Some issues are only briefly touched upon as they have already been laid out in detail in the papers of other experts. This report outlines key ideas that might compose the pillars of a future strategy and puts forward a number of concrete steps to be taken in the course of its implementation.

Report structure

This report begins with a general overview of the state of affairs of global politics, the interests of the big players in the Black Sea region, and how they affect the security dynamics of the region. The primary goal of this report is to put the Black Sea

region in the wider context that is needed to understand the factors at play. Moreover, the threats and challenges in the Black Sea region cannot be considered without addressing Russia's actions in other geographical areas and domains. There is also a sketch of the evolution of the reasoning of Russian elites that has led to Russia's current confrontational course.

The two subsequent chapters examine Russia's strategic and tactical goals and actions in the maritime domain and consequential changes to NATO's presence in the region since 2014. Along with the highlighted role of the heavily militarized Crimean peninsula in the Kremlin's power projection to the Mediterranean, the Middle East, and North Africa, this report underscores that this is an element of the Russian architecture of 'insecurity bubbles' that stretches from the North (Barents Sea and the Baltic Sea) to the South (Syria and Libya). One of the main conclusions is that it is necessary to lay out an Eastern Flank defence strategy that would include a Black Sea component and describe the role of partner countries in it.

The fourth chapter is dedicated to nuclear issues for the following reasons. Firstly, the Kremlin has been lowering the threshold for nuclear weapons use as well as widening the range of 'legitimate' targets, e.g. use against non-nuclear states. These possibilities are outlined in Russia's newly-adopted nuclear posture that de jure turns the region into the arena of nuclear confrontation and increases the likelihood of an incident that could potentially escalate to a conflict that includes the use of tactical nuclear weapons by Russia. Secondly, the Kremlin has returned to the rhetoric of nuclear blackmail in a way not seen since the 1960s. This rhetoric is aimed

at striking a 'grand bargain' with the US at the expense of other states, particularly those that Russia claims belong to its sphere of influence. Finally, Russia has already deployed nuclear weapon delivery systems to Crimea, and is reconstructing the nuclear munition storage facilities there. Russia is also considering deploying strategic bombers to Crimea on a permanent basis.

The fifth chapter describes the spectrum of non-military tools that Russia employs to wage its aggression against Ukraine. Since there is a good number of studies on Russian propaganda, subversive operations, use of soft power, and other hybrid warfare tools, this chapter describes only those relevant to Ukraine. In particular, it describes the disruption of freedom of navigation. Some of these Kremlin approaches might be familiar to those who observe Chinese actions in other waters.

This report introduces a scenario construction chapter (Chapter Six) as a way of coping with the complexity and scope of the problems that make traditional scenario elaboration hardly possible in this case. This chapter identifies trigger events and conditions that may result in the Kremlin taking aggressive action, the likely objectives that fit into the overall Russian strategic direction, as well as already-known or feasible patterns of Russian behaviour.

The Seventh Chapter is dedicated to the Ukrainian reader, as it addresses an ongoing discussion between two camps: one which believes that given the urgency in building up naval capabilities and Ukraine's lack of resources and naval-industrial power, the Ukrainian government should stick to the concept of a 'mosquito fleet' in the first stage; that Ukraine should launch

its own production of larger warships only after filling critical maritime capabilities gaps using the 'mosquito fleet' idea as a guide. This report promotes this idea. The other camp believes that Ukraine needs to invest in building its own corvette type warships from scratch or/and engage in some kind of joint construction of corvette type warships with a foreign partner.

The final chapter proposes a reasoning on what a sound Ukrainian strategy should be based on and what it should consist of. This report promotes the necessity of a coordinated national, regional and international response. The proposed strategy begins with building up Ukrainian institutional capabilities and acquiring hard power tools, as well as taking legal actions. As an emergency measure, Ukraine should elaborate contingency plans for possible actions in the maritime domain and proceed with acquiring the necessary naval assets. Ukraine should cooperate with regional actors on maritime affairs, and attempt to influence external actors to become more involved in the region.

The recommendations section puts forward proposals ranging from actions at the strategic level through to immediate steps that should be carried out at a tactical level.

Approach

There is a consensus within the community of Ukrainian experts on the real threats posed by Russia primarily in the maritime domain; there is a shared sense of urgency to counter them.

Thus, this report is based on the contribution of a spectrum of experts. The authors defined the content and structure of this report, guided by their desire to provide a wholistic picture, without just repeating findings from the research and policy papers of others. The ideas contributed for this report were arranged into a defined storyline and underwent several iterations of discussions within the group. The final draft was provided to a number of experts for peer review.



SUMMARY

The Black Sea region's security environment has dramatically deteriorated. The illegal annexation of Crimea is not an anomaly in Russia's behaviour but is rather a return to the traditional expansionist policies of its past. Its current path stems from two factors: first, as a reaction to a perceived threat from the West that is allegedly trying to undermine Russia's stance in the area of its 'privileged' interests. The other driver is Vladimir Putin's quest to restore Russian greatness at the expense of its neighbours.

Having militarized Crimea, Russia has achieved its dominance in the Black Sea and renewed its power projection ability into the Middle East, Northern Africa, and the Eastern Mediterranean. Along with the undeclared war in Donbas, this illegal annexation is an additional hot spot on Europe's frontier. More than this, Russia's expanded missile, naval and air force capabilities, including nuclear, are security threats to Europe as a whole and an apple of discord between allies.

The seizure of Crimea has allowed Russia to integrate the Northern and the Southern parts of its 'bubbles of insecurity' (A2/AD) architecture, lessening the strategic depth of NATO and partner nations. The Kremlin pursues its ultimate foreign policy and security goals opportunistically, in various domains, while Ukraine and the West take more time to make decisions and exploit opportunities and shore up allies.

Given the rift between Turkey and its Transatlantic Allies, it will be very difficult for the Black Sea states to bring the security environment back to normal on their own. Until there is a reversal of the accommodational approach regarding the membership of Ukraine and Georgia in NATO, Russia will seek to re-establish its spheres of influence through a combination of well-developed hybrid tools that blur the line between war and peace. The Kremlin's

preference for hybrid tools does not rule out the likelihood of the employment of direct, brutal force. Since 2014 NATO has significantly augmented its standing in the Baltic states and Poland with its Enhanced Forward Presence (eFP). The Black Sea was given a lower priority with the tailored Forward Presence (tFP) for allies and the Security Package for partner countries. The latter, along with US security assistance, added some desperately needed capabilities for partner nations in the Black Sea region. Yet these still fall short of an adequate response to Russia's growing military potential in the region.

Though NATO's rotational presence in the Black Sea has restrained the Kremlin's actions against Ukraine to some extent, it does not deter Russia from violating freedom of navigation in the Sea of Azov as a form of economic warfare. Russia has been taking advantage of NATO's scarce resources that are stretched between distant theatres of operations. NATO's Southern flank, as well as Europe as a whole, will remain exposed to various unmitigated threats from the Black Sea, including a missile threat, until there is a new Eastern Flank strategy in place. A comprehensive strategy that includes a Black Sea component that involves regional partner nations as an integral part of the strategy. On top of this, Russian actions remain unchecked in the Middle East and North Africa.

Russian behaviour underpinned by doctrinal documents demonstrate the offensive nature of the Russian Navy. It has already established a maritime insecurity belt in the Northern part of the Black Sea region, aimed at blocking Ukraine's naval assets into the vicinity of Ukrainian bases and ports, imperilling non-Black Sea NATO countries' warships in the region, and keeping most other regional navies within their offshore areas and that of Turkey below the 43rd parallel. Russia has an advantage over other regional powers in terms of numbers, firepower, and new weaponry. Furthermore, the Kremlin is planning to commission 10 more warships in the next seven years and increase its Kalibr missile salvo capabilities in the Black Sea by almost three times. The deployment of new hard-to-detect Kilo-class submarines carrying Kalibr missiles, including variants capable of delivering nuclear warheads, have raised the regional threat level.

Nuclear forces continue to compensate for the huge gap in conventional arms and forces between Russia and NATO. Meanwhile, the Kremlin has chosen escalatory rhetoric and an escalatory course of action to persuade the West to agree on a new set of rules based on the recognition of Russia's 'legitimate' interests in return for some 'concessions'.

Vladimir Putin might be following the logic of political expediency rather than of military necessity on the issue of the deployment of nuclear weapons to Crimea. The Kremlin has already deployed the means of nuclear weapons delivery to the Peninsula, launched reconstruction works at two nuclear munition storage facilities, and is considering the permanent stationing of some strategic bombers there. Russia's vaguely outlined nuclear doctrine could be

interpreted as containing the possibility of using limited scenarios of 'controlled' escalation with the employment of nuclear weapons. The primary targets near Crimea are Poland and Romania, countries that are hosting elements of the US BMD. There are possible scenarios where Ukraine might be defined as a nuclear target as well. With the approval of this new nuclear posture, the Black Sea region de jure has become an arena of nuclear confrontation and there has been an increased likelihood of an incident that could potentially lead to conflict that involves Russian use of tactical nuclear weapons.

Ukraine is a Russian test-bed for new methods and approaches for conflict, including the use of soft power tools (such as the 'Russian World' concept and use of the Russian Orthodox Church) aimed at, among other things, the suppression of a society's will to resist. The forceful conversion of Ukrainian citizens in Crimea into Russian nationals and the fast-track distribution of Russian passports in the occupied territories of Donetsk and Luhansk have the goal of justifying the Kremlin's 'right' to interfere with Ukrainian internal affairs.

Corruption is one of Russia's key foreign policy tools that is being used to promote its interests abroad, ranging from carrying out energy projects, to attempts aimed at the erosion of the sanctions regime and the legitimization of the Crimea annexation.

Russia has been waging economic war by obstructing cargo shipping to and from Ukrainian ports on the Sea of Azov, misusing the SOLAS Convention in order to disrupt navigation, exploiting Ukrainian offshore gas fields, and de facto annexing vast resource-rich areas of the Black Sea. Without a Ukrainian consent Russia built

the Crimean bridge, constructed a gas pipeline and laid a submarine electricity cable, connecting the mainland Russia with the Ukrainian peninsula. Russia is using civilian maritime industry facilities for its own military purposes. Russia is spoofing GPS signals and has been trying to take control of air traffic management over the illegally annexed territories, increasing the risk of accidents with serious consequences, both at sea and in the air.

Classical approaches to scenario modelling do not seem appropriate for the scope and complexity of the Russian conflict with Ukraine, especially given the background of Russia's overall confrontation with the West. Russia views imposing its will over Ukraine as its goal. At the same time, its war against the country is a tool for achieving other strategic goals of the Kremlin, including those unrelated to Ukraine, such as sowing discord between European and Transatlantic allies. Thus, it is more useful to identify trigger events and conditions that may cause the Kremlin to take action, pursuing objectives that fit into Russia's overall strategic direction, and continuing already-known or initiating novel but feasible patterns of Russian behaviour.

Russia poses a direct threat to Ukraine via the offensive build-up on its border, the heavily militarised Crimea, and its proxy forces in Donbas. Cutting a land corridor to Crimea through Ukraine and cutting off the central and western parts of Ukraine from the sea, seizing control over cities of Odesa, Dnipro, Kharkiv and Mykolaiv remain Russian goals. An issue involving the supply of water to Crimea from the Dnipro river may serve as the trigger for aggression. Russia could try to seize Serpent's (Zmiinyi) Island,¹ a move that

would strengthen its ability to restrict freedom of navigation for Ukraine as well as pose major obstacles for its Navy. A naval blockade of Ukrainian Black Sea ports would have a devastating effect on the Ukrainian economy and political stability. The number of provocative actions by Russian pilots and sailors against NATO or Ukrainian jets and ships may rise, increasing the likelihood of miscalculation and escalation. Though the Kremlin prefers to employ subversive actions and destabilize the situation, it would be erroneous to completely rule out the possibility of a large-scale conflict.

So far, Ukraine has not managed to build up force components capable of deterring Russia or repulsing its possible aggression from the sea. There is still an ongoing discussion in Ukraine between proponents of a national corvette program and the 'mosquito fleet' concept. The first group puts forward arguments about the necessity of filling the gap in firepower, of employing Ukrainian industry and enhancing its ability to accommodate the future needs of the Ukrainian Navy, of applying existing and acquiring new technologies in defence and shipbuilding, and of developing workforce skills, and bringing overall economic, social and political benefits. The proponents of a 'mosquito fleet' argue that while Ukraine would be pursuing the corvette option, acquiring a lone platform with capabilities in excess of those required to meet the primary goals set in Ukrainian naval strategy, Ukraine would be vulnerable for a much longer time than if it develops the 'mosquito fleet' concept. In essence, the 'mosquito fleet' concept does not contradict the idea of corvette construction, but rather arranges priorities in a way that takes into consideration security and production risks.



RK-360MC 'Neptune' missile test, © Ukroboronprom

Ukraine has yet to define a clear asymmetric strategy on Russia, as well as the institutions designated to cope with various Russian maritime threats, be they of a hybrid or traditional nature. The fundamentals of the policy of the non-recognition of the Crimea annexation, as well as those of the restoration of Ukrainian territorial integrity, are either absent or inconsistent in Ukrainian laws and regulations.

There is no national contingency planning nor are there plans coordinated with regional partners and NATO concerning possible Russian aggression against Ukraine from the vulnerable Southern direction. The government has not set its mind to the issue of the composition and development of its naval forces that largely remain legacy platforms from the Soviet era. Mechanisms for situational awareness are not in place nor are there mature arrangements in place for effective real-time interaction with partners.

Ukraine needs to do more to acquaint some reluctant European partners with the threats that Russia poses to them, especially those threats emanating from the Black Sea.

Kyiv needs to redouble its efforts to persuade partners to impose sanctions on the Russian defence industries that strengthen Russia's ability to carry out an aggressive policy against Ukraine and elsewhere.

Ukraine needs to encourage an increased presence of non-Black Sea NATO navies and air forces in the region; this will require a legal framework to allow for an extended presence, without violating the Montreux Convention. Kyiv needs to contribute to the development of the NATO 2030 Secretary General initiative, this provides a potential platform to promote the idea of the necessity of developing an Eastern Flank defence strategy, one that includes a Black Sea component, elaborating the role of partner countries and their contribution to it. ©

THE BLACK SEA REGION IN A WIDER STRATEGIC FRAMEWORK

This chapter gives a general overview of the state of affairs in global politics, the interests of the big players in the Black Sea region or lack thereof, and how these interests affect the security dynamics of the Black Sea region. In brief, this chapter describes the evolution of the reasoning of Russian elites, reasoning that has led to the current confrontational course. This chapter also shows the importance of Crimea to Russia's geostrategic calculus throughout history and highlights the fact that Moscow had been constantly trying to seize the peninsula in recent history until it finally succeeded six years ago.

Securing access to 'warm seas' has always been an aspiration of Russia's rulers right up to the conquest and the annexation of Crimea by Catherine II in 1783. The world wars of the 20th century provided an opportunity for Moscow to establish control over most of the coastal areas of the Black Sea region, as well as to play a role in North Africa and the Middle East. The Soviet Black Sea Fleet, with the support of regional Warsaw Pact allies, was meant to dominate the Northern, the Western, the Eastern, and the Central parts of the Black Sea and to provide unhindered projection of naval power into the Mediterranean, and even into the Atlantic and Indian oceans.

The emergence of independent states on the ruins of the Soviet Empire brought a new geostrategic reality to Europe. It seemed that the irreconcilable confrontation between the two superpowers was over, and that Russia would benefit from

Western assistance on its way to full-fledged membership in the international community, adopting its shared values and principles. However, even the relatively 'liberal' Russia, as it was then, questioned the internationally recognized borders of the former Soviet Republics.² Russia incited and supported 'separatists' movements and attempted to take the Crimean Peninsula.³ President Boris Yeltsin's 'liberalism' came to an end with a non-democratic transfer of power, with a turn back to the

One of the key elements of so-called 'hybrid war' is a blurring of the line between war and peace

Unlike the Baltic states that made it into NATO and EU membership, Ukraine and Georgia failed to escape the security 'grey zone' during the short period when Russia 'refocused'. This has permitted Russian aggression in the more vulnerable Southern direction

authoritarian model of governance (solidified in the Russian Constitution of 2020). Russia now suppresses the rights and liberties of its citizens, confronts neighbouring states, and views the West as Russia's ultimate adversary.

The important turning points in the restoration of support for a confrontational foreign policy approach among the Russian elite were NATO's campaign in the Federal Republic of Yugoslavia and the so-called 'Colour Revolutions' that took place in several post-Soviet states. Russian diplomacy hindered the resolution of the Balkan conflict within the framework of the UN Security Council's. It protected President Slobodan Milosevic's 'right' to commit crimes against humanity, the same 'right' that was widely used in the Chechen war that paved Vladimir Putin's way to the Kremlin. The US and their NATO allies bypassed the UN Security Council and launched airstrikes to prevent further ethnic cleansing in the Federal Republic of Yugoslavia, seeing this as an obligation – a 'Responsibility to Protect.' The Russian elite saw this step as a wake-up call. It was Vladimir Putin, the Chairman of Russia's Security Council at the time, who kicked off the process of a nuclear posture review that resulted in a lowering of the threshold for nuclear use (including use against non-nuclear states; use in response to a conventional strike; and use in the case

of an 'escalate to de-escalate' approach).^{4,5,6} Nuclear blackmail returned to the Kremains' rhetoric in a way unprecedented since the Cuban Missile Crisis of 1962, and it is now widely used for political purposes (by showing off mysterious new nuclear weapons,; threatening to turn the US into 'radioactive ash'^{9,10} and so on).

The Rose Revolution and the Orange Revolution were perceived as threats to Vladimir Putin's regime. Since members of the Putin regime believe in neither the right nor the possibility of citizens seeking a better life by toppling their politicians, the peaceful transfer of power in Georgia and Ukraine in 2003-2004 were perceived as conspiracies of the West. They believe that the only purpose of such 'intrusions' is the further 'encirclement' of Russia to prevent its restoration as a global power. Since then, the Kremlin has developed and started to apply soft power tools for hard coercion,¹¹ including the concept of the 'Russian World'^{12,13,14} and empowering the Russian Orthodox Church as an integral part of Kremlin strategy.^{15,16} These were accompanied by massive propaganda campaigns and influence operations, as well as the use of any forms of cooperation (cultural/humanitarian, trade/economic, energy, etc.) as tools for achieving political goals. Paradoxically, the Russian non-linear warfare doctrine, attributed (mistakenly)

to Valery Gerasimov, the Chief of the General Staff, was outlined as a summary of alleged technologies used in the expansion of Western dominance.¹⁷ This kind of thinking and asymmetric approach let the Kremlin bridge the gap between its enormous global ambitions and its lack of the attributes of a great power apart from its huge nuclear and missile capabilities and its vast geographical space. However, these 'new' approaches are, in fact, based on proven methods developed during Soviet times. One of the key elements of so-called 'hybrid warfare' is a blurring of the line between war and peace.¹⁸ Everything is a weapon,

The only aim of attempts to impose 'compromise' models such as non-block status, neutrality, or Finlandization – is to gradually draw the target countries into Moscow's sphere of influence

and everything is a war. The political process, diplomatic negotiations, the use of international law, economic competition and even securing support for a ruling regime are considered as equal to combat operations in a long-term war for regaining the status of a great power abroad and preserving the regime's rule at home.

The authoritarian nature of the Putin regime allows it to allocate significant resources to pursue Russia's foreign policy objectives. Meanwhile, total control of the media and massive brainwashing provide

the necessary number of passionate recruits or common thugs for Russian operations– the so-called 'They-Are-Not-Theres'.¹⁹ The controlled Russian media also secures the support of a large number of the Russians via orchestrated outbursts of 'Crimea Is Ours'²⁰ or 'Victory-Revelling'^{21,22} euphoria while the sober minority is either forced to leave the country²³ or is marginalized.

Unable to compete with appealing ideas about the future or provide a decent lifestyle for the wider population, the Russian elite turned to use the reconstructed image of an 'authentic history'. After so many years of distorting history, the Kremlin has started to believe in the imaginary reality of its own 'indisputable' interpretation. Pseudo-historical arguments have come to dominate over the principles and provisions of law and even over the realities of international politics, which have changed drastically over the past three decades. The Kremlin is pursuing a revisionist strategy in order to re-establish its spheres of influence, while at the same time accusing others of establishing their own.^{24,25} Ukraine and Georgia have suffered the most, unlike the Baltic states and Poland, as they failed to escape the security 'grey zone' during the short period when Russia 'refocused itself'. Poland and the Baltic states' membership in the EU and NATO, as well as their joint borders with the countries of Old Europe, turned Russian aggressive moves away from them and towards less protected countries to the South.

The illegal annexation of the Autonomous Republic of Crimea and the city of Sevastopol, the proxy-war in the Donbas, the overt war and covert occupation of Abkhazia, South Ossetia and Transnistria (which is not officially recognized by Moldova) are designed to neutralize the efforts and

aspirations of the affected states to join the Free World. The Kremlin's ultimate goal with regard to Ukraine is securing absolute dominance over Ukraine, limiting its sovereignty. The Kremlin's attempt to impose

overwhelmingly dominate the Black Sea and use it as a platform to project power into the Mediterranean,²⁷ to North Africa, and to the Middle East. The Kremlin is trying to expand its Syrian 'success story' to Libya.

Russia has had relative success in using non-military means to block the aspirations of neighbouring nations to become a part of the Free World, but has failed at drawing them into its sphere of influence. This failure has not ruled out but has rather increased the likelihood of Russia employing much blunter, but more effective, forms of coercion in its quest for 'Lebensraum'

'compromise' models such as non-block status, neutrality, or Finlandization has only one aim - to gradually draw the target countries into Moscow's sphere of influence. Belarus is an excellent example that proves that even its status as a Russian ally is no protection from aggressive take over. Moscow's application of its unmatched non-military means, and sophisticated non-linear warfare tools has caused considerable harm to targeted nations. Nevertheless, Russia has failed at drawing them into its sphere of influence, not to mention failed to gain approval from the international community of Russia's 'right' to have such a 'sphere of influence.' However, this failure has not diminished, but instead increased the likelihood of Russia employing much blunter, but more effective, forms of coercion in its quest for 'Lebensraum'.²⁶

Unlike Russian military assets in the occupied territories of Georgia and Moldova that are meant to pose threats only to these countries, illegally-annexed Crimea is of strategic importance to the Kremlin. Russia is using this 'unsinkable aircraft carrier' to

Both campaigns would have been impossible or at least significantly complicated without the seizure of the Crimean Peninsula. The escalation of the situation in Syria, with the use of the latest weapons and tactics of warfare, and a number of cases that can be qualified as war crimes, has generated a waves of refugees heading to the EU. In its turn, this has led to crises at the EU-wide and national levels, boosting Euroscepticism and assisting the rise of anti-liberal forces in a number of European countries.

Russia has beset Europe with hot spots of instability from the East and South, and by A2/AD bubbles²⁸, turning itself into a factor which cannot be ignored. Certain European politicians who are sympathetic to Russia tend to neglect the security concerns of others and complicate the decision-making process when Moscow's interests are at risk. Transatlantic and European unity is challenged by the Kremlin's increased pressure on the Baltic and Black Seas and the Mediterranean region and by the escalation of conflicts ignited by Russia or with its direct involvement, along

with Russia's influence operations, and disinformation campaigns.²⁹ The US 'Pivot to Asia' policy, as well as the developments in the Syrian war, opened up a favourable opportunity that the Kremlin seized. The power vacuum in the Middle East has been promptly filled by Russia and Iran.³⁰

Turkey is a major naval power in the region, yet most of its assets are focused on the Mediterranean. This gives Russia an advantage in increasing its capabilities in the Black Sea. Additionally, both countries' interest coincide in restraining the naval presence of non-Black Sea players via the Montreux Convention. The construction of the Istanbul Canal could significantly change the regime of access to the Black Sea, and this still remains an open question.³¹

China's presence in the region remains limited despite its willingness to build an alternate gateway to European markets, particularly through cooperation with Central and Eastern European countries in a '17+1' format. Romania and Bulgaria, which are part of this format, receive only 1.6% of Chinese FDI in Europe. On the other hand, Beijing is cherry-picking its priorities, particularly in the high technology and defence industries, as well as in infrastructure projects.

It will be very difficult for Black Sea states to bring the security environment to Status Quo Ante on their own

The decisions of the 2008 NATO Bucharest Summit not only disappointed the leaderships of Ukraine and Georgia, but also were identified by the Kremlin as a window of opportunity

George H. W. Bush's vision of a 'Europe whole and free' was later replaced by George W. Bush Jr's 'Global War on Terror'. In between the Bushes, Bill Clinton focused his efforts on Balkan matters, hoping that bringing new democracies into the EU and NATO would have a positive impact on regional security. By becoming an important partner in combating international terrorism after 9/11, Russia outmatched the legitimate aspirations of other countries for security and well-being. The decisions of the 2008 NATO Bucharest Summit not only disappointed the leaderships of Ukraine and Georgia, but were also identified by the Kremlin as a window of opportunity, which Russia took up just four months later. Though the concept of a 'Europe whole and free' is still exists, the resources and attention of the United States have shifted, while the EU has been preoccupied with its own internal problems and external crises.

Brexit pushed the United Kingdom to reconsider its global role and rearrange its priorities. Though there has been a decrease in its ability to consolidate the EU members in coping with Russia's threats and challenges, London has taken on the



Signing of the Memorandum of Intent for defence cooperation between the Ministry of Defence of Ukraine and the Ministry of Defence of the United Kingdom 8.10.20

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role of a European leader in supporting NATO allies and partners in the Black Sea region. The UK is leading a multinational Maritime Training Initiative for the Ukrainian Navy, aimed at boosting its ability to combat threats in the Black Sea.³² With the recently signed Political, Free Trade, and Strategic Partnership Agreement, Britain's role is even more sound with regard to Ukraine.³³

The international community responded to the illegal annexation of Crimea and the war in Donbas with a non-recognition policy, and effective and painful anti-Russian sanctions, as well as the reinforcement of NATO allies and partners. However, unlike Russia, Ukraine and the West are reacting discretely and even deferentially,

in particular domains and in certain geographic areas. There is also a difference in tempo – the responses of Ukraine and the West doesn't match the pace of Russian action – which again ensures that the Kremlin maintains the upper hand and that Ukraine and the West are kept on the back foot. Moreover, because of their democratic forms of government, EU and NATO members must deliberate and ensure that enough political factions are aligned on a particular foreign policy, and only then can they be effective actors. Russia's authoritarian regime can act more decisively without taking any account of public opinion. This gives the Kremlin opportunities and sometimes the necessity to act in an unpredictable manner. ©



© NATO Secretary General of the President of Ukraine

The Black Sea region's security environment has dramatically deteriorated. The illegal annexation of Crimea is not an anomaly in Russia's behaviour but is rather a return to the traditional expansionist policies of its past. Its current path stems from two factors: first, as a reaction to a perceived threat from the West that is allegedly trying to undermine Russia's stance in the area of its 'privileged' interests. The other driver is Vladimir Putin's quest to restore Russian greatness at the expense of its neighbours. Having militarized Crimea, Russia has achieved its dominance in the Black Sea and renewed its power projection ability into the Middle East, Northern Africa, and the Eastern Mediterranean. Along with the undeclared war on Donbas, this illegal annexation is an additional hot spot on Europe's frontier. And more than this, Russia's expanded missile, naval and air force capabilities, including nuclear capabilities, are security threats to Europe as a whole and an apple of discord between allies.

The seizure of Crimea has allowed Russia to integrate the Northern and the Southern parts of its 'bubbles of insecurity' (A2/AD) architecture, lessening the strategic depth of NATO and other allies. The Kremlin pursues its ultimate foreign policy and security goals opportunistically, in various domains. Ukraine and the West are reacting discretely and differentially, in particular domains and in certain geographic areas. There is also the time dimension - where the response of Ukraine and the West doesn't match the pace of Russian action - which again ensures Kremlin maintains the upper hand and Ukraine and the West continue on the back foot. Given the rift between Turkey and its Transatlantic Allies, it will be very difficult for the Black Sea states to return the security environment back to Status Quo Ante on their own.

Until there is a reversal of the appeasement approach regarding the membership of Ukraine and Georgia in NATO, Russia will seek to re-establish its spheres of influence through a combination of well-developed hybrid tools that blur the line between war and peace. The Kremlin's preference for hybrid tools does not rule out the likelihood of the employment of direct, brutal force.



A MILITARY BUILD-UP AIMED AT REGIONAL DOMINATION

This chapter examines Russian maritime strategy and analyses its means and goals. It highlights the growing threat a heavily militarized Crimea poses to the Black Sea region, as well as to the European continent, and even to the Mediterranean, to the Middle East, and to North Africa. This chapter demonstrates that Crimea is an integral element of the architecture of Russian 'insecurity bubbles' that stretch from the North (Barents Sea and Baltic Sea) to the South (Syria and Libya).

The offensive character of a future Russian Navy '*equipped with effective high-precision offensive weapons*' was envisaged in Russia's Naval policy of 2017.^{34,35} Russia's maritime doctrine for implementing Russia's policy towards the NATO-dominated Atlantic region assigned the task to the Russian Black Sea Fleet.^{36,37} Both documents imply a Russian naval build-up through increasing the capabilities of the Black Sea Fleet (including the development of the combined forces in Crimea) as well as

maintaining Russia's permanent naval presence in the Mediterranean. These documents speak volumes.

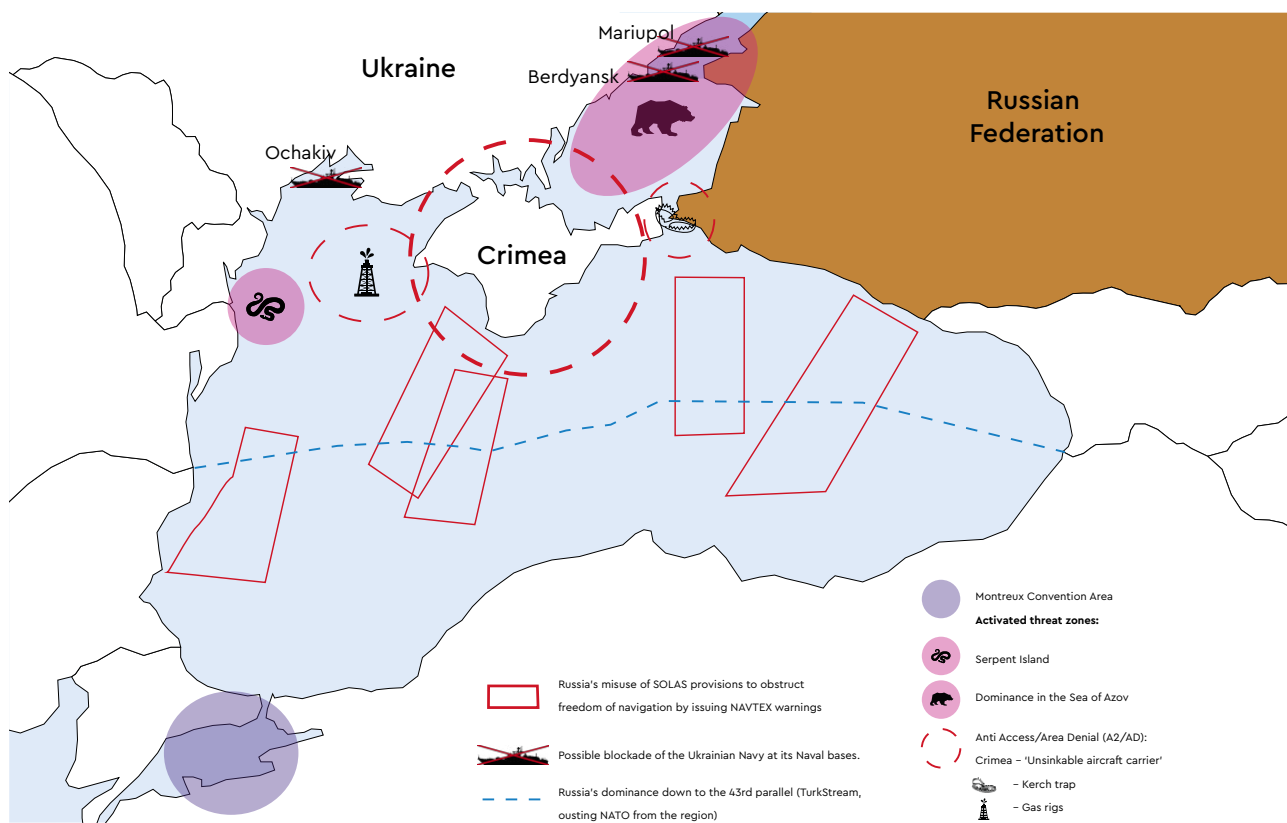
Though this paper is focused primarily on the Black Sea, it is worth noting that Russia is contesting the Barents Sea and the Baltic Sea, trying to impose its dominance in those places as well. Thus, it is necessary to see the Kremlin's actions in distant geographic areas as elements of its grand design and to respond in a comprehensive manner.

Russian strategic military goals include achieving dominance in the North-Western, Eastern, and Central parts of the Black Sea, with the de facto annexation of the Sea of Azov and the creeping seizure of other Ukrainian maritime areas in the Black Sea. What is more, Russia is determined to project its maritime power to the Eastern Mediterranean, the Middle East, and North Africa

Based on an analysis of Russian strategic documents related to maritime policy and operations, as well as an analysis of the nature of the Russian force posture in the Black Sea region, one can define the Russian strategic military objectives as the following:

- domination in the North-Western, Eastern, and Central parts of the Black Sea, along with the de facto annexation of the Sea of Azov and the creeping seizure of other Ukrainian maritime areas in the Black Sea;
- unhindered projection of its maritime power into the Mediterranean, the Middle East, and North Africa;
- the development of Russian military infrastructure in the Crimean Peninsula, including facilities for the storage and deployment of nuclear weapons;
- enhancing the possibilities of further regional expansion through the use of force (Russia's vision of the 'Greater Black Sea Area').³⁸

Having these goals in mind, one can observe that Russia has established a maritime insecurity belt in the Northern part of the region (see Map 1).



Map 1. The Russian maritime insecurity belt in the Northern Black Sea region

In general terms, the Kremlin's operational goals include blocking Ukraine's naval assets in the vicinity of Ukrainian bases and ports, forcing non-Black Sea NATO countries' warships, especially US warships, out of the Black Sea and if possible out of the Eastern Mediterranean. Russia's intent is to keep the navies of other Black Sea states penned within their offshore areas and for the Turkish Navy to stay below the 43rd parallel.

Before the illegal annexation of Crimea, Turkey had been the major naval power in the Black Sea, with twice the naval assets that Russia possesses, more sophisticated platforms and systems (including access to Link 16, a military tactical data link network), as well as the advantage of full interoperability with NATO. However, the navies of other Black Sea countries have limitations, being composed of 20-30 warships, mostly constructed during the Cold War, and equipped with Soviet-era weaponry.

According to bilateral agreements, Russia was supposed to withdraw its Fleet from Crimea in 2017. All Ukrainian presidents except for Viktor Yanukovich have carried out a constraining policy regarding the modernization of the Russian Black Sea Fleet and an increase in its numbers.

The security dynamics of the Black Sea have been drastically changed in Russia's favour as a result of the speedy militarization of the Crimean Peninsula after its illegal annexation in 2014. Russia has built and deployed 18 new warships, which is 3.6 times more than the new warships they have deployed to the Baltic Fleet and 4.5 times more than those deployed to the Northern Fleet. In 2019 Russia deployed a squadron of 'Forpost' UAVs to the region. This year, the Black Sea

Fleet will be reinforced with an airborne regiment, a naval aviation division, and a coastal defence division.

At its current pace, by 2027 the Black Sea Fleet will have 10 more warships and will increase its missile salvo capabilities with the Kalibr missiles by almost three times (up to 168)

At its current pace, by 2027 the Black Sea Fleet will have 10 more warships and will increase its missile cruise missile capabilities through deployment of Kalibr by almost three times (from 72 to 168). Kalibr cruise missiles have a range of up to 300 km against surface targets and 1500-2500 km (depending on the type of Kalibr)³⁹ against land targets. Furthermore, over the past couple of years Russia has practiced the redeployment of its warships from the Northern and the Caspian Seas to the Black Sea, which gives it an additional ability to increase its capability in the region.

With its new deployments of sophisticated air defence systems, Russia established a line of 'insecurity bubbles' (A2/AD)⁴⁰ ranging from Barents Sea and the Baltic Sea (Severomorsk, Kaliningrad and St. Petersburg), through Crimea, down to the Mediterranean Sea (Khmeimim, Syria), and then Westwards to North Africa (according to OSI data, in mid-2020 Russia deployed either an S-300⁴¹ or S-400⁴² air defence system near

Ras Lanuf in Libya).⁴³ The deployment of S-300s and S-400s in Crimea has allowed Russia to establish a multi-layered air defence zone, capable of detecting targets at ranges of up to 600 km and engaging them at ranges of up to 240 km, which could include targets in the airspace of continental Ukraine. The multi-layered anti-ship systems deployed in Crimea are capable of detecting and engaging surface targets at ranges up to 300 km. In the worst-case scenario of Ukraine losing more territory or its independence, Russian offensive capabilities would be moved further westwards, severely affecting NATO's ability to defend itself and operate in Central Europe.

At the same time, Russia is restoring the naval units that were downsized before 2014 (e.g., the 30th Surface Ship Division) as well as reinforcing the coastal and aerial defence components of forces on the Crimean Peninsula. An integrated naval and air situational awareness system and a target designation system is being created. This is supposed to be an integral part of the Russian national system.

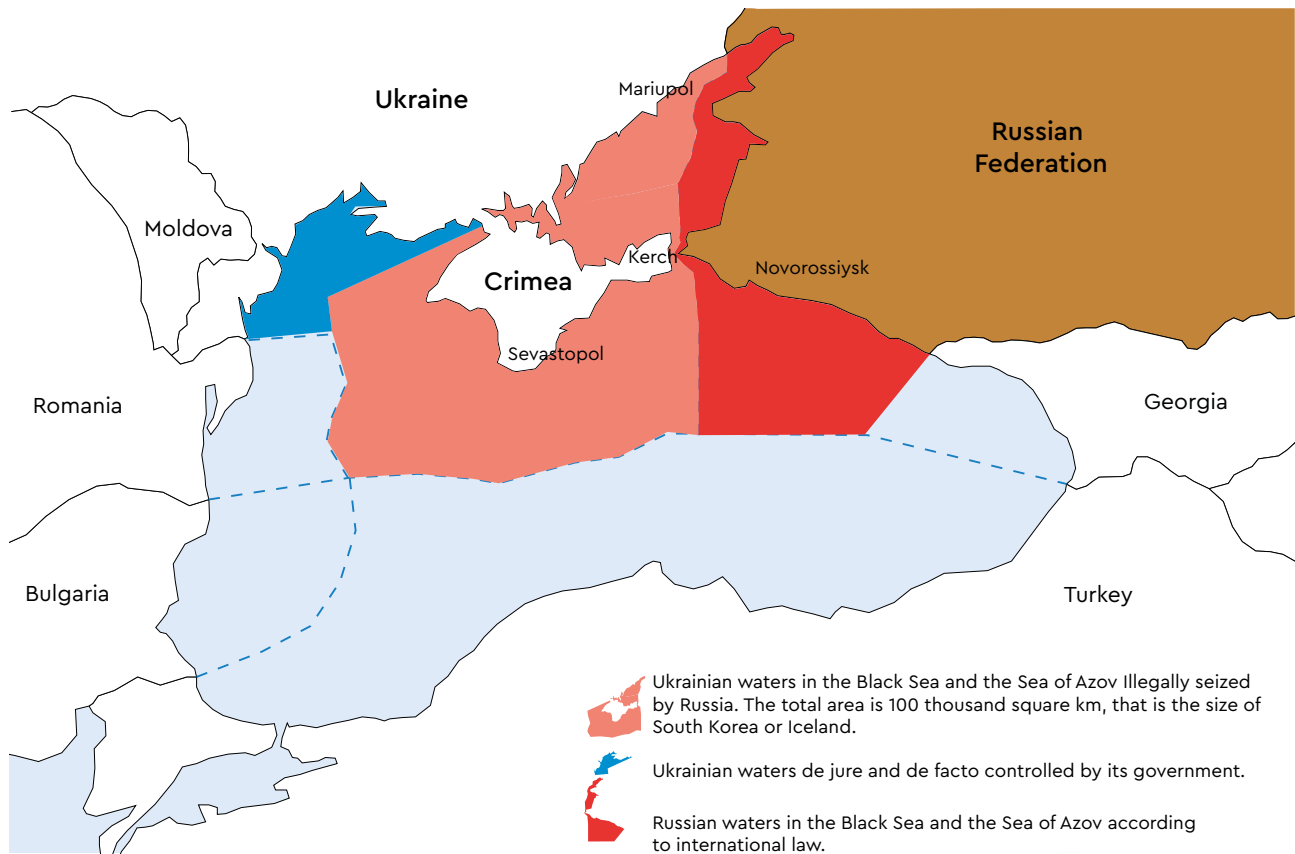
Russia is conducting widescale exercises involving multiple missile launches from surface ships (operating as part of different fleets) and submarines, with the simultaneous employment of over 100 fixed-wing and 60 rotary-wing aircraft. These exercises also involve the use of coastal missile systems of different types ('Bastion', 'Bal', 'Iskander' and 'Utios'), including new systems deployed over the past two years. Russia is demonstrating a significant increase in the intensity of offensive combat training activities. In 2019 the Russian Black Sea Fleet conducted 197 combat training activities, which is 20% higher than in 2018. Starting in 2018, almost 80% of the exercises were offensive in na-

ture with employment of combined forces with live missile launches. It should also be noted that most of the planned and 'snap' exercises 'coincided' with either the presence of warships of NATO countries nearby or when Ukraine was testing new types of weapons. In the course of these exercises, Russian forces have practiced assaulting NATO naval task forces, with simulated missile launches by Russian naval forces and coastal missile battalions in coordination with tactical and strategic aviation and missile defence systems.

Russia is demonstrating a significant increase in the intensity of its offensive combat training activities

The various naval military exercises and the operational activity of Russian forces are tools for furthering Russian intrusion into maritime areas off the coast of Ukraine. The Kremlin does not hesitate to use military force to prevent any Ukrainian attempts to restore its sovereignty and jurisdiction at sea.⁴⁴ As a result of this strategy, Ukraine has lost control of over 100 of the 137 thousand square kilometres of its offshore zone, which is equal to the territory of South Korea or Iceland (see Map 2).^{45,46}

Non-Black Sea NATO countries' warships are under the constant surveillance when they enter the Black Sea and tracked continuously. Moreover, the Russians tend to flex their muscles and behave recklessly and provocatively, actions that could result in serious incidents.



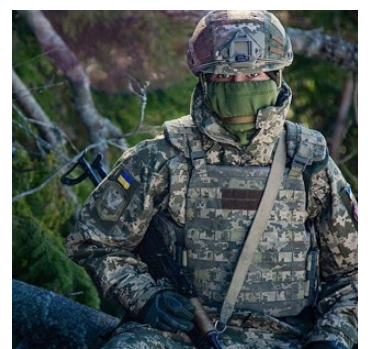
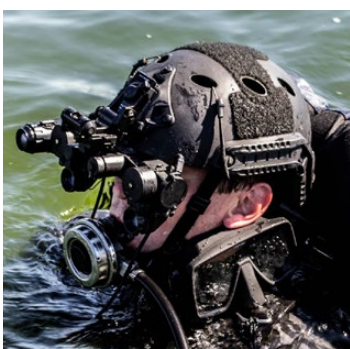
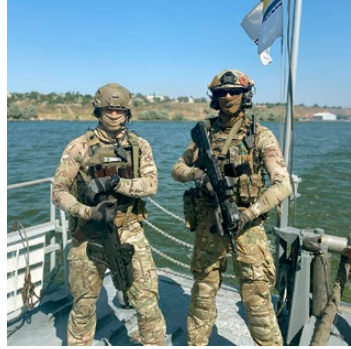
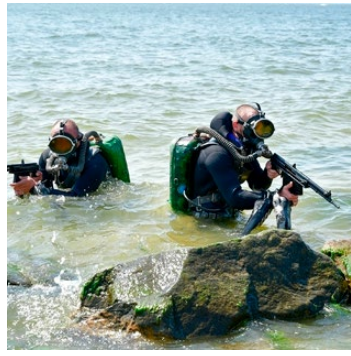
Map 2. A comparative analysis of the area of Ukraine's marine waters occupied by the Russian Federation

Manipulations within the Montreux Convention (using Article 12) allow Russia to move its submarines out the Black Sea under the pretext of conducting maintenance operations in St. Petersburg. In fact, these submarines are engaging in combat operations in Syria. In both the Black Sea and the Eastern Mediterranean, Russia

has significantly increased the operational intensity of its Improved Kilo Class submarines. These submarines, which are extremely quiet and difficult to detect, can carry up to four Kalibr cruise missiles with nuclear warheads, which are capable of targeting most European countries. 🌐

Russian behaviour and doctrinal documents demonstrate the offensive nature of the Russian Navy. It has already established a maritime insecurity belt in the Northern part of the Black Sea region, aimed at blocking Ukraine's naval assets into the vicinity of Ukrainian bases and ports, threatening non-Black Sea NATO countries' warships in the region, and keeping most other regional navies within their offshore areas and that of Turkey below the 43rd parallel. Russia has an advantage over other regional powers in terms of numbers, firepower, and new weaponry.

The Kremlin is planning to commission 10 more warships for the Black Sea Fleet in the next seven years and increase its Kalibr missile salvo capabilities in the Black Sea by almost three times. The deployment of new hard-to-detect Kilo-class submarines carrying Kalibr missiles, including ones capable of delivering nuclear warheads, have raised the regional threat level.



THE FLAG OF THE NORTH ATLANTIC IN THE 'INHOSPITABLE SEA'

This chapter examines changes of NATO's attitude towards and presence in the Black Sea caused by Russia's aggressive actions in the region and Russia's power projection beyond the region. This chapter also argues for the necessity of laying out an Eastern Flank defence strategy that would include a Black Sea aspect and describe the role of partner countries in it.

During the Cold War, the Black Sea was more of an internal sea of the USSR, shared with its Warsaw Pact's satellites – Romania and Bulgaria. The only NATO member on the Black Sea (Turkey) did not play a significant naval role. After the collapse of the Soviet Union, the region became

Europe's new periphery even as Europe's attention shifted elsewhere. Before Russia's 2014 aggression against Ukraine, warships from non-Black Sea NATO allies visited the Sea between 8 and 40 times a year (see Figure 1).

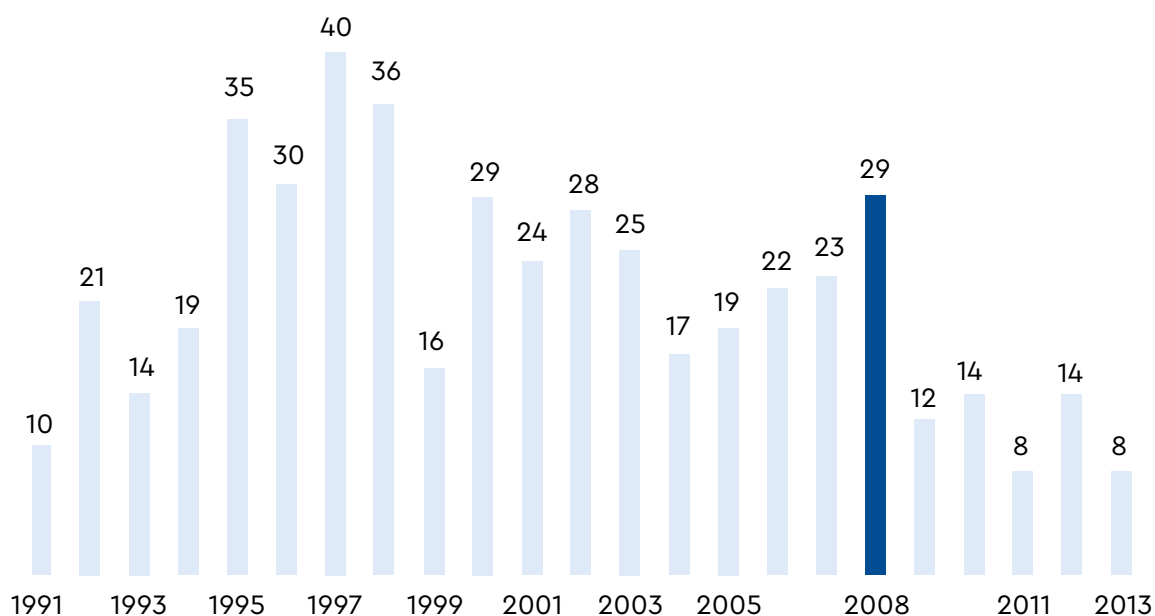


Figure 1. Visits of warships from non-Black Sea NATO countries to the Black Sea between 1991 and 2013

Even the Russian aggression against Georgia did not draw the necessary attention and resources to the Black Sea, leading to a strategic surprise six years later. During the final phase of the seizure of Crimea (20 February – 7 March 2014), there were no warships from non-Black Sea NATO countries in the Black Sea, except for a command ship and a frigate of the US 6th Fleet, which were there on other, unrelated missions.

The cursory approach to the Black Sea even after Russia's aggression against Georgia resulted in a strategic surprise in 2014

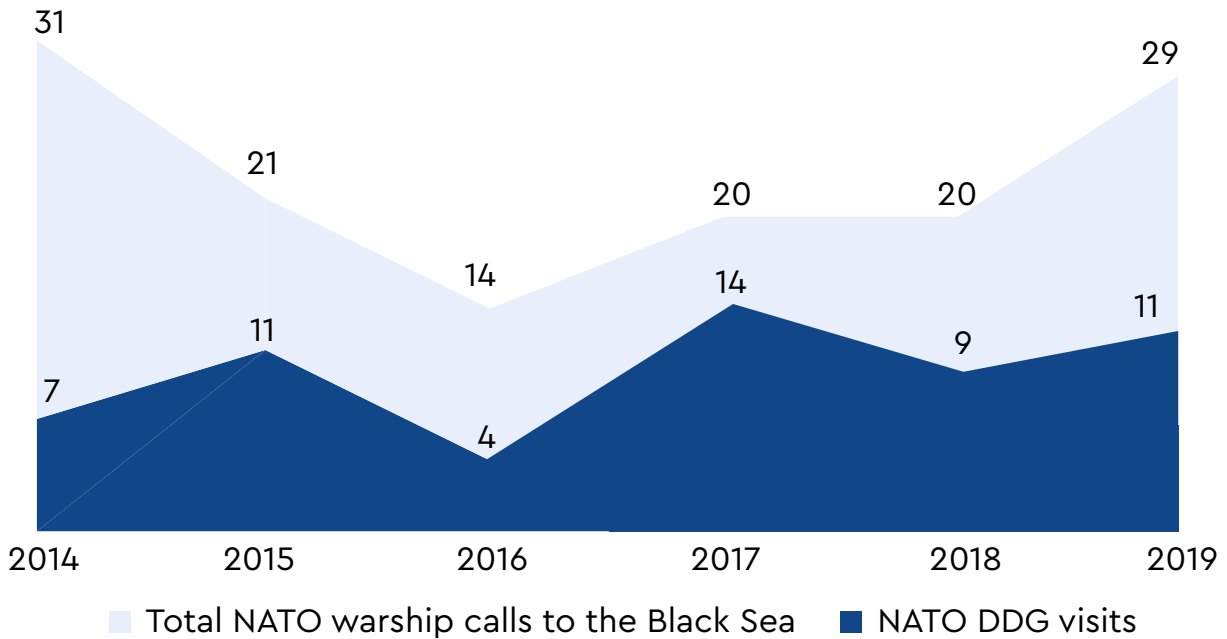


Figure 2. Visits of warships from non-Black Sea NATO countries' to the Black Sea between 2014 and 2019

Right after the illegal annexation of Crimea, NATO had to spend the whole year of 2014 not only demonstrating its moral support to Ukraine but also studying this new theatre of operations. Overall, between 2014-2019, given the loss of Ukrainian Navy, the naval presence of the Alliance in the Black Sea played a positive role in restraining Russia's actions against Ukraine. It was particularly important in 2014 and 2015 as Ukraine was highly vulnerable against Russian amphibious landing operations in coastal areas. During those years, NATO countries' warships remained in the Black Sea almost continuously (see Figure 2).

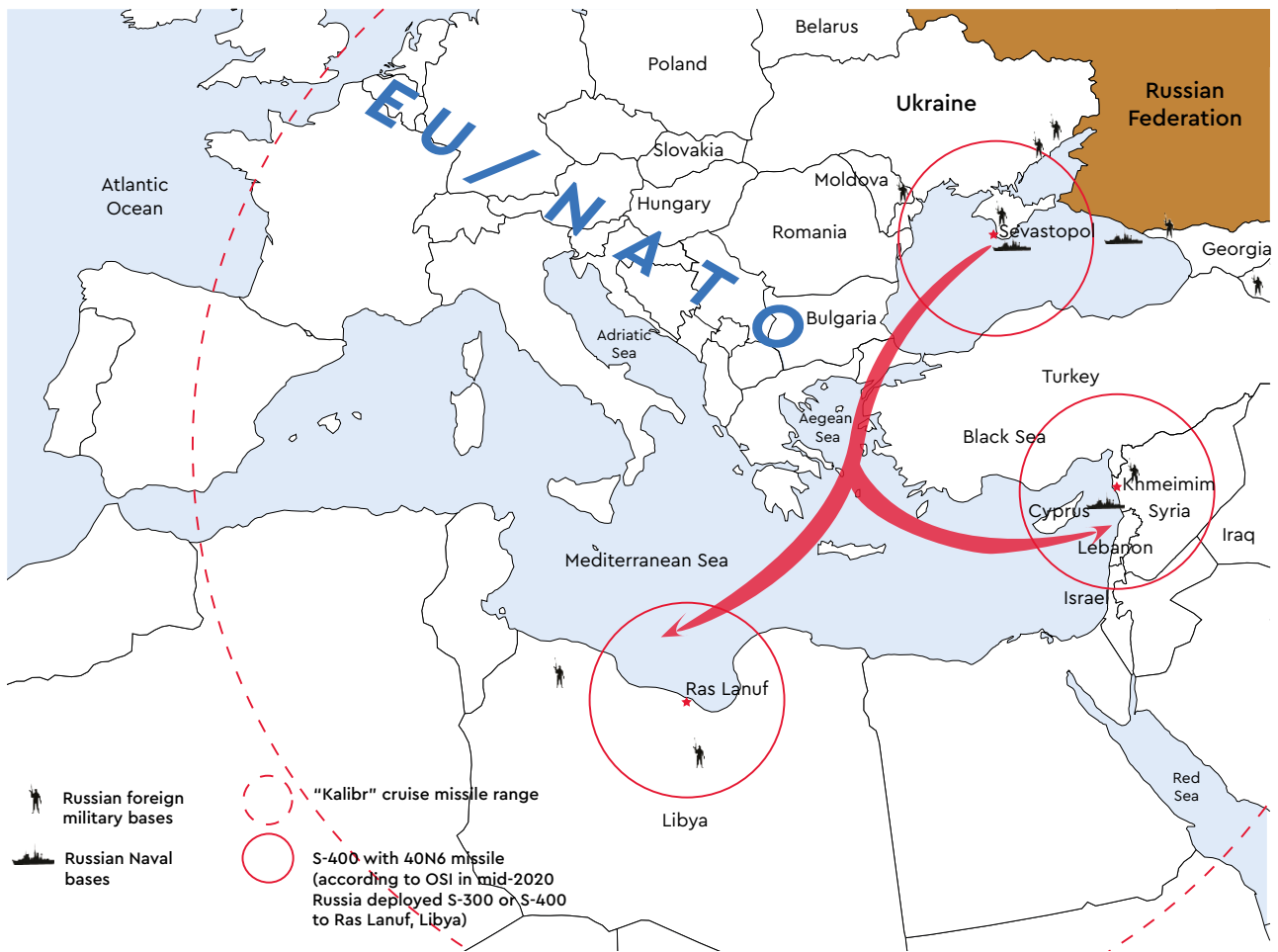
However, between 2016 and 2018 the situation worsened due to the difficulty of ensuring a significant presence of warships from NATO non-Black Sea navies. This was because of both the expansion of the operational area of the US 6th Fleet from the Baltic Sea (facing the Russian threat) through the Mediterranean (instability in North Africa, the Syria war, issues with refugees and migrants to the EU) all the way to the Black Sea. Moreover, Russia was successful in stretching the limited capabilities of the US 6th Fleet and NATO's Standing Naval Forces between geographically distant theatres

of operations. It is therefore judged that there is a need to strengthen the Standing NATO Maritime Groups (SNMGs), as well as command and control components specifically focused on deterring Russia.

Although NATO has moved away from its relatively inattentive approach to the Black Sea region, the Alliance has yet to clearly define its vision. Given the nature of the threats and challenges, it is necessary to lay out a coherent NATO Eastern Flank defence strategy, one that includes a Black Sea component and describes the role of partner countries in it. This is also necessary because Crimea and Novorossiysk serve as the Russian springboard for power

The SNMGs' peacetime modus operandi lacks the necessary assets to counterbalance Russian military threats in the three seas simultaneously

projection that directly and indirectly affect the interests of NATO allies on both sides of the Atlantic. In Syria, Russia is not only propping up the Assad regime and causing waves of Syrian refugees triggering a crisis



Map 3. The main directions of Russian regional naval policy until 2035, and Russia's ability to present threats beyond the Black Sea region (to the European continent, the Mediterranean, the Middle East, and North Africa)



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within the EU and between the EU and Turkey – the Kremlin is also using Black Sea bases to demonstrate Russia's capabilities threatening European nations. Specifically, by launching hundreds of Kalibr cruise missiles (between 2015 and 2017) from new warships and submarines, including those deployed to the Caspian and the Mediterranean Seas. In recognition that Kalibr cruise missiles have an effective range of up to 2,500 km and are capable of engaging targets on the British Isles, in North Africa, and in the Western part of the Mediterranean (see Map 3), it is considered that closer attention should be paid to the region.

This is further reinforced from mid-2018, when Russia imposed limitations on the freedom of navigation in the Sea of Azov. After the illegal annexation of Crimea, Russia gained full control over the Kerch Strait. This enabled the Kremlin to employ non-military means to wage economic war against one of the industrial centres of Ukraine. Until Ukraine deployed two gunboats to the Sea of Azov and began escort operations, Russian FSB ships were

harassing Ukrainian and international cargo vessels transiting to and from the Ukrainian ports of Mariupol and Berdyansk. Russia has also been artificially delaying vessel passage via the Kerch Strait, creating significant negative economic impact. In this respect Russia has been trying to impose its own national legal regulations on the Kerch Strait in violation of bilateral agreements and international law.⁴⁷

In 2018 NATO adopted the Black Sea Package aimed at improving situational awareness, stepping up its support for Georgia and Ukraine, training maritime forces and coast guards, and increasing its frequency of port visits and exercises in the region.⁴⁸ Along with considerable US security assistance,⁴⁹ these measures are adding some desperately needed capabilities. Yet, they still fall short of an adequate response to Russia's growing military potential in the region, not to mention of providing deterrence against aggressive acts in the Mediterranean, the Middle East, and North Africa.

Giving that NATO has yet to adopt a Black Sea strategy^{50,51} and that Turkey is charting its own course of action, there is no chance that the remaining regional actors can restore the balance vis-à-vis Russia on their own. Romania and Bulgaria have insufficient economic and military potential,⁵² and the latter lacks political will as well.⁵³ The regional actors have been unable to successfully lobby for a significant increase in the presence of non-Black Sea powers in the region when compared with the Baltic states and Poland who managed to influence an increase in presence in the Baltic Sea. ©

Russia's violation of the freedom of navigation in the Sea of Azov has renewed the attention of the international community to the Black Sea region

Since 2014 NATO has significantly improved its standing in the Baltic states and Poland with its Enhanced Forward Presence (eFP). The Black Sea was given a bit lower priority with the tailored Forward Presence (tFP) for allies and the Security Package for the partner countries. The latter, along with US security assistance, has added some desperately needed capabilities for the partner nations in the Black Sea region. Yet these still fall short of an adequate response to Russia's growing military potential in the region. Though NATO's rotational presence in the Black Sea has restrained the Kremlin's actions against Ukraine to some extent, it does not deter Russia from violating freedom of navigation in the Sea of Azov as a form of economic warfare.

NATO's Southern flank, as well as Europe as a whole, will remain exposed to various unmitigated threats emanating from the Black Sea, including a missile one, until there is a new Eastern Flank strategy in place – a comprehensive strategy that includes a Black Sea component as an integral part, one that involves regional partner nations. On top of this, Russian actions remain unchecked in the Middle East and North Africa. These Russian actions either directly or indirectly affect the interests of allied countries on both sides of the Atlantic. The lack of NATO attention given to the Black Sea also gives Moscow additional opportunities to exploit differences in threat perceptions and widen rifts between the allies.

THE NUCLEAR BIG STICK

This chapter elaborates on the possible implications of Russia's new nuclear posture for the Black Sea security environment. It also draws attention to the nuclearization of the Crimean Peninsula and shows the Kremlin's desire to employ nuclear leverage to secure a 'Grand Bargain' with the US. This chapter highlights that with Russia's new officially declared nuclear posture, Russia has de jure turned the Black Sea region into an area of potential nuclear confrontation.

Nuclear blackmail and Russia's alleged possession of new state-of-the-art nuclear and hypersonic arms are storylines for Vladimir Putin in his confrontation with the West. Given the huge disparity in conventional armed forces between Western and Russian forces and guided by perceived threats from the West (such as the leftover trauma from the Yugoslavia campaign), the Kremlin regime considers its nuclear weapons to be the guarantee of its survival. These weapons also serve as an argument for why Russia should remain at the table of the great powers. Of particular importance for the Kremlin is the continuation of strategic arms control treaties that were inherited from the times of bipolar superpower confrontation.

Yet, with the end of the Cold War, the world has drastically changed, and some pivotal bilateral arrangements of the past are no longer relevant to the United States. The reason for this is the growing assertiveness of China, the major competitor with the US for global power and the primary challenger of the liberal world order. Moscow is trying to restrain Washington within arrangements that Russia itself covertly

violates, as was the case with the Intermediate-Range Nuclear Forces Treaty (INF).^{54,55} Russia has an economy 12 times smaller than America's, and Russia is burdened with painful sanctions as punishment for its aggressive foreign policy – it cannot afford a new nuclear arms race.

Despite this, the Kremlin keeps talking about 'Yalta 2.0'^{56,57,58,59} viewed as an exchange of Moscow's 'concessions' on matters of strategic stability in return for recognition of its 'legitimate' interests in neighbouring countries. The nuclear factor continues to compensate for the huge gap in conventional arms and forces between NATO and Russia. Meanwhile, acknowledging their comparative lack of conventional power, both Russia and China have adopted a strategy where they play the conventional card first while stopping external military intervention by using their nuclear card. The threat of nuclear escalation neutralizes the conventional imbalance and supports Russia's belligerent actions.

Vladimir Putin confessed that he had been ready to employ nuclear arms during the forceful takeover of Crimea.^{60,61} Russia's

The Russian nuclear forces continue to compensate for the huge gap in conventional arms and forces between NATO and Russia

foreign minister Sergey Lavrov stated: ‘in accordance with international law... Russia has every reason to dispose of its nuclear arsenal in Crimea... to suit its interests and international legal obligations’.⁶²

Shortly after Russia formally announced its ‘reunification’ of Crimea, a territorial branch of the 12th Chief Directorate of the Russian Ministry of Defence was established on the Peninsula.^{63,64} It launched reconstruction work at two nuclear munition storage facilities that had been used by the Soviet military. During the Soviet era, Soviet military unit No. 62047 also known as ‘Feodosiya-13’ stored, assembled, disassembled, and disposed of nuclear munitions that could be used by aviation, artillery, and by missiles. This included any warheads deployed on

the warships of the Black Sea Fleet of the USSR.^{65,66} It is from this facility that the first Soviet warheads were dispatched to the German Democratic Republic in 1959. Several bombs were sent from there to Cuba during the Cuban Missile Crisis of 1962. Until 1991, military unit No. 90989 stationed in Balaklava also stored nuclear warheads for the missiles and torpedoes of Black Sea Fleet submarines, surface ships, and coastal missile regiments. Russia has already deployed the means for nuclear weapons delivery on the territory of Crimea (namely warships and strike aviation). Moreover, the issue of the permanent deployment of strategic bombers to the Hvardiiske airbase is under consideration.⁶⁷

There is no defensive rationale behind the deployment of nuclear weapons on the Peninsula, as the control over Crimea is already secured by previously-deployed Russian conventional forces. At the same time, the storage facilities of the Southern military district in Russia and the naval base of Novorossiysk provide all the necessary infrastructure for conducting operations in the Black Sea and in the Mediterranean.

Despite the inevitable negative reaction of the international community in the case

While there is no defensive rationale for the deployment of nuclear weapons in Crimea, the Kremlin might be following the logic of political expediency. The Russian nuclear posture considers Ukrainian forces that are taking part in joint operations with NATO as legitimate targets. The new doctrine implies a direct threat to both Romania, which hosts elements of the US BMD of a purely defensive nature, and Poland, where US anti-ballistic missile interceptors will be deployed by 2022

of the confirmed deployment of nuclear weapons to Crimea, the Kremlin might be following the logic of political expediency. The new Russian nuclear posture defines military threats as: *'the build-up by a potential adversary of general-purpose force groupings that possess the means for nuclear weapons delivery on the territories of the states contiguous with*

listic missile interceptors by 2022. There is also a new potential threat here to Ukraine as it seeks to acquire its own short- and medium-range cruise missiles, as well as strike-drones, in order to develop asymmetric capabilities to deter Russia until Kyiv can become a member of NATO contributing to Transatlantic security.

In the hypothetical case of Ukrainian action aimed at the restoration of its territorial integrity by all legitimate means (in accordance with domestic legislation and international law), Russia may choose nuclear escalation, treating such actions as having an 'adverse impact on critically-important state or military objects of the Russian Federation, the disruption of which would undermine the response capabilities of nuclear forces'

the Russian Federation and its allies, as well as in its adjacent waters' and 'the deployment by the states which consider the Russian Federation a potential adversary of missile defence systems and infrastructure, of medium and short-range cruise and ballistic missiles, of non-nuclear high-precision, and hypersonic weapons, of unmanned aerial strike vehicles, and of directed energy weapons'.⁶⁸

In the first case, not only are NATO forces considered as legitimate targets, but also Ukrainian forces if they are part of joint operations with NATO. In this case, there is also an additional direct nuclear threat to Romania, despite the defensive nature of the US Ballistic Missile Defence (BMD) installations on its territory.⁶⁹ There is also an additional Russian threat to Poland, where the US is planning to deploy its anti-bal-

In the hypothetical case of Ukrainian actions aimed at the restoration of its territorial integrity by all legitimate means, as provided under the Constitution of Ukraine, the Law on Defence, and under international law, particularly Article 51 of the UN Charter on the Right of Self-Defence, Russia may choose nuclear escalation, treating such actions as an *'attack by an adversary against critical governmental or military sites of the Russian Federation, the disruption of which would undermine the response capabilities of nuclear forces*. In this case, any incident involving the Armed Forces of Ukraine and Russian nuclear deterrence assets, including those provoked by the Russian special services, may be considered as sufficient provocation. Similarly, *'aggression against the Russian Federation with the use of conventional weapons when the very existence of*

the state is in jeopardy, – which is a situation identified as one of the conditions for the use of nuclear weapons – may be used to legitimize the threat or the actual use of tactical nuclear weapons against Ukraine.

This vaguely defined nuclear posture is in line with nuclear deterrence principles, particularly the *'adaptability of nuclear deterrence to military threats'* and *'unpredictability for a potential adversary in terms of the scale, time, and place for the possible employment of forces and means of nuclear deterrence'*. This might be interpreted

as the possibility of using limited scenarios of 'controlled' escalation involving the employment of nuclear weapons.

The risk of unintended incidents is increasing significantly as we witness the demolition of strategic arms control regimes; the aggressive rhetoric of the Russian leadership; the lowering of the threshold for the use of nuclear weapons and the increasing readiness to employ them against non-nuclear states; and the reckless behaviour of Russian pilots during their increased number of flights along NATO borders. ©

Nuclear forces continue to compensate for the huge gap in conventional arms and forces between Russia and NATO. Meanwhile, the Kremlin has chosen escalatory rhetoric and an escalatory course of action to persuade the West to agree on a new set of rules based on the recognition of Russia's 'legitimate' interests in return for some 'concessions'. Vladimir Putin might be following the logic of political expediency rather than of military necessity on the issue of the deployment of nuclear weapons to Crimea. The Kremlin has already deployed the means of nuclear weapons delivery to the Peninsula, launched reconstruction works at two nuclear munition storage facilities, and is considering the permanent stationing of some strategic bombers there.

Russia's vaguely outlined nuclear doctrine could be interpreted as containing the possibility of using limited scenarios of 'controlled' escalation with the employment of nuclear weapons. The primary targets near Crimea are Poland and Romania, countries that are hosting elements of the US BMD. There are possible scenarios where Ukraine might be defined as a nuclear target as well. With the approval of this new nuclear posture, the Black Sea region de jure became an arena of nuclear confrontation and there has been an increased likelihood of an incident that could potentially lead to conflict that involves Russian use of tactical nuclear weapons.

WAR BY NON-MILITARY MEANS

This Chapter describes various non-military means of Russian aggression against Ukraine, ranging from manipulating historical narratives, to propaganda campaigns, to lawfare, to impeding the freedom of navigation, to spoofing GPS.

Ukraine has become a testing ground for new methods and approaches to conflict, ranging from the overt use of armed force to sophisticated means of the manipulation of public opinion. Though the physical world remains important, the main battlefield has moved into the cognitive space. A confrontation of ideological and historical narratives plays a special role.⁷⁰ The concept of the 'Russian World' is still popular in Ukraine despite its catastrophic consequences for the citizens of the Donetsk and Luhansk regions. The sea-belt from Reni to Mariupol that is populated with predominantly Russian-speaking Ukrainian citizens for a long time has been under the Russian

media influence. Behind the curtain of a concern for Russian culture abroad, one can discern neo-imperialist plans which are based on the tactics of 'divide and rule',⁷¹ tactics as old as time, stirring divisions over ethnicity, language or religion. The Russian Orthodox Church loyally serves the regime, blessing its military actions abroad and confusing believers on issues around vaccinations and pandemics, thus exposing them to great danger. The Kremlin tries to monopolize the right to 'historical truth' by interpreting past events in line with its current ideological needs. In this way, the Kremlin justifies its violations of domestic and international law, while nostalgia be-

The use of the Kerch Strait as a tool of economic warfare, as well as yet another act of aggression against the Ukrainian Navy off the Kerch Strait on November 25, 2018, revealed that there has been a de facto annexation of a vast area of the Sea of Azov. Meanwhile, Russia is trying to impose its own national legal regime on the Black Sea and the Sea of Azov.

comes the only consolation for those to whom the Putin's regime is unable to offer an appealing future. On top of that, Russians and the citizens of other countries living under Russian occupation are under constant and massive propaganda bombardment, which distorts worldviews and detaches people from reality. Injections of misinformation are aimed at causing disorientation, internal chaos, despair, and the suppression of the will to resist. All of this is enabled by the control over the Russian information environment exercised by the Kremlin, and also the control of the Ukrainian media environment exercised by Russian allies in Ukraine.

The Kremlin is targeting the information environment of the countries bordering Ukraine and conducts influence operations aimed at sowing discord among Ukrainians and their neighbours, creating obstacles for Ukraine's European and Euro-Atlantic integration as well as decreasing support for Ukraine and increasing support for lifting sanctions on Russia.

The forceful conversion of almost all Ukrainians in Crimea into Russian nationals and the fast-track distribution of Russian passports in the occupied territories of Donetsk and Luhansk are designed to change the reality on the ground and claim an even greater 'right' to interfere with Ukrainian internal affairs (as part of the so-called 'protection of fellow countrymen').

At the same time, as a basis for the further legitimization of the annexation of Crimea and to strengthen its grip over the peninsula, Russia is carrying out a policy of the forced transfer of populations aimed at a profoundly changing the demographic composition of the peninsula. The tools at Russia's disposal are targeted intimidation

and repression, framed within the wide-scale suppression of freedom and the civil, social, and property rights of Ukrainian citizens in Crimea.

The Crimean Tatars are severely persecuted on ethnic and religious grounds, as well as for their political non-recognition of the Russian occupation. At the same time, the Russian intelligence services are actively using various collaborators to create the illusion of inter-ethnic and inter-religious harmony and freedom on the peninsula. They are trying to have Crimean pseudo-representatives included as representatives to international organizations. Meanwhile, the Kremlin invites Western politicians at various levels to visit modern-day 'Potemkin Villages'⁷² at the Kremlin's expense: rigged elections and so-called referendums.^{73,74,75,76}

Corruption is one of Russia's main foreign policy tools.⁷⁷ Moscow employs it to promote its interests, such as completing Nord Stream 2⁷⁸ and softening the Western response to its aggressive actions.^{79,80,81} By putting forward plans to bring to an end this 'unnecessary confrontation' the Kremlin is trying to erode the sanctions and restrictions that have been imposed on Russia⁸² and to legitimize the annexation.

The Kremlin is also experimenting with tools of economic warfare. Since May 2018, Russia has been leveraging its maritime strength employing its control over the Kerch Strait in order to harm the Ukrainian economy. Until Ukraine deployed its own naval gunboats to the Sea of Azov, Russia had been detaining nearly all vessels bound for Ukraine via the Sea of Azov or carrying Ukrainian cargo to the high seas from Ukrainian ports on the Azov Sea, subject only to weather conditions that al-

lowed these Russian operations. Ever since the Ukrainian deployment, Russia has been artificially delaying the passage of vessels through the Kerch Strait (the average artificial delay for a single vessel heading from the Sea of Azov ranged from 23.9 to 115 hours; before the start of the blockade, a delay was usually only 5-7 hours long).⁸³ As a result of the 18 months under de facto blockade, the cargo handling operations at the port of Mariupol reduced by 41.2%. Based on the assessment of the Monitoring Group of the Institute of Black Sea Strategic Studies, ship owners suffered losses of 45 million US dollars. On top of that, the Russian government imposes various sanctions and other restrictions on Ukrainian goods transiting the Sea.

Any interruption of maritime trade and freedom of navigation will cause ripple effects across all sectors of the Ukrainian economy and society, as its future prosperity is closely linked to the maritime domain.

The Maritime Ripple Effect model (See Figure 3)⁸⁴ illustrates how a maritime conflict might impact all of Ukraine and ultimately, Ukrainian independence and sovereignty.

One third of the Ukraine's known hydrocarbon reserves are beneath the shelf of the Black Sea and the Sea of Azov. There are about 1583.5 billion cubic meters of Ukraine's natural gas and up to 409.8 million tons of crude oil under the sea. While up to 70% of the explored hydrocarbon re-

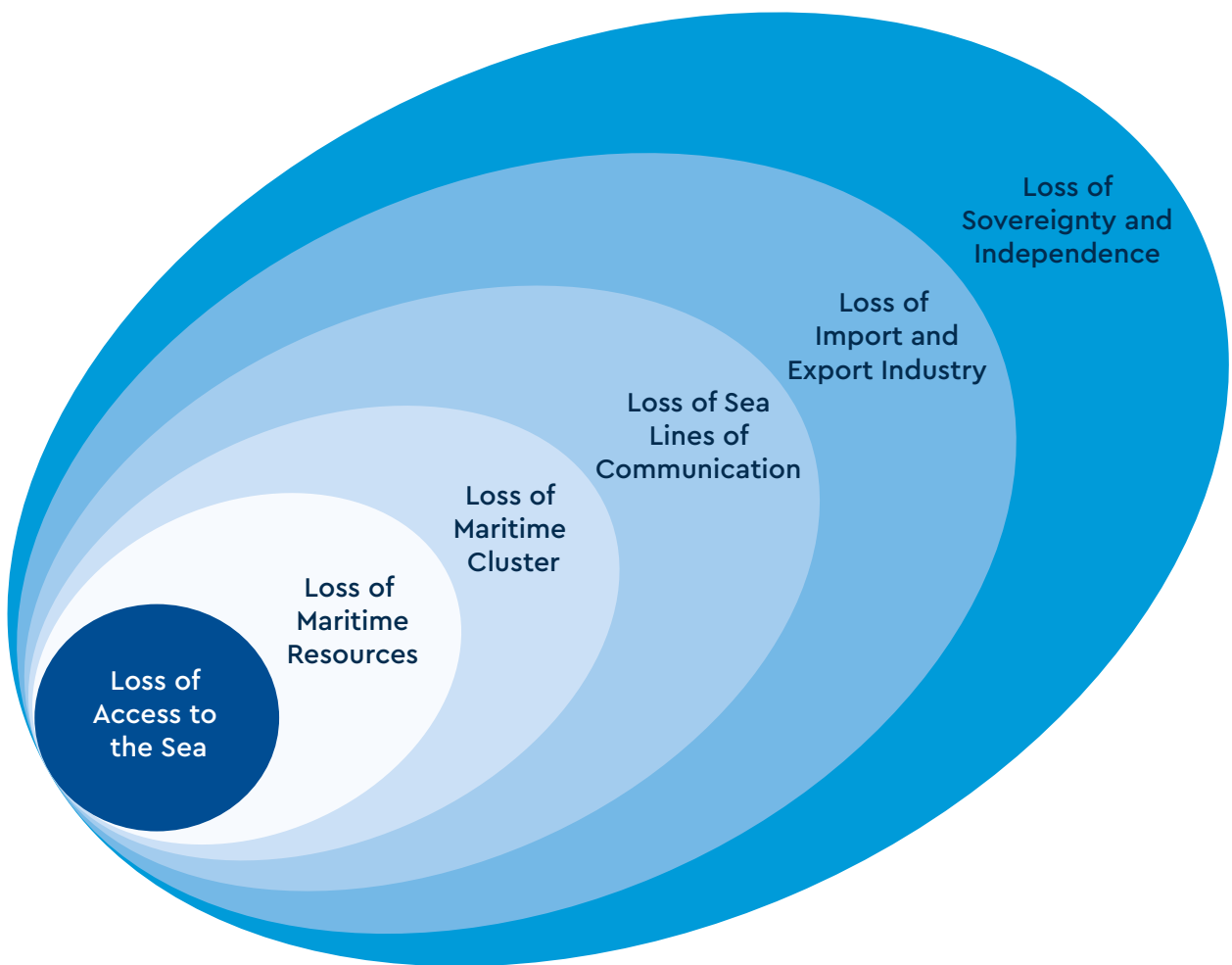


Figure 3. The Maritime Ripple Effect model

serves onshore have already been exploited, 96% of the offshore deposits are intact.

Ukraine has the largest coastline length in the region (2759.2 kilometres) and it holds more than 72 thousand square kilometres of an exclusive economic zone on the Black and Azov seas. A significant part of Ukraine's GDP is contributed by five maritime oblasts (regions) of Ukraine that make up 27 percent of its total territory. The lion's share of the population of the maritime regions live no more than 60 kilometres from the sea and is closely associated with maritime activities.

Ukraine access to its maritime resources is already being challenged. These include Ukraine's ability to harvest the economic benefits from merchant shipping, sea transport, shipbuilding and ship repair, as well as the exploitation of living marine resources and inanimate seabed resources, and also tourism and recreational activities. It also impacts activities in the fields of science, education, ecology, and marine protection. Losing these will have grave consequences for Ukraine's ability to ensure a sustainable economic, social development of its society and therefore, of its national security. Russia is already exploiting the offshore energy resources in the Black Sea and denying Ukraine the possibility of exploring its untapped maritime resources in the sea.

Russia is also affecting the maritime related industries.^{85,86} Ukraine has lost a large part of this industry due to the illegal annexation of Crimea. This includes shipping, shipbuilding, marine equipment, maritime services, recreational boating, seaports, offshore supply, Navy, tourism and recreation, fishing, fish processing, aquaculture, and more.

The freedom of navigation and consequently, of Sea Lines of Communication (SLOC) is already being challenged. Russian actions in the Kerch Strait and in the Sea of Azov shows how this affects all parts of society, from industry and agriculture to social development and the stability of society. Russia has demonstrated both the will and the ability to restrict and ultimately, to stop all maritime trade through the closure of the Kerch Strait and the regular closure of major parts of the Black Sea on the pretext of 'exercises'.

If (or when) Russia decides to impose a full blockade of all Ukrainian ports, the Ukrainian economy will collapse. The loss of access to the sea will stop all maritime imports and exports. This will result in the loss of jobs and income, affecting all other parts of the Ukrainian business environment. The loss of freedom of navigation and SLOCs will severely damage a number of industries and severely affect the lives of millions of Ukrainians. This would further destabilize Ukraine from within, undermining the sovereignty and independence of the country.

Ukraine is presently unable to challenge the Russian Black Sea Fleet or its multi-layered Anti Access/Area Denial (A2/AD) capacity in the Black Sea. That is a critical vulnerability with a potential devastating 'Maritime Ripple Effect'.

The unrestricted use of the Kerch Strait as a tool of economic warfare, as well as yet another act of aggression against the Ukrainian Navy off the Kerch Strait on November 25, 2018,^{87,88} reveal that there has been a de facto annexation of a vast area of the Sea of Azov. Meanwhile, Russia is trying to impose its own national legal regime as a substitute for the United Nations Convention on the

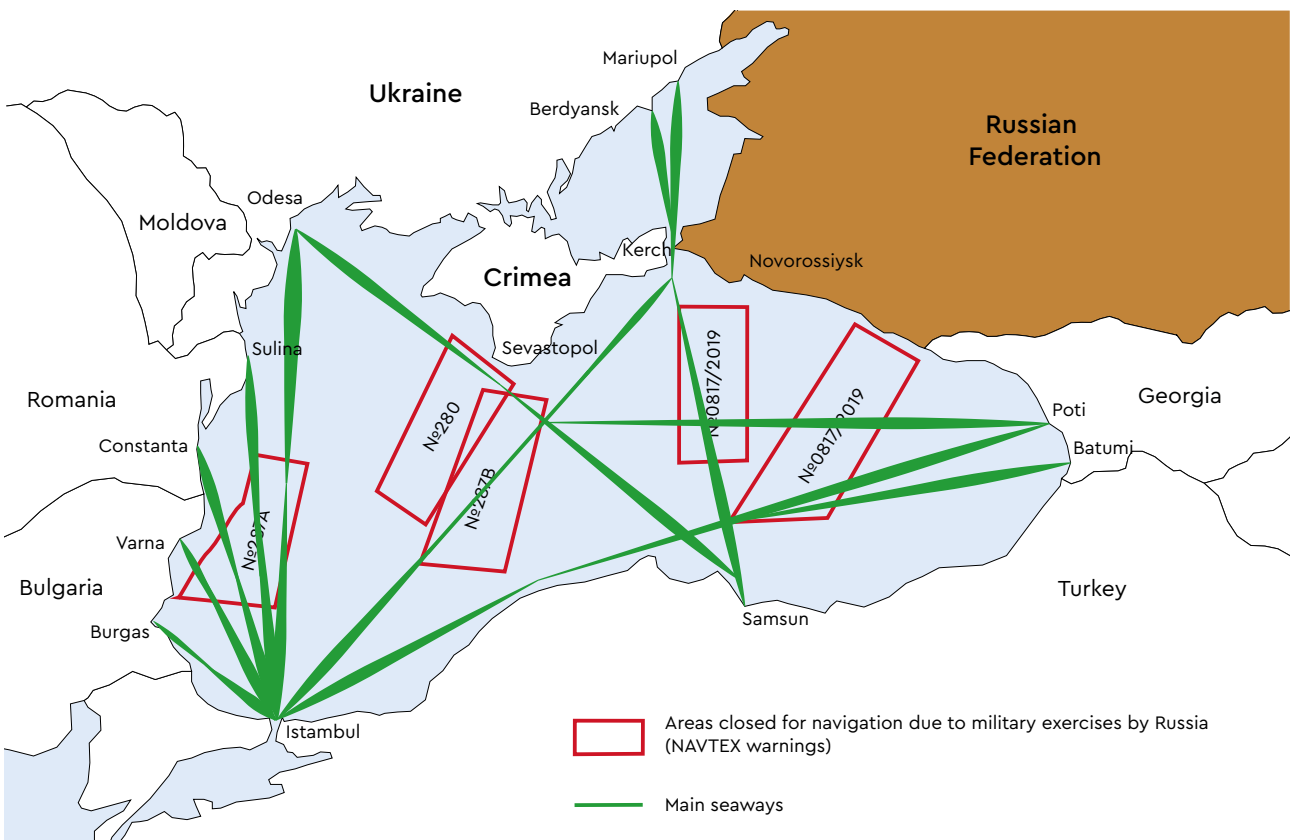
Law of the Sea (UNCLOS) and the agreement between Ukraine and the Russian Federation on cooperation on the use of the Sea of Azov and the Kerch Strait.

Russia is using civilian maritime industry facilities for military purposes. Russia has already installed a stationary sonar surveillance system in the north-western part of the Black Sea and on the TurkStream natural gas pipeline. Also, the illegally-seized rigs of the Ukrainian Chornomornaftohaz company continue to produce over 2 billion cubic meters of gas per year.⁸⁹ Russia has deployed army special forces units along with surveillance equipment on those rigs and uses its Navy for patrols around them.⁹⁰ Had Ukraine succeeded in attracting transnational energy corporations to these offshore projects, as well

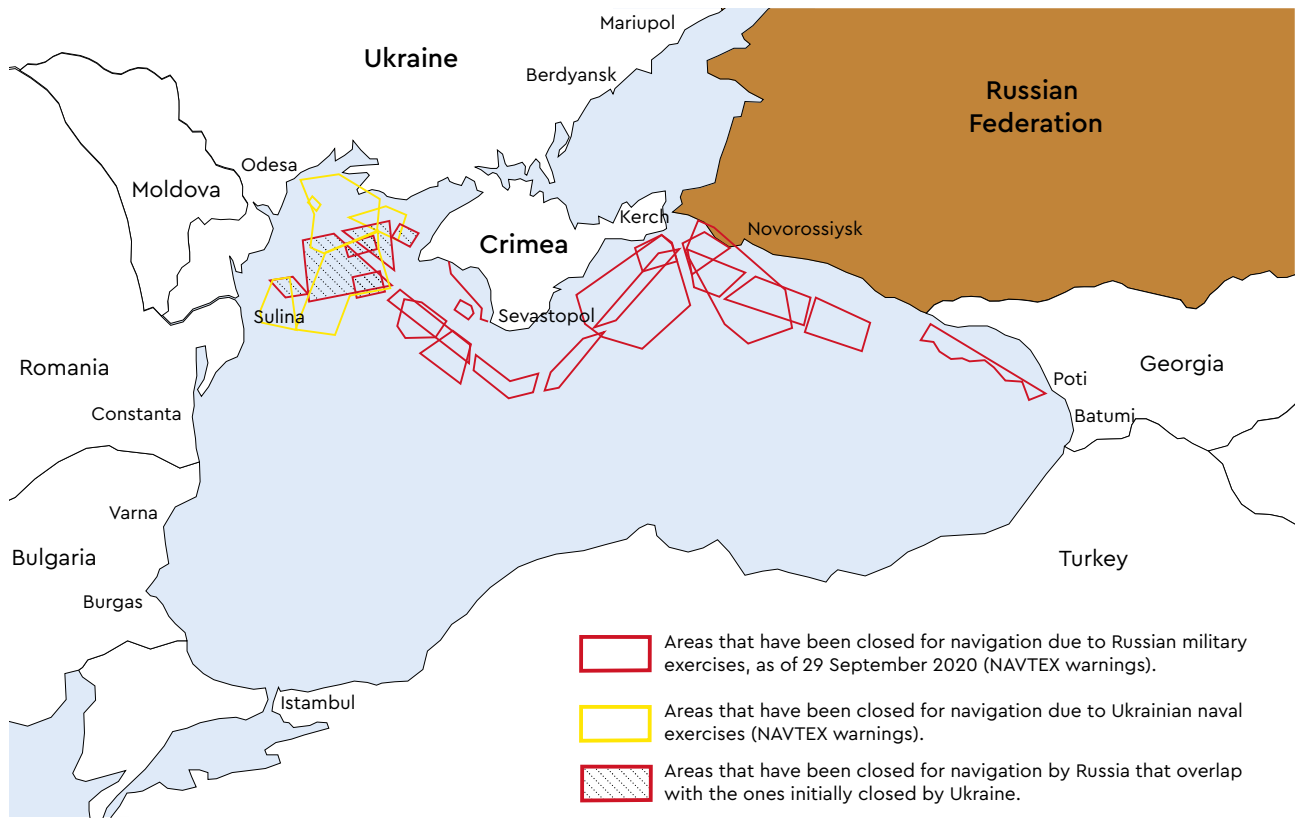
Russia is using civilian maritime industry facilities for military purposes

as to shale gas extraction projects in Eastern Ukraine, it could have provided more incentives for a stronger reaction against Russian aggression, not to mention lessened Ukraine's dependence on Russian energy supplies.

Russia's strategy of 'creeping expansion and domination' in the international waters of the Black Sea creates artificial obstacles



Map 4. Russia's manipulation of the provisions of SOLAS aimed at disrupting the US-Georgia 'Agile Spirit 2019' exercise



Map 5. Russian and Ukrainian NAVTEX warnings on closing sea areas for the ‘Kavkaz – 2020’ and ‘Joint Efforts – 2020’ exercises (September 2020)

to the freedom of navigation. It manipulates the provisions of the International Convention for the Safety of Life at Sea (SOLAS) to deny merchant shipping access to large areas of the Black Sea (over 25% of the total area) over long periods of time (up to 3 weeks) under the pretext of conducting military exercises and live firing (see Map 4).⁹¹ This is not just a blockade of vast sea areas, it leads to significant economic damage to international shipping between Ukraine, Georgia, Romania, Turkey, and Bulgaria.

With the aim of conducting its own ‘Kavkaz 2020’ military drills and to create obstacles to Ukraine’s military exercises with NATO partners ‘Joint Efforts – 2020’, Russia has designated areas of the sea along the shore of Crimea as closed for navigation. It has used the same tactic to close areas

off the shore of the Northern Caucasus as well as off the shore of Georgia’s occupied territories. However, the most dangerous use of this kind of act was when Russia announced the closure of several areas of the North-Western Black Sea (in the direction of Odesa) that overlapped areas that Ukraine had previously closed for naval exercises in September 2020 (see Map 5).⁹²

Russia is spoofing the Global Positioning System (GPS), causing it to malfunction.⁹³ Trying to hide violations of Crimean sanctions, cargo ships heading to or from the peninsula’s ports often turn off their Automatic Identification System (AIS).⁹⁴ Since 2014 Russia has been trying to gain control over air traffic management in Ukrainian airspace.^{95,96} Such actions increase the risk of accidents with serious consequences, both at sea and in the air. 🌀

Ukraine is a Russian test-bed for new methods and approaches for conflict, including the use of soft power tools (such as the ‘Russian World’ concept and use of the Russian Orthodox Church) aimed at, among other things, the suppression of a society’s will to resist. The forceful conversion of Ukrainian citizens in Crimea into Russian nationals and the fast-track distribution of Russian passports in the occupied territories of Donetsk and Luhansk have the goal of justifying the Kremlin’s ‘right’ to interfere with Ukrainian internal affairs.

Corruption is one of Russia’s key foreign policy tools that is being used to promote its interests abroad, ranging from carrying out energy projects, to attempts aimed at the erosion of the sanctions regime and the legitimization of the Crimea annexation.

Russia has been waging economic war by obstructing cargo shipping to and from Ukrainian ports on the Sea of Azov, misusing the SOLAS Convention in order to disrupt navigation, exploiting Ukrainian offshore gas fields, and de facto annexing vast resource-rich areas of the Black Sea. Russia is using civilian maritime industry facilities for its own military purposes. Russia is spoofing GPS signals and has been trying to take control of air traffic management over the illegally annexed territories, increasing the risk of accidents with serious consequences, both at sea and in the air.

Photo courtesy of Exercise Sea Breeze/Twitter



SCENARIO CONSTRUCTION

This chapter examines various risks, triggering events, and conditions that may cause the Kremlin to take active action, as well as already-known or feasible patterns of Russian behaviour.

The previous chapters shed light on the Kremlin's goals and approaches regarding the Black Sea. Some of them are explicitly stated in official Russian documents and articulated by senior regime figures, other ones could be inferred from Russian actions, including covert actions that the Kremlin denies responsibility for.

Russia has deployed considerable combat forces in proximity to the Ukrainian border,^{97,98,99} it has been militarizing Crimea at a noticeable speed and has also been enhancing the command and control and the warfighting capabilities of its proxy forces in Donbas.¹⁰⁰ It denies the Ukrainian Navy access to the Sea of Azov and obstructs free navigation there, de facto annexing vast areas in the Black Sea and the Sea of Azov. Beyond direct pressure on Ukraine, Russia dominates in the Northern part of the sea and uses Crimea as a springboard into the Mediterranean and beyond. These are all actions, to a large extent, that have already

taken place or are currently taking place but are now becoming understood in retrospect. The main question is: what is Russia up to?

A separate research project might study whether the Kremlin has a 'grand strategy' or acts in ad hoc manner, based on general strategic goals. This research is rather based on anticipating future Russian actions in the Black Sea by other methods. The Russian establishment has always been proud of its distinctive culture of strategic thought and special modus operandi which features cultivating uncertainty, unpredictability, suddenness, initiative, and taking risks that can seem like brinksmanship. In a multi-layered conflict that covers different domains and geographic areas (should we perhaps call it a new type of 'total war'?) some actions might be triggered by circumstances unrelated to the situation in the Black Sea or conversely regional events might trigger action elsewhere. Thus, the application of



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classical approaches to scenario modelling does not seem appropriate here. It may be more useful to identify triggering events and conditions that may cause the Kremlin to take action, pursuing objectives that fit into Russia's overall strategic direction, as well as examine already known or feasible patterns of Russian behaviour.

Though the Novorossiia¹⁰¹ project has failed, Russia has not abandoned its goal of cutting a land corridor to Crimea out of Ukraine and also of cutting the central and western parts of Ukraine off from the sea, seizing control over the strategically important city of Odesa and taking over the strategically important industries in the Dnipropetrovsk, Kharkiv, and Mykolaiv regions, especially in the defence and energy spheres.

The continuous shortage of water supplies in Crimea that might cause a crisis provides the pretext for act of aggression, perhaps

a naval blockade or rapid actions by Special Operations Forces (SOF)¹⁰² that would be accompanied by a political coverup and psychological operations (PSYOPS)¹⁰³ with the involvement of the 'fifth column' inside Ukraine. The resumption of the supply of water to Crimea from the Dnipro river (for the needs of the occupying military contingent and the illegally seized defence industry enterprises)^{104,105} has been a hot topic for quite some time, and the Kremlin has tried to employ various tools to resolve this problem in its favour, from propaganda campaigns and appeals to the UN,¹⁰⁶ to attempts at making secret deals with corrupt Ukrainian officials.¹⁰⁷

Almost two-thirds of the Ukrainian exports go through seaports, revenues from port services reaches 2% of Ukrainian GDP.¹⁰⁸ If Russia cuts Ukraine off from the sea and employs embargo techniques like those that are being tested in the Sea of Azov, it would have a devastating effect on the

The problem of water supply to Crimea (for the needs of the occupying contingent and the illegally seized defence industry enterprises) may serve as the trigger for another act of aggression: from a naval blockade to SOF activity

Ukrainian economy and, consequently, would likely cause a deterioration of the Ukrainian political situation. A pretext for such actions could be found in 'protecting' the illegally seized Ukrainian rigs in the Odesa oil field against 'sabotage' (as it was in the Kerch Strait with the 'protection' of the Crimean bridge).

There might be provocations or attempts to seize Serpent's Island, which is located near the estuary of a major European shipping artery: the Danube River. By deploying military assets, Russia would strengthen its ability to restrict freedom of navigation for Ukraine as well as pose a major obstacle for the Ukrainian Navy.

Giving its full control over the Kerch Strait, Russia might escalate the situation in the Sea of Azov by imposing a total blockade against Ukraine-bound cargo shipping.

Blocking the passage of civil shipping by restricting access to vast areas of the Black Sea along the main shipment routes under the pretext of military exercises or missile firings has already become a routine practice that could be scaled-up if necessary.

There is the possibility of an incident or a provocation involving Russian manipulation of SOLAS provisions - closing areas of ocean ostensibly because of naval exercis-

es or live firing, perhaps overlapping with closures initially announced by Ukraine, as has happened before.

The number of provocative actions by Russian pilots¹⁰⁹ and sailors against NATO or Ukrainian jets and ships may increase. NATO ship visits to Ukraine or delivery of gun or missile boats for the Ukrainian Navy (those provided by the US or UK) might be seen in Moscow as setting the conditions for escalation.

The Russian Navy might try to impose a blockade against the Ukrainian Navy and its naval bases or pin them along the shore by denying their free navigation.

A supposed mine threat could be used as a pretext or a tool for escalation. A supposed plot to sabotage a Russian vessel could be used as the pretext for conducting mine countermeasure operations and with this seizing control over the exclusive (maritime) economic zone of Ukraine. Also, local and international marine traffic could be severely affected if a Ukrainian or foreign vessel is damaged or sunk as a result of a naval mine, perhaps placed under the cover of 'separatist' activity.

Large-scale military exercises¹¹⁰ can serve as a preparatory stage for a real operation, while a Russian-inspired 'civil conflict' or

any high-profile event such as a terrorist attack or a political assassination might be used as the trigger for a 'stabilization' operation in the coastal area in order to gain military control over it, followed by subsequent annexation.

Free access to inland rivers (the Dnieper and Danube) can be exploited to conduct provocative actions or sabotage operations.

Although it seems more likely that the Kremlin will be trying to achieve its goals through covert operations and subversive actions aimed at destabilizing the situa-

tion, it would be erroneous to completely rule out the possibility of an overt action that could include large-scale conflict.

While the above provides only a snapshot of possible threats, it is clear that Russia, as the major regional destabilizing factor, holds the initiative and has the luxury of choosing the time, methods, and targets of its actions. This necessitates keen situational awareness and constantly scanning for threats and vulnerabilities that could be exploited for launching an attack. ©

Classical approaches to scenario modelling do not seem appropriate for the scope and complexity of the Russian conflict with Ukraine, especially given the background of Russia's overall confrontation with the West. Thus, it is more useful to identify trigger events and conditions that may cause the Kremlin to take action, pursuing objectives that fit into Russia's overall strategic direction, and continuing already-known or initiating novel but feasible patterns of Russian behaviour.

Russia poses a direct threat to Ukraine via the offensive build-up on its border, the heavily militarised Crimea, and its proxy forces in Donbas. Cutting a land corridor to Crimea through Ukraine and cutting off the central and western part of Ukraine from the sea, seizing control over cities of Odesa, Dnipro, Kharkiv and Mykolaiv remain Russian goals. An issue involving the supply of water to Crimea from the Dnieper river may serve as the trigger for aggression. Russia could try to seize Serpent's Island, a move that would strengthen its ability to restrict freedom of navigation for Ukraine as well as pose major obstacles for its Navy.

A naval blockade of Ukrainian Black Sea ports would have a devastating effect on the Ukrainian economy and political stability. The number of provocative actions by Russian pilots and sailors against NATO or Ukrainian jets and ships may rise, increasing the likelihood of an incident. Though the Kremlin prefers to employ subversive actions and destabilize the situation, it would be erroneous to completely rule out the possibility of a large-scale conflict.

THE FALSE DILEMMA: A LONE CORVETTE VS. A SWARM OF ‘MOSQUITOES’

This chapter outlines the key arguments related to ongoing dialogue about the capabilities that the Ukrainian Navy should acquire. There are the arguments in some quarters advocating development of a ‘mosquito fleet’, while others who believe the government should proceed with investment into the construction of heavy-tonnage corvettes by Ukrainian shipbuilders. It can be argued that the ‘mosquito’ concept does not undermine the case for the corvette option in the longer term, but meets immediate requirements set out in the Ukrainian Naval Strategy.

Despite serious threats to its national security in the maritime domain, Ukraine has not managed to build force components capable of deterring Russia or repulsing possible Russian aggression from the sea. There are several reasons for this. During Russia’s seizure of Crimea, the Ukrainian Navy lost a considerable number of its assets, though they were mostly outdated ones. Until 2018 when Russia began the systematic obstruction of the freedom of navigation in the Sea of Azov and committed an act of aggression against the Ukrainian Navy, the maritime domain was considered by decision makers a much lower priority. There is still an ongoing discussion about whether the government should invest in building heavy-tonnage corvettes¹¹¹ or acquire necessary capabilities from partner countries and through joint construction projects. A close look at the arguments on both sides shows that this is a false dilemma.

‘The Strategy of the Naval Forces of the Armed Forces of Ukraine to 2035’¹¹² that has

been developed with the input from western advisors and welcomed by NATO partners, sets the goals and implies the capabilities needed to achieve them. The Strategy articulates in the first stage (to 2025) the Navy will need to acquire capabilities that can establish its control over, and defend, Ukrainian territorial waters (up to 40 nautical miles offshore). The second stage (2025-2030) requires the acquisition of capabilities to protect Ukraine’s national interests at sea within the exclusive (maritime) economic zone of Ukraine (up to 200 nautical miles from the coast). The third stage (2030-2035) involves a further build-up of the capabilities developed in the previous stages that will enable Ukraine to protect its national interests on the world ocean.

The key arguments in support of the corvette proposal are both political and military in nature, reflecting that corvettes are necessary to fill the gap in firepower, and to provide employment to the national shipbuilding industry that would enhance its

ability to accommodate the future needs of Ukraine's Navy. Corvette construction would also allow Ukrainian shipbuilders to apply existing technologies and acquire new ones in shipbuilding and defence and develop workforce skills, and provide other economic, social and political benefits.

Opponents to this option argue that Ukraine would be vulnerable for a much longer time if the corvette construction plan is adopted, largely because of lead times. It would take significant time to acquire this lone platform with capabilities in excess of the primary goals set in Ukrainian naval strategy.¹¹³ A 'mosquito fleet'¹¹⁴ option would allow a much more robust force to be built, one that would be larger and match the required capabilities.^{115,116} With its maritime superiority, the Kremlin may introduce a naval blockade at any time that would have a devastating effect on the Ukrainian economy and, consequently, would deteriorate Ukraine's political and security situation. It would take 7 to 10 years to build a corvette. Supporters of the argument for a 'mosquito fleet' point out that there has been little progress in the construction of the Ukrainian Project 58250 corvette since it was laid down in 2010.

Meanwhile, thanks to US assistance,^{117,118} Ukraine either has already received or is waiting to acquire platforms that fit the 'mosquito fleet' concept. The recent agreements between Ukraine and the UK¹¹⁹ provide promise of a boost to the Navy's capabilities through the procurement and joint construction of fast and agile missile boats. It could be argued that considerable risks accrue that combines spending the lion's share of available funds on the construction of a small number of corvettes, and the rest for the procurement of fast-attack boats. A few boats would not contribute suffi-

cient capabilities to regain control over the maritime zone and that requires an agile and swift response. A 'mosquito fleet' requires the use of several dozen platforms. A promising option for Ukraine to buy/construct warships jointly with Turkey¹²⁰ should be assessed for its compatibility with the general strategy of building-up naval capabilities, the Russian factor that might affect Turkey's stance in the future, possible complications with other strategic partners of Ukraine, as well as whether Ukraine possesses the required industrial capabilities.

Even in the long run, Ukraine does not stand a chance of achieving symmetrical parity (balance) with Russia, of developing similar naval force capabilities and assets in the Black Sea region

Ukraine fortunately has several elements of a full-fledged naval shipbuilding industry and has a number of new weapon systems and types of naval equipment at various stages of research and development. Nevertheless, a full shipbuilding cluster has yet to be created and Ukraine does not possess the full spectrum of technologies crucial to build a navy from scratch. It would be worth conducting an assessment of the Ukrainian shipbuilding industry (shipyards and design bureaus) as well as of necessary financial options to ascertain whether Ukraine possesses the necessary industrial capabilities for such construction and realistically the financial resources to do so.

The government has not yet reformed the existing procurement system that is currently unable to acquire the necessary capabilities in a transparent and efficient manner. Moreover, the current acquisition system is greatly exposed to corruption risks. There is risk of inadequate approaches in acquisition until newly established government bodies and the state owned 'Ukroboronprom' concern can prove their efficiency. These factors indirectly affect the position of both sides of this debate, though they are likely to affect the corvette proposal more because of the scale of public funds required, the lifespan of the project, and the difficulties that will arise in exercising control over its implementation.

At the end of the day, the 'mosquito' concept does not contradict the idea of corvette construction with a NATO partner (whether it be the US, UK, or Turkey, or a combination of them). The question is about setting priorities. The question is: should the government fill the gap of capabilities with 'mosquitoes' now and then strengthen them with corvettes later, or should it go with the corvette option right away and bear all the related risks. ©

So far, Ukraine has not managed to build-up force components capable of deterring Russia or repulsing its possible aggression from the sea. There is still an ongoing discussion in Ukraine between proponents of a national corvette program and the 'mosquito fleet' concept. The first group puts forward arguments about the necessity of filling the gap in firepower, of employing Ukrainian industry and enhancing its ability to accommodate the future needs of the Ukrainian Navy, of applying existing and acquiring new technologies in defence and shipbuilding, and of developing workforce skills, and bringing overall economic, social and political benefits.

The proponents of a 'mosquito fleet' argue that while Ukraine would be pursuing the corvette option, acquiring a lone platform with capabilities in excess of those required to meet the primary goals set in Ukrainian naval strategy, Ukraine would be vulnerable for a much longer period than if it pursues the 'mosquito fleet' option, that can be delivered more rapidly and is considered capable of meeting immediate operational need. In essence, the 'mosquito fleet' concept does not contradict the idea of corvette construction, but rather arranges priorities in a way that takes into consideration security and production risks.



IN SEARCH OF A STRATEGY

This chapter sketches out a proposed three-pillar strategy and its key components. The enhancement of Ukraine's own potential to counter threats posed by Russia is the proposed first pillar. The second proposed pillar is more active regional cooperation, and the third one is greater involvement from the US and NATO. This chapter argues for the necessity of developing an asymmetric strategy against Russia and a mechanism for countering hybrid threats, e.g. setting up a unified strategic command and control centre for dealing with non-military forms of aggression, as well as a centre for maritime crisis management.

Russia's aggressive actions in the Black Sea region have to be met with coordinated national, regional and international responses, along with the optimal use of political, diplomatic, legal, economic and other levers. There is still a need to define reliable means of containment. However, the development of a strategy to address Russian threats, to say nothing of its implementation, is complicated by the problem's subjective asymmetry and the necessity of responding simultaneously to a wide spectrum of threats in many different fields. To date, the Kremlin retains the initiative and continues to play the long-

game with varying degrees of success, while Russia's opponents remain rather fragmented in approach.

This analysis applies at the national level as well, where compartmental approaches tend to dominate at the expense of integrated ones. The slow tempo of decision-making and implementation in the West's political and defence organizations provide Moscow with a range of benefits. Creating a sufficient and coherent western response in the mid-term depends on the ability to reach and maintain consensus. This is increasingly difficult due

Ukraine's deterrence strategy has to be based on the development of asymmetric capabilities – missile systems, special operations capabilities, as well as the acquisition of numerous, high-speed, multitask 'mosquito fleet' vessels with both offensive and defensive capabilities



Combat Divers of the 73rd Naval Centre of Special Operations of the Ukrainian Navy with the US 352d Special Operations Wing unit during the exercise 'Joint Endeavour 2020', September 2020, © 73rd Naval SOF Centre, Ukrainian Navy

to differences in understanding and interpretation of the issues and threat perception among the key players as well as the swift electoral cycles of western democracies that can create political turbulence. After the six years of so-called hybrid war, Ukraine has yet to define an asymmetric strategy on Russia and a clear mechanism for countering hybrid threats. A consequence of this is that political decisions often lack integrity and a comprehensive approach. Despite a number of success stories in the reforms of the Ukrainian security and defence sector, Ukraine's political and administrative elite, as could be argued in the West, has been reactive to the challenges Russia presents. There should be a serious motivation to start developing an adequate Ukrainian strategy, not least in mitigating the devastating impact of losing access to the sea.

We believe that enhancing Ukraine's potential to counter current and emerging threats posed by Russia should be **the first pillar** of such a strategy. First and foremost, defence and security sector reform should be in line with Euro-Atlantic integration. It is not just the right political signal to send to society, but also an appeal to NATO member-states to provide Ukraine with a Membership Action Plan (MAP) as the country approaches membership criteria. In practical terms, it would strengthen the warfighting capabilities of the Armed Forces, their overall interoperability with NATO and introduce the more efficient use of resources.

Ukrainians should not find comfort in their successes so far in stopping the advance of the Russians and their proxies in Eastern Ukraine. The next stage of the conflict will probably be much different. Therefore, we

should enhance Ukrainian Armed Forces ability to fight a modern war. Special attention should be paid to the development of asymmetric capabilities, including missile systems, special operations capabilities, as well as to the Navy. These steps should form an integral parts of a comprehensive defence concept laid out in Ukrainian strategic documents. 'The Strategy of the Naval Forces of the Armed Forces of Ukraine to 2035' - with its clear goals and realistic approaches, should remain the guide for the path towards acquiring relevant maritime capabilities.

In order to overcome the compartmentalization of government on matters related to countering non-military forms of aggression as well as the restoration of territorial integrity, the Ukrainian government needs to establish unified strategic command and control centre. Considering the nature of threats from the sea, the govern-

ment needs to seek greater involvement from local authorities, businesses, and civil society. Also, the government needs to engage those players in the development of contingency plans for a possible naval blockade of Ukrainian ports as well as overt armed aggression from the South. Consideration should be given to the idea of setting up a multi-agency centre for maritime

crisis management, which would analyse the dynamics of threats in the maritime domain in real time, model possible scenarios, identify countermeasures, and advise the Ukrainian leadership on feasible actions. Such a centre should be staffed with experts in various fields, not only military experts.

There is a need for a new Maritime Strategy that will replace the Maritime Doctrine of Ukraine of 2009 which is no longer relevant.

Proceeding from the provisions of UNCLOS, the government should launch the process of the delimitation of the Ukraine-Russia maritime boundaries in the Black Sea, the Sea of Azov and in the Kerch Strait. Also, the government should declare a 12-mile exclusion zone around Crimea, prohibiting any movement towards the occupied peninsula or remaining within the zone.

Setting up a unified strategic command and control centre for dealing with non-military forms of aggression as well as the restoration of territorial integrity is of crucial importance. The government should define the fundamentals of the policy of non-recognition of the Crimean annexation and subjugate other state policies to it

The government should define the fundamentals of a policy on the non-recognition of the annexation of the Autonomous Republic of Crimea and the city of Sevastopol. Other government policies should be in line with this policy and be subjugated to it. The government should not only react to Russia's constant attempts to legitimize the annexation, but call other

ment needs to seek greater involvement from local authorities, businesses, and civil society. Also, the government needs to engage those players in the development of contingency plans for a possible naval blockade of Ukrainian ports as well as overt armed aggression from the South. Consideration should be given to the idea of setting up a multi-agency centre for maritime

Intensified cooperation with other players in the region and beyond is required, along with the setting up of mechanism for improving situational awareness and coordination. Joint contingency plans are also needed; plans that deal with scenarios ranging from further non-military aggression to a full-scale Russian military advance

governments to condemn it, and convince them of the necessity of formalizing their non-recognition policy at the national [and International] level and enforcing it by prosecuting perpetrators.

The second pillar of the strategy should be intensified cooperation with regional players (the EU and NATO members and partner countries) as well as those from beyond it that share common interests and values. The primary partners should be Romania, Turkey, Georgia and the UK. A top priority should be assigned to confidence building, expanding collaboration, and establishing mechanisms for improving common situational awareness. Ukraine should engage with its partners in elaborating a range of contingency plans, plans that address scenarios that span both non-military aggression through to full-scale Russian military interventions.

It is time to establish a joint mechanism for monitoring the nuclearization of the Black Sea, especially with regards to the Crimean Peninsula. Political and diplomatic actions should be taken in response to Moscow's lowering of the threshold of nuclear weapons use, as well as its declared readiness to use such weapons against non-nuclear states. Russia's deliberate activities that cause negative political, military, econom-

ic, industrial, and ecological effects in occupied Crimea, in the Sea of Azov and the Black Sea, should be the subject to monitoring and joint response.

The further involvement of big players (the US, NATO and the EU) should be **the third pillar**. The government should focus its efforts on developing understanding and insight of partners that Russian threats go well beyond the Black Sea region. A heavily militarized Crimea poses a real threat not only to Black Sea countries but serves as an effective foundation for creating new threats to the Free World by expanding Russia's domination and potential to create instability in the Mediterranean, Middle East, and North Africa. The dialogue agenda around strategic balance should include new developments in Russia's nuclear posture combined with the movement of nuclear delivery systems to Crimea and the waters around Crimea, along with the restoration of nuclear munitions storage facilities on the peninsula. As it was with the INF treaty's violations, disproportionate growth of Russia's offensive cruise missile capabilities should not be ignored.

The government should seek the establishment of a permanent working group on Black Sea security at the International Military Staff in Brussels and restore

Ukraine's permanent presence at the Allied Maritime Command in Northwood, UK. Ukraine should work with NATO on contingency planning, on joint policies and actions, and on improving situational awareness. As a member of the Enhanced Opportunities Partnership (EOP), Ukraine should initiate establishment a mechanism to explore its potential, e.g. building up joint capabilities, intelligence sharing, technological cooperation, etc.

Ukrainian defence companies in Crimea into state-owned enterprises on the Russian mainland.^{121,122} At the same time, violation of Crimea sanctions could be used as a trigger for imposing sanctions on Russian ports on the Black Sea and the Sea of Azov.

The government should work for the expansion of the NATO Black Sea Package and an increase in the rotational presence of NATO vessels from non-Black Sea allies

A joint monitoring mechanism of Russia's nuclearization of the Black Sea should be put in place. Moscow should face a strong political and diplomatic reaction for lowering the threshold for nuclear weapons use and Moscow's declared readiness to employ it against non-nuclear states

The key priority for Ukrainian diplomacy is to ensure strong support for the country and to obtain ironclad security guarantees that are achievable recognising that Ukraine is not yet a member of the NATO alliance. Another priority task is acquiring the necessary capabilities to protect its national interests in Ukrainian territorial waters, and also within the exclusive (maritime) economic zone of Ukraine and in the World Ocean. This requires strong partnerships.

Ukraine should seek the expansion of sectoral sanctions to Russian defence enterprises that are strengthening Russia's ability to carry out its aggressive foreign policies as well as support rogue regimes across the world. The legal grounds for the further expansion of these sanctions are related to the incorporation of seized

into the region. This also applies to increasing the number of partner maritime aircraft patrols over the northern Black Sea coastline and along the routes of cargo ships bound to and from Ukrainian, Georgian and Romanian ports. In addition to this, the government should develop legal mechanisms that would allow non-regional NATO members to keep their warships in the Black Sea longer without violating the Montreux Convention, specifically by using the Danube, the estuaries of the Dniester, the Southern Bug, and the Dnieper, as well as the Sea of Azov. The government should study the idea of setting up a foreign military (naval) base that would allow the navies of NATO countries, including non-Black Sea ones, to stay and operate without violating the Montreux Convention. It is necessary to return to the issue of establishing a joint

naval formation (along with NATO members and partners), primarily to ensure free navigation in the Black Sea. The government should explore a possibility of engaging Ukraine's partners in constructing the E40 Waterway that would connect the Baltic Sea to the Black Sea via the Vistula River, Bug Canal, and the Pripyat and Dnieper rivers.¹²³

Ukraine should boost its regional cooperation with other coast guard services, particularly regarding search and rescue missions. Russia's interference with GPS signals should receive a coordinated response.

The top priority of the government, besides ensuring overall strong support, is to obtain ironclad security guarantees that are achievable even while Ukraine is not a member of the NATO alliance

Ukraine has yet to define a clear asymmetric strategy on Russia, as well as the institutions designated to cope with various Russian maritime threats, be they of a hybrid or traditional nature. The fundamentals of the policy of the non-recognition of the Crimea annexation, as well as those of the restoration of Ukrainian territorial integrity, are either absent or inconsistent in Ukrainian laws and regulations.

There is no national contingency planning nor are there plans coordinated with regional partners and NATO concerning possible Russian aggression against Ukraine from the vulnerable South. The government has not set its mind to the issue of the composition of its naval forces. Mechanisms for situational awareness are not in place nor are there mechanisms for effective real-time interaction with partners.

Ukraine needs to do more to acquaint some reluctant European partners with the threats that Russia poses to them, especially Russian threats emanating from the Black Sea. Kyiv needs to redouble its efforts to persuade partners to impose sanctions on the Russian defence industries that strengthen Russia's ability to carry out an aggressive policy against Ukraine and elsewhere.

Ukraine needs to seek the increased presence of non-Black Sea NATO navies and air forces in the region and work out a legal framework to allow them to extend their presence there, without violating the Montreux Convention. Kyiv needs to contribute to the development of the NATO 2030 Secretary General initiative as well as to promote the idea of the necessity of developing an East Flank defence strategy, one that includes a Black Sea component and an elaborating the role of partner.

CONCLUSIONS

Russian aggressive foreign policy, illegal annexation and militarisation of Crimea have dramatically deteriorated the Black Sea region's security environment. Should it not be addressed in a joint and comprehensive manner, the Kremlin's ability to dictate in the region and beyond will continue to increase.

The regional powers are unable to cope with Russia alone for two major reasons. Firstly, it is disparity in all measurable capabilities and resources. Secondly, the Black Sea is just a square on Russia's grand chessboard and the game should be played on the same board not on many separate ones. Russia is eager to dominate in the region and project its power beyond. It struggles for a 'Grand Bargain' with the US that would allow for the setting of new rules, new divisions of the world. Russia exploits weaknesses within allies as part of its strategy to undermine European and Transatlantic unity. The only way Russia may hope for regaining great power status is by weakening values-based alliances and expanding its sphere of influence.

Growing hard security threats of a conventional and nuclear nature is the grim reality we live in. The Kremlin's belligerent behaviour and adherence to a controlled esca-

lation strategy may lead to a conflict with unpredictable consequences. Yet Russia is already waging undeclared war against the West by non-military means. For the past six years Ukraine has been experiencing first-hand the full spectrum of overt and covert aggression.

Russia will remain an existential threat to Ukraine for years to come. It will take time to develop necessary deterrence capabilities. But there is urgency to act because the threats from the South, especially in the Black Sea and the Sea of Azov are real ones and might be executed in a hybrid manner at any time. The consequences of Russia's actions might have a devastating effect on Ukrainian security, economy, and political stability. Thus, the government should consider implementing coordinated preventive actions and countermeasures. A proactive approach is desperately needed to counter a multi-layered conflict that encompasses all spheres. Beyond these urgent actions, the government should develop a three pillars strategy based on self-reliance, boosted co-operation with the regional actors and increased regional presence of global partners ones.

Though there is much to be done by Ukraine itself, foremost, fostering national

unity and wisely channelling scarce resources to pursue national goals. Ukraine enjoys strong support of its strategic partner – the United States. These relations are of outstanding importance for survival, safeguarding democracy, and bringing prosperity. It is also crucial to boost collaboration with the regional actors, primarily Romania, Turkey and Georgia, and those, who, as the United Kingdom, defined the region as of special interest. It is essentially about defining and exploiting shares val-

ues and interests. Euro-Atlantic integration is the means to achieve this, fostering domestic political support for the country's transformation and enhancing its ability to withstand Russian aggressive policies for years to come. Acquiring membership of the Alliance would mean not only ironclad guaranties for the nation. It would bring Ukraine closer to Europe whole and free by expanding the space of freedom and security eastwards.



Official ceremony of commissioning of two Island-class boats into the Ukrainian Navy, Odesa, 13.11.19, © Admiral (ret) Ihor Kabanenko

LEGAL ACTIONS AIMED AT PROTECTING UKRAINE'S MARITIME INTERESTS

Due to Russia's illegal annexation of Crimea and de facto annexation of the Sea of Azov Ukraine has lost control of over 100 of the 137 thousand square kilometres of its sea (territorial and the EEZs), which is equal to the territory of South Korea or the State of Kentucky.

While exploiting Ukrainian offshore energy resources, Russia denies access to the Ukrainian oil and gas fields and the fishery resources in Ukraine's own maritime areas. In the meantime, without Ukrainian consent, Russia built the Crimean bridge, constructed a gas pipeline, and laid a submarine electricity cable, connecting mainland Russia with the Ukrainian peninsula, trespassing on Ukraine's maritime areas. Russia is carrying on its 'creeping annexation' policy.

At the same time, in accordance with international maritime law, the Kerch Strait is an international strait that directly connects the exclusive economic zones of the Azov and Black Seas. All vessels, be they cargo ships, those owned by governments, warships, and even military aircraft, including those of third countries (i.e. other than Ukrainian or Russian ones) should enjoy an unimpeded right of transit through the Kerch Strait, as well as to enter the Sea of Azov.

Taking this into consideration, the Government of Ukraine should take the following legal steps to address the maritime threats and challenges posed by Russia.

STEP 1. The Government should state that the Azov Treaty is null and void.

With the aim of seizing control of the Kerch Strait, in October 2003 Russia began a construction that would have connected its mainland with the Ukrainian Tuzla Island and, in the view of the Kremlin, would have shifted the strait's median line towards the Ukrainian shore. The two countries were on the brink of armed conflict over this. Under the threat of the use of force Ukraine was made to sign with Russia the agreement 'On Cooperation over the Use of the Sea of Azov and the Kerch Strait' (the Azov Treaty). This agreement requires the consent of both states to allow access to the Sea of Azov via the Kerch Strait for the warships of third countries, primarily NATO member-states. However, according to Article 52 of the 1969 Vienna Convention on the Law of Treaties, a treaty is void if its conclusion was procured under the threat or use of force. This is why the Azov Treaty has no legal force and Ukraine should inform the other countries and the UN about this fact.

STEP 2. The Government should initiate the establishment an ‘international delimitation commission’ under the auspices of the United Nations

Since 1996 Ukraine has been trying to negotiate in due course permanent sea boundaries with Russia (in the Black Sea, the Sea of Azov and the Kerch Strait). Russia has been filibustering the process by putting forward unacceptable proposals that are based neither on the administrative boundaries of the USSR nor on UNCLOS provisions.

But UNCLOS envisages a special compulsory procedure for such cases by setting up an ‘international delimitation commission’ under the auspices of the United Nations. The special compulsory procedure for the delimitation of sea boundaries was successfully applied for the first time in 2016 by East Timor against Australia.

Georgia and Ukraine are faced with similar problems concerning Russia in the Black Sea. Georgia and Russia have no maritime boundary since the latter de facto annexed most of the Georgian parts of the sea. Ukraine and Georgia should synchronize their activities on the basis of UNCLOS, showing that the violation of the maritime rights of its neighbours is part of Russian policy

STEP 3. The government should adopt a Law on Ukraine’s Internal Waters and Territorial Sea.

With the aim of filling the gap in countering Russia’s maritime aggression, the Government of Ukraine Should adopt a law on Ukraine’s Internal Waters and Territorial Sea that:

- sets the width and the outer border of its territorial sea;
- establishes a Special Zone within the Ukrainian territorial sea belt around the Crimean Peninsula until Ukraine restores its territorial integrity and sovereignty over Crimea that is illegally annexed by Russia;
- prohibits any movement of warships or cargo vessels, except Ukrainian ones, towards the occupied peninsula or remaining within the zone.

After establishing the Special Zone Ukraine should add to its Criminal Code special articles that define the criminal responsibility of captains of merchant ships and the management of shipping companies for violations of the Special Zone regime around Crimea and then pursue the individuals involved using all available instruments, including via Interpol.

RESTORING THE SHIP-BUILDING INDUSTRY WITH JOINT PROJECTS

The development of the Ukrainian national shipbuilding industry offers the revival of the economy, a positive attitude of the coastal area population, pride for continuing deep Ukrainian shipbuilding traditions, and the development of national industrial facilities. The latter is crucially important, considering the limited amount of funds available in the Defence Budget. Ukraine has all the potential it needs to become a strong naval power.

However, the lion's share of Ukrainian shipbuilding capabilities has either been lost or become obsolete. Such an objective reality should prevent the government from using a kind of 'Juche' ideology for the restoration of the industry (relying solely on Ukrainian efforts) based on obsolete capacities and technologies. The global defence shipbuilding industry has made significant progress in designing hulls, weaponry, and engineering systems as well as drafting design and production papers, etc. Any attempt to totally make up for the time we lost and catch up with global expertise would only result in exces-

sive spending without achieving any goals. The current maritime threats dictate the need to avoid an increase in operational, technical, and technological risks, as the use of obsolete industrial facilities to construct new designs of ships seems rather inefficient.

The only true chance for restoring national capabilities, as is true in the case of any other capital-intensive industry, lies in cooperation with international partners to procure types of ships that have already been adopted by other nations. The plans for the joint construction of ships and boats together with France, the United Kingdom, and potentially with Turkey match this kind of approach perfectly. Besides, this would also reduce the capability gap of the Ukrainian Navy within a short period of time, allowing it to repel Russia's armed aggression in the Black Sea and the Sea of Azov. The experience and technology transfer resulting from this kind of joint projects would establish the preconditions for further independent design and production works.

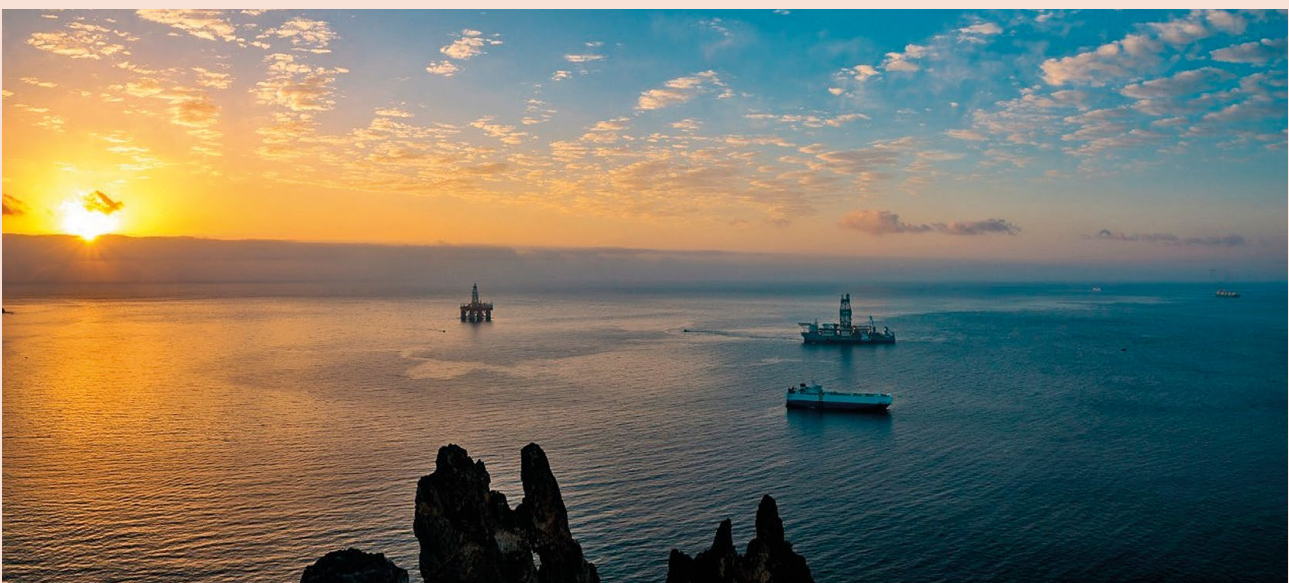
GLOBAL INVESTMENTS TO CONTRIBUTE TO DETERRING AGGRESSION

The involvement of strategic investors into the naval and coastal economic areas promotes further economic development and security consolidation. The companies of key partner nations, including the EU member states, the United Kingdom, Canada, and the US, have the solid political support of their governments.

If Ukraine had managed by 2014 to get global energy corporations to implement production projects for shale gas in Eastern Ukraine (Shell, approx. \$6 billion) and on the Black Sea shelf (Exxon, approx. \$10 billion), this could have undermined the Russia's near-monopoly on supplying gas to Europe and also promoted

the development of Ukraine's export potential. A more assertive approach to the successful implementation of those projects would have resulted in a more stringent response from the US and other nations against the Kremlin's aggression.

Therefore, Naftogaz Ukraine should receive comprehensive support in its efforts to engage strategic investors in the Free World for the oil and gas industry of Ukraine. The implementation of energy projects and the development of the proper infrastructure are tightly interweaved with security issues, considering the present situation in the Black Sea region.



RECOMMENDATIONS

I

The government should develop a long-term Russian strategy that would provide the framework for others aimed at countering the threats in the Black Sea and the Sea of Azov, de-occupation and re-integration of the occupied territories in Donbas, as well as Crimea.

II

The government should boost strategic communication, in particular on the issues of Russian threats to Europe from the Black Sea, including in the nuclear area, its various forms of aggression against Ukraine and other regional states, etc.

III

The government should seek an invitation to the MAP as well as participation in the Strategic Concept development. It should also promote the idea of the necessity of laying out NATO East Flank defence strategy, including the Black Sea chapter and roles for partner countries in it.

IV

The government should work on further increase of NATO rotational presence at sea and reconnaissance and assurance overflights along the seashores and main seaways thus deterring Russia's aggression and securing freedom of navigation. It should reinitiate the idea of a joint (with NATO members and partners) naval formation. The government should also work out a legal framework of securing much longer presence of non-regional NATO members' navies without violating the Montreux Convention, in particular on the Danube, in the estuaries of the Dniester, the Southern Bug and the Dnieper, as well as in the Sea of Azov. The government should study the idea of setting up a foreign military (naval) base.

V

The government should establish a unified strategic command and control centre for dealing with non-military forms of aggression as well as restoration of territorial integrity. It should also define the fundamentals of the policy of non-recognition of the annexation of the Autonomous Republic of Crimea and the city of Sevastopol and subjugate to it other governmental policies.

VI

The government should attach priority to establishing a comprehensive contingency plan for a possible naval blockade as well as overt armed aggression from the Southern direction.

VII

The government should set up a centre for maritime crisis management, which in real-time would analyse the dynamics of maritime threats, model possible scenarios, identify countermeasures and advise the government of feasible actions. It should also seek establishment of permanent working group at the International Military Staff in Brussels and restore Ukraine's permanent presence at the Allied Maritime Command in Northwood, UK. The government should work with NATO on contingency planning, joint policies and actions and situation awareness.

VIII

The government should define the strategy of acquiring necessary naval capabilities that the authors believe should be based on the 'mosquito fleet' concept. Therefore it should prioritise securing relevant US assistance as well as implementing the agreements with the United Kingdom.

IX

The government should conduct a survey of the national shipbuilding industry (shipyards and design bureaus) as well as financial and banking institutions that might form a national shipbuilding cluster. It should also explore a potential for development of various naval weaponry and equipment, in particular, air, surface and underwater systems, including unmanned ones, and the capabilities of naval special operations forces, employing national industry and cooperation with the key partners. The government should work out a plan of exploiting the full potential the EOP for this goal as well.

X

The government should seek involvement of the western strategic investors into the upstream sector, first of all, in the projects on the Ukrainian continental shelf in the Black Sea.

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