

Assessing NATO's Deterrence Strategy against Russian Federation Security Threats in the Baltic Sea

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Abstract

Today, the Baltic Sea has become the epicenter of the European crisis. The Baltic Sea is the only region where NATO has a land border with Russia, increasing the region's sensitivity. The slightest incident can turn into a full-blown war in the region. Russia's complex security challenges, the region's geopolitical situation, and the Baltic states' defense vulnerabilities have raised the need to revive NATO's military presence and strengthen deterrence against Russia. In the light of interpretive structural modeling, this study seeks to answer the question of what effect Russia's escalating activities in the Baltic Sea have had on the effectiveness of NATO's deterrence strategy in the region. Given the theoretical framework of broad deterrence, it hypothesized that Russia's security strategy in the three areas of conventional, nuclear, and hybrid threat had led NATO to move toward broad deterrence based on the threat of punishment and denial. However, both types of deterrence do not have the quantity and quality necessary to fully contain Russia in the region, as in the Cold War. In order to measure efficiency according to the research method and its extended formulation, the indicators of credibility, communication, and capability are used. The findings show that deterrence through punishment is much more pronounced than deterrence through denial and that the normal state of deterrence in NATO is highly vulnerable to Russia. Weaknesses in capability and communication have also led to the fragility of NATO's deterrent credentials in the region, making the Baltic Sea very sensitive and critical.

Keywords: NATO, Russia, Baltic Region, Extended Deterrence, Deterrence by Denial, Deterrence by Punishment.

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1. Interduction

Indeed, viewed from the historical perspective, the Baltic Sea region has experienced a turbulent history where major European powers have regularly tried to exercise strategic and ideological influence. The Soviet Russia occupied the three countries in 1939, after Hitler donated them to Stalin in the secret Molotov-Ribbentrop pact. The Yalta meeting of 1945 became funeral for Baltic independence. During the Cold War the dividing line of Europe went across the Baltic Sea region, which became a strategic backwater that received little focus on international agendas. However, since the end of the Cold War, the region has become an important focal point where U.S.A, EU and Russia policies are intercrossed. There is a widespread understanding that the Baltic Sea region is one of the most dynamically developing, outward-looking and promising regions in Europe. The region offers the world-market excellent trade opportunities, a good climate of foreign investments, transit routes, and a steadily growing network of international, governmental and non-governmental arrangements.

Russia's military presence in the Baltic Sea ended in 1998 with the closing of the Skrunda radar base, but the withdrawal of Russian naval forces did not mean the end of Russia's efforts to exert security-defense influence in this region (Yazdani and et al,2011:28). The expansion of NATO in 2004 led to the entry of Estonia, Latvia and Lithuania into the Western Alliance. Apart from the Baltic states, NATO's northern and eastern flanks also expanded up to 160 kilometers from St. Petersburg and Belarus. About 90 million people live in this region and many rich natural and human resources are observed in it. With the fall of the Soviet Union and other totalitarian regimes in Eastern Europe, the unification of Germany, the independence of the Baltic states, the membership of Finland and Sweden in the EU, and the membership of Poland in the EU and NATO, the prosperity and stability of the region increased (Pishgahifard and Arab,2011:54-55). As a result of these events, the European Union and the United States of America became an important challenge for Russia in the Baltic region. Russia's response to this challenge was to militarize Kaliningrad.

Russia did not give up any efforts to prevent the membership of the Baltic states to NATO and the EU. The challenges created by Russia

have always been accompanied by NATO's response and have fueled tensions in the region. With Russia's attack on Ukraine in 2014, the Baltic countries were considered as possible targets of Russia's attack due to their historical ties with Russia, the high presence of the Russian minority in their countries, and their unsteady position in NATO. This perception led to the strengthening of NATO's deterrence in the Baltic Sea. When we talk about tension and deterrence in the Baltic Sea; It means the area shown in the map below:



Figure (1): Center of Tension in Baltic Sea

As it is clear on the map, the two cities of St. Petersburg and Kaliningrad are the borders of Russia with the Baltic Sea. Other Baltic neighbors include Poland, Belarus, Finland, Latvia, Lithuania and Estonia. Due to Russia's behavior, Western governments have moved towards re-arming the region since the NATO summit in Wales (2014) and Warsaw (2016). For a better understanding of the security structure of the region, it should be noted that these countries are included in three categories:

- NATO countries: Estonia, Latvia, Lithuania and Finland (until April 2023).
- Neutral countries: Sweden (which has officially applied for membership in NATO)
- Russia

According to what was mentioned, this question is raised that what effect Russia's escalating activities in the Baltic Sea have had on the effectiveness of NATO's deterrence strategy in the region. It hypothesized that Russia's security strategy in the three areas of conventional, nuclear, and hybrid threat had led NATO to move toward broad deterrence based on the threat of punishment and denial. However, both types of deterrence do not have the quantity and quality necessary to fully contain Russia in the region, as in the Cold War. The conceptual framework of this research is designed based on the Extended Deterrence theory. Considering Russia's interests in delegitimizing NATO and collective defense, attacking the Baltic states is always one of Russia's favorite tactics. As a result, the necessity of NATO deterrence against Russia is not only of regional importance and collective security, but it is considered an important requirement to preserve Western liberal values. The research method used in this research is Interpretive Structural Modeling (ISM).

2. Literature Review

The first group of works in the present topic examines NATO's deterrence in the Baltic Sea. In 2019, the Baltic Defense College published a book on the occasion of the 20th anniversary of the relationship with NATO. This book was written by NATO military leaders. They emphasize the necessity of reforming NATO's grand strategy in the West and against Russia based on adopting a broader European-oriented and trans-Atlantic approach. The analyzes of this book are both political and military and examine NATO's threats in the 21st century. In a chapter, Fredrich Ben Hodges believes that NATO members should take a common view of the threat, more solidarity and cooperation in spending in order to exercise effective and appropriate deterrence and ensure collective security in the Baltic. He considers Russia's lack of transparency in the international environment as a factor that makes it difficult to fight against this country. McLenis and Mc Partland (2021), in a joint paper, have examined NATO deterrence and its dilemma in the Baltic region. They consider the turning point of NATO's deterrence to be Russia's attack on the Baltics. They compare the type of deterrence in the Soviet era and the years after 2014. NATO's "Firepower Strategy" and the Host Nation Support (HNS) are the focus of their discussion.

Binnendiik and Rodihan (2020) have studied NATO's deterrence and the necessity of its cooperation with Finland and Sweden to deter Russia. From their point of view, commitment to NATO, nuclear deterrence, structures of

frontline forces and multinational planning are among the factors that have questioned the validity of NATO's deterrence in the Baltic. This research offers suggestions for facilitating deterrence among the Baltic states, where NATO is committed. In a realistic approach, they believe that there is no commitment from the US and other nuclear powers to protect the Baltics, and the countries of the region have no choice but to increase their national and conventional military capabilities.

The second group of studies deals with Russian threats in the Baltic Sea. There are different opinions about the possibility of Russia's nuclear threat to the Baltics. For example, in the Rand Institute report (2016), it is stated that Russia's next target will most likely be the Baltic region, and NATO's nuclear force does not have enough credibility for deterrence. Thompson (2016) believes that the Baltic states will be attacked by Russia for several reasons. He believes that the strategic importance of the Baltic region and new NATO and Russian technologies will cause this attack. Luik and Jermalavicius (2017) also have such a view and emphasize the Russian political literature about the Baltic nuclear threat and its vulnerability. In this regard, Klotzer (2020) pays attention to the militarization of the Baltic region in his book. The starting point of his article is the review of the Russian military exercise in Kaliningrad. He emphasizes the political differences of the Baltic states as a blind spot against Russia. From his point of view, the Baltic Sea is the internal sea of NATO and the EU, and from this point of view, he does not consider any right for Russia. His emphasis is to increase the involvement of Germany to solve regional problems.

veebal (2018) has investigated Russia's goal of delegitimizing NATO's presence in the Baltic Sea and believes that the Russians seek to challenge the international security order and replace it with a new order in which Russia has more influence and power. From his point of view, Russia is ready to fuel regional tensions gradually and as far as its budget allows. On the other hand, according to Altman (2018), economic conditions have clearly imposed restrictions on Russia in the expansion of regional conflicts. The size of the Russian economy is smaller than Germany, France and Italy, and it is at the level of a middle power like Spain. The limitation of economic resources leads Russia to prioritize its choices and this reduces Russia's bargaining power in the region. Altman concludes that the cost of conflict in the region will be high for NATO and Russia.

As it comes from examining the background of the subject; Most of the works published on this topic deal with the cost-benefit of the military confrontation between Russia and NATO in the Baltic Sea and consider the possibility of a Russian military attack as probable. The experience of the 2014 crisis in Ukraine has been effective in this approach. After the second attack in 2022, these views gained momentum. But it seems that such a simple analysis is somewhat far from reality and will close the hands of many elements of the Russians to enter the Baltic and take direct hostile action in the near future. This is the gap that the current research intends to address.

3. The Methodology and Conceptual Framework

The research method of this article is ISM. This model is process-oriented and is included in the multi-criteria decision-making techniques (based on several indicators). The reason for choosing this method is the need to the interaction between different variables. This method is used to explain the relationships between the components of a complex whole. In this paper, extended deterrence is considered as a system in which individual variables must be identified. In the second step, the relationship between the indicators was determined and finally the network of interactions was identified and drawn. This method is a subset of the mixed research method. The patterns resulting from this method specify the relationships of the elements, level the elements, and show the degree of strength and dependence of the variables. Based on this, the research variables are:

Independent variable: Russia's security threat.

Dependent variable: NATO extended deterrence.

Intermediate variable: geographical conditions and historical background of the region
Autonomous variable: ideological difference of the conflicting parties.

Deterrence as a military strategy has a long history. This strategy was proposed in the Cold War as a way to control the arms race of the two superpowers, and from there it was transferred to the academic field. Deterrence is a special type of political relationship between units involved in interaction (Ghasemi,2007:98). Deterrence can be conceptualized as “one state’s attempt to convince another state to refrain from initiating some course of action for the reason that cost and (or) risk which may be incurred would be greater than the benefit”, or as “an attempt, which is made by one state as a defender, to prevent an action expected from another state as a

challenger by using the threat of incurring cost” (George and Smoke,1989: 173). It seems that the power game between Russia and NATO has not changed much after the Cold War. The type of NATO's grand strategy to control Russia in this region can still be analyzed in the form of deterrence theory and more specifically extended deterrence.

Deterrence is a subset of rational choice theory and has a psychological nature. The theory of rational choice hopes that the antagonists will be rational and act rationally. If for any reason the hostile parties are irrational; Then deterrence will lose its meaning. This component is the distinguishing factor between deterrence and defense; because defense, unlike deterrence, has a purely physical dimension and is narrower than that. In a more precise definition, Glen Snyder defines deterrence by emphasizing its psychological dimension as a kind of countering the enemy's intentions. Meanwhile, the purpose of defense is to reduce the capabilities of the enemy and damage it (Snyder,1961:3). Deterrence has three special tasks: preventing the threatening action of the opponent, the occurrence of tension and war, and finally creating a suitable platform for dialogue about the red lines of the parties. Robert Jervis refers to three waves in the thinking on deterrence, which are increasing relevance of deterrence due to nuclear weapons, the development of the strategic concept through game theory, and the reembedding in the geopolitical context (Jervis,1979:292). Jeffrey Knopf adds a fourth wave to this sequence, in which the nature of threats has changed and the need for extended deterrence has increased. The timeline of these waves can be seen in the figure below:

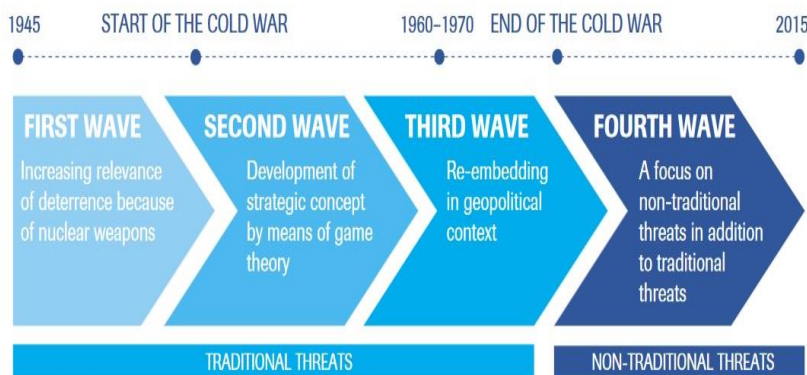


Figure (2): Chronology of Deterrence Theory

(Source: Vander Putten and et al,2015:9)

Bernard Brodie concluded that the invention of the atomic bomb had fundamentally altered the nature of war. Brodie was of the opinion that a strategic revolution had taken place. Whereas before it had been about winning wars, preventing wars now had become the essential aim (Jervis, 1979:294). In the second wave, Thomas Schelling was one of the first to classify war as a bargaining process in which opponents attempt to influence each other's expectations and intentions by means of threats, promises and action (Tunander,1989:355). In the third wave, the traditional conflict between governments was emphasized, and finally in the fourth wave in addition to state deterrence, asymmetric wars and non-state actors became important. According to Jeffrey Knopf, Strategic cultural awareness of the adversary is essential (Knopf,2010).

The reason for NATO's move towards extended deterrence was the vulnerability of its conventional forces against the Soviet Union. Extended deterrence is a type of strategy that emphasizes the two elements of using conventional and non-conventional forces in tandem. Extended deterrence, conceptually, is a complex strategy. This complexity is also true in the Baltics. Where the action or policy of any individual government is not able to guarantee security, and there is no doubt about the vulnerable geopolitical position of the countries in the region as the front line of a possible military crisis (Vseriov,2021:3). In fact, extended deterrence means deterring the opponent from attacking the allies and changing the established order. Center of this type of deterrence is the logic of Mutually Assured Destruction (MAD).

The two elements of extended deterrence are deterrence by punishment and deterrence by denial. Deterrence by denial uses the capability of denying territorial acquisition attempted by an enemy while deterrence by punishment uses threats and capabilities of punishment by nuclear weapon. Basically, in the Baltic region, applying the strategy of deterrence through punishment without denial is impossible. Punishment is not necessarily associated with direct defense; but it can include more punishment, such as increasing nuclear tension or expanding the geographical borders of the conflict, which increases the cost of aggression; Therefore, in order to measure NATO's extended deterrence in the region, based on this model, we must first scrutinize both subsets of extended deterrence. The second step is to evaluate the effectiveness of this deterrence. According to the explanation of the theoretical foundations of the research, Alexander George's formula

was used to level the indicators. Deterrence is a very complex process that George considers its success to be evaluated based on the following formula:

$$p(C + R) > (1 - p) B$$

p is the probability of a retaliation by the deterring party, C is the cost to the aggressor, R is the estimated damage (risk) that the aggressor incurs, and B is the benefit gained through the attack of the aggressor. The nearer p comes to 1, or the larger the values of C and R are, the better deterrence work (George and Smoke,1989:60). In this process, it is necessary to correctly estimate the capability of the patron (NATO and especially the US) and the protégé (Baltic states). To apply this formula to the case study, the following model can be drawn:

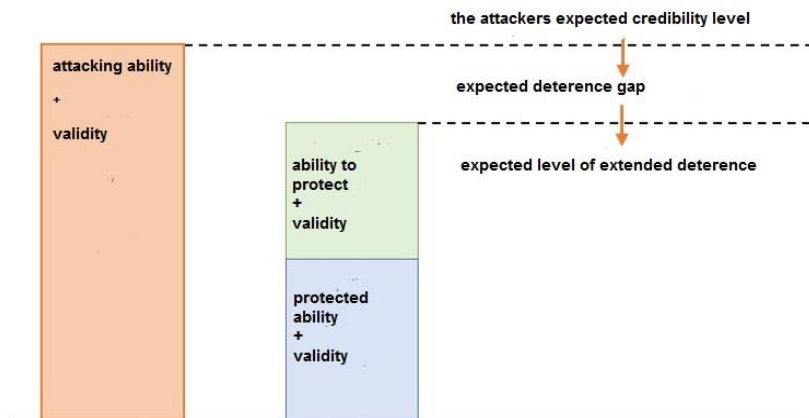


Figure (3): Theoretical Model of Research

As a result, the triple formula of deterrence measurement is used for the efficiency test, which consists of:

$$\text{Deterrence efficiency} = \text{credibility} \times \text{capability} \times \text{communication}$$

To be sure, a protégé must believe in the extended deterrence achieved by its own and the patron's internal capabilities, commensurate with the aggressor's threat. From the point of view of the protégé, the aggressor has an expected level of threat that is a product of his capabilities. The action of the aggressor to increase or decrease his capability or actions that indicate the use of capability causes a change in the perception of the target of the threat (red column). After the protégé is aware of his internal deterrence level (green column) and is relatively sure of the patron's power (blue

column), a relative understanding of deterrence is obtained. However, there is always an error factor in the green column. In other words, according to this model, in the current research, all the elements of deterrence will be examined at the level of the Baltic states on the one hand and other NATO member countries on the other hand, in order to finally get a better understanding of the validity of deterrence. This review will be done in three indicators of capability, credibility and communication. According to the explanations, the modeling matrix of the current research method is based on the following figure:

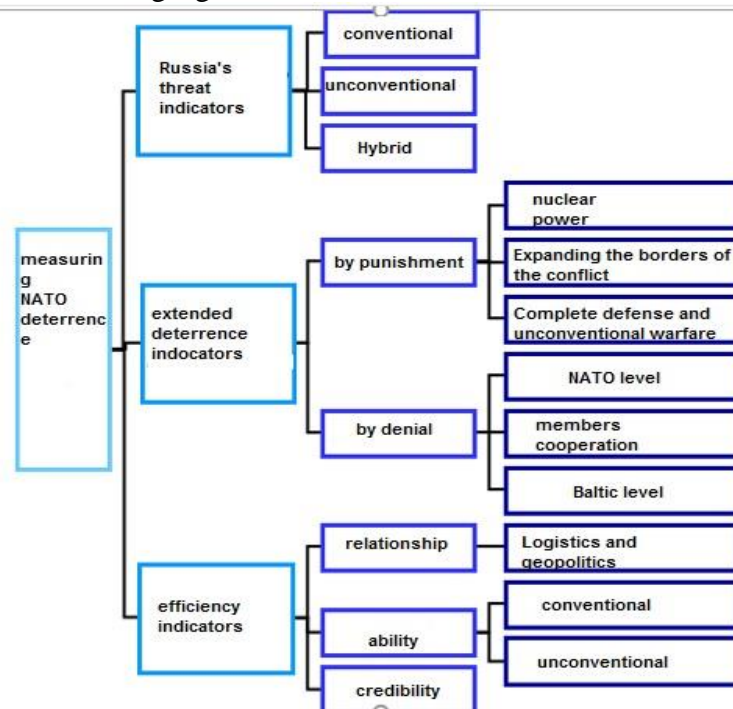


Figure (4): The Matrix of Research Method

Russia's attempts to maintain influence over ethnic Russians abroad is a sensitive question for Estonia and Latvia, given their ethnic diversity. Because of large-scale immigration during the Soviet period, 25.2 percent of Latvian inhabitants and 24.8 percent of Estonian residents are of Russian descent. Since the 1990s, the non-citizen's issue remains a burning issue in Baltic-Russian relations, and a key element in Russia's compatriot policy (Bergman,2020:484). If Russia sends troops to the Baltic, it will raise the

issue of discrimination against the Russian minorities in the region. This policy has many fans especially in Estonia. Therefore, the presence of the Russian-speaking population can be a challenge for NATO.

Currently, the most important threat from Russia in the region is the conventional threat. Out of all the military districts, Russia's Western Military District (MD) fields the most robust, most numerous, and most capable fighting forces. The 6th Combined Arms Army (CAA) is located opposite the Baltic States and is the least developed army in the Western MD. It is mostly composed of brigades; its armor capability is limited to just two tank battalions, which indicates the low priority given to this particular theater (Muzyka and Consulting,2021:4). Among other conventional capabilities of Russia, its anti-access/area denial (A2/AD) capability can be mentioned. Russia's A2/AD system is a set of missiles and air force that act as a defense umbrella over the Baltic Sea and prevent the penetration of NATO forces. This system includes the S-300PS, S-400 and S-300PM surface-to-air missiles belonging to the 6th Air Defense Army based in St. Petersburg and the k 300 Bastion-P coastal defense system and the S-400 missile battalion based in Kaliningrad (Muzyka and Consulting,2021:18). Iskander surface-to-surface ballistic missiles and cruise kalibr missiles have directly targeted countries such as Denmark (Muzyka and Consulting, 2021:50).

Conventionally, Russia's military modernization campaign has been largely designed to counter and contest US and NATO military superiority in Europe. Russia has held no-notice "snap" military exercises concurrently with the large-scale ZAPAD 17 exercise along its western border with NATO allies in 2017, as well as a recent large-scale submarine exercise in the Arctic. Russia has also continued its aggressive actions in the air, land, and sea, notably buzzing US Navy ships and aircraft, violating allied air space in the Baltic Sea region, and conducting mock attack (Binnendiik and Rodihan,2020:7). In fact, both from the point of view of the formation of forces and from the geopolitical point of view, Russia has the upper hand in this field. It should be noted that Russia's offensive movements outside the Baltic Sea also affect this region. An example of this situation is the 2022 Ukraine crisis. Because Russia's strategic approach in Europe is integrated, which includes elements of attack and defense. Therefore, in this policy, the distance between war and peace is very short.

In the second stage, we can mention the Russian nuclear threat. In 1993, Russia announced that it would initiate nuclear war if its territorial integrity was threatened (Mearsheimer,2014:402). President Vladimir Putin has repeatedly declared that Russia is a responsible nuclear power that would use nuclear weapons only in self-defence, in response to a nuclear attack or to a conventional attack that threatens the very existence of Russia. This principle is also recorded in Russian military doctrines, but clouded by official public statements that create uncertainty and are likely aimed at intimidating the West. Meanwhile, Russia's yearly strategic military exercises, including Zapad in the Western Military District (MD), have included nuclear components such as flights of strategic bombers over the Baltic Sea and even simulations of first- use nuclear strikes against Western capitals and territories. Furthermore, Russia has embarked on a massive and costly nuclear modernization programme that involves both strategic and sub-strategic weapons and launch systems. Several nuclear accidents, including the explosion close to Severodvinsk in early August 2019 and the fire on a nuclear mini-submarine close to Severomorsk in July 2019 also testify Russia's increased efforts in the nuclear realm (Brauss and et al,2020:20). Moreover, Russia allegedly warned the US in 2017 that it would not hesitate to use tactical nuclear weapons against NATO in case of conflict in the Baltic region. In the nuclear arena, Russia has unveiled new strategic weapons systems and violated the Intermediate-Range Nuclear Forces Treaty (INF). Russia has also declared an "escalate-to-deescalate" nuclear policy, which under certain circumstances would see Russia threaten to use tactical nuclear strikes to end a conventional conflict on Russian terms (Binnendiik and Rodihan,2020:8).

The third threatening area is Russia's hybrid strategy. Western analysts often refer to the model of hybrid warfare to describe Russian tactics. This term is derived from the strategy of the New Generation Warfare (NGW) which is a distinct and genuinely indigenous Russian innovation aimed at winning the conflict with NATO by coercing the alliance—largely through all measures short of open warfare—into giving up on the post-Soviet space and, perhaps, finally forswearing further enlargement. As part of this strategy, Russia seeks to avoid a direct military conflict with NATO for as long as possible (Kühn,2018:15). Therefore, according to this strategy, a direct military attack on the Baltic states is not on the agenda. Russia's hybrid capabilities are also significant. Moscow uses offensive tactics, intelligence

operations and cyber-attacks against the countries of the region repeatedly (Flanagan and et al,2019:5).

Russia has used the approach based on the Gerasimov doctrine which attempts to find a hybrid conflict model with a very low-intensity. According to this doctrine, Russia uses a combination of economic and technological tactics in line with its security strategy (Veebal and Ploom, 2018:191). Gerasimov lists some changes in the current security environment, stressing the role of mobile, mixed-type groups of forces as strengthening; military actions are becoming more dynamic, active, and successful; that tactical and operational pauses are disappearing; that informational gaps between forces and control organs are reducing; that long-distance and contactless actions against enemy forces are becoming the main tool of achieving the goals, and so on (Veebal and Ploom,2019:408). In a closer look, examples of this type of threat from Russia can be the direct threat to Sweden and Finland for non-membership in NATO, cyber and media influence in the 2016 and 2020 American elections, attempted coup in Montenegro and preventing this country from joining NATO, the attempt to assassinate former Russian spy Sergei Skripal in England and... (Binnendiik and Rodihan,2020:6). This strategy is holistic, but three components can be seen in it:

- Nonkinetic Tools: As part of its NGW concept, Moscow employs various nonmilitary means, including standard diplomacy; economic pressure; financial and/or rhetorical support of political groups or parties that are friendly to Russia and hostile to the EU and NATO; propaganda and disinformation campaigns; overt criminal activities by mercenaries or mafia-style groups; and covert intelligence and cyber operations.
- Classical and Nontraditional Military Activities: NGW also consists of both classical and nontraditional military activities.
- Nuclear Weapon: comprises a nuclear force posture that maintains numerical parity with the United States in deployed long-range (strategic) nuclear weapons (with a range of more than 5,500 kilometers); superiority vis-à-vis NATO's Eastern European member states in short-range (tactical) nuclear weapons (with a range of less than 500 kilometers) (Kühn,2018:16-17).

Now that Russia's security threats against NATO and its allies were examined; is necessary to examine the reaction strategy of the West, that is, extensive deterrence against this threat in the next part.

4. Applying Deterrence by Punishment in the Baltic Region

Deterrence through punishment is one option to influence the enemy's cost-benefit analysis. Deterring Russian aggression in the Baltics short of military hostilities, or "left of bang," is a political problem in which U.S. and NATO militaries are but one component. Because of the presence of nuclear weapons on both sides, the overriding consideration regarding any confrontation between NATO and Russia over the Baltics would require managing both vertical and horizontal escalation (Klein and et al,2019:3). Any disruption in NATO's capability will lead to the fragility of such deterrence. Therefore, the punishment can be a part of NATO's threat to counterattack and the possibility of using land forces in Poland. As it was mentioned, one of Russia's security strategies is the threat of using tension-causing nuclear tactics. This tactic will greatly reduce the effectiveness of deterrence by punishment. However, the importance of deterrence through punishment should not be underestimated. The main reason for the fragility of the punishment is the absence of nuclear power by the protégé, that is, the Baltic states. In this context, they have complete reliance on NATO or their supporter.

It seems that US is preparing for a small nuclear war in the Baltic. Washington has started military exercises for such an operation. If NATO uses its nuclear force, after the invasion of Russian territory (Kaliningrad), Lithuania will become uninhabitable forever. Even some German authors want to use nuclear weapons for NATO's possible problem in the Suwalki¹ gap (Brauß and Krause,2019:161). Therefore, although erasing Kaliningrad from the map is not mentioned in any published text, but it is not unlikely that this issue is of concern to NATO. Therefore, complete destruction using nuclear weapons will also be possible. The most important difference between the current situation of NATO and Russia in the Baltic Sea with the Cold War era is that:

- A NATO and U.S. threat to escalate to general nuclear war over a Russian invasion of the Baltic states has doubtful credibility.

1. In a possible war, Russia will do its best to prevent NATO land forces from reaching the Baltic states. The only way for NATO to enter would be the Suwalki gap on the border between Poland and Belarus, which is currently under Russian influence. Therefore, the first reaction of Russia in the war is to block the gap. The German proposal is based on this military estimate.

- In a conflict in the Baltic states, Russian ground forces would greatly outnumber NATO ground forces. This fact and geography are why Russia could invade one or more Baltic states and rapidly achieve its war aims using conventional forces alone, probably within a few days.

- Targets attacked by NATO using nonstrategic nuclear weapons would, from the outset of the war, be either in Russia proper or in NATO countries (i.e., the Baltic states). During the Cold War, NATO could (if it chose) conduct limited nuclear attacks against lucrative military targets in Warsaw Pact countries other than Russia throughout the conflict.

- NATO's military and military-supporting infrastructure was extensive, dispersed, and hardened to a greater extent during the Cold War than it is today (Davis and et al,2019:ix-x).

Although NATO's nuclear policy has changed strategically, but it has retained its deterrence function. According to NATO's strategic concept, "the best security guarantee of the allies is the nuclear force of the alliance, especially the US, England and France, which plays a deterrent role by itself" (NATO,2015). Meanwhile, it is necessary to pay attention to several points:

- The coalition itself does not have nuclear weapons, and as a result, there is no legal and political guarantee for the member states on how to use the nuclear weapons that belong to another state.
- NATO nuclear countries do not agree on the allocation of nuclear forces. While the UK's nuclear weapons are officially in the possession of NATO; France is not a member of NATO's nuclear structures, nor does it participate in NATO's Nuclear planning Group¹ (NPG).
- In practice, the role of nuclear weapons in NATO's doctrine has declined in the last three decades. In the 1990s, the number of American nuclear weapons in Europe was about 2500, but now it has reached 180. Therefore, the possibility of using nuclear weapons will be weak or time-consuming (Chalmers,2011).

According to the Nuclear Posture Review, the US Department of Defense approved in February 2018 that due to the worsening of security threats, the

1. This group decides on issues such as nuclear arms control and nuclear proliferation. All NATO member countries (including countries without nuclear weapons) except France are members of this group.

issue of maintaining and replacing US nuclear forces should be done. In this review, the US will use an appropriate approach for effective deterrence and will modernize "NATO Consultation, Command and Control (NC3)" (NPR, 2018).

Total Defense and Unconventional Warfare (TD/UW) techniques and forces as another NATO doctrine for deterrence by punishment can support deterrence, early warning, de-escalation, defense against invading forces, and liberation from occupation during the course of a hybrid or conventional conflict. Total Defense (TD), a whole-of-society approach to national defense and resilience, and aspects of Unconventional Warfare (UW) (Flanagan and et al,2019:1-2). The other would comprise Unconventional Warfare, which relies on special operations and guerrilla tactics. The result is a broad-spectrum resistance ranging from armed attacks by special forces and cut-off regular army troops turned guerrilla, to spreading propaganda leaflets and tweeting on social media (Peck,2019). Estonia, Latvia, and Lithuania are committed to enhancing the size and capabilities of their national guards and reserve forces and increasing whole-of society resilience and resistance efforts.

According to the assessment of the RAND Institute, a wide range of technologies can enhance the effectiveness of TD/UW efforts. These include cyber capabilities, night vision devices, tactical and long-range mobile communications systems, man-portable anti-armor and anti-aircraft (including anti-unmanned aerial vehicle [UAV]) weapons, small UAVs, small arms and explosives, computers, cameras, and printers, as well as nonlethal weapons. A robust technology initiative to equip resistance cells in all three Baltic states would require approximately \$125 million in initial equipping cost, plus training, operations, and maintenance funding (Flanagan and et al,2019:3-4).

Estonia has the most developed TD/UW structure among the Baltic states. In this regard, the country created a defense league that includes 15 battalions. Each of the battalions belongs to one of the provinces of the country (Kaitseliite,2021). On the other hand, in 1994, Latvia started to merge the National Defense Forces and the National Guard¹. But in 2014, the government injected \$76 million to increase the number of employees to 12,000 by 2027. The National Guard now serves in the form of special

1. Zemessardze

operations forces, police and border guards (Szymański and Gotkowska, 2015:3). Among them, Lithuania has the weakest situation.

In general, due to the fragile situation of NATO's deterrence by denial against Russia, the use of nuclear deterrence is highly emphasized. Extending deterrence by punishment between Russia and NATO requires a balance between several important elements:

- Balance between US strategic forces and TD/UW of NATO members
- Balance between land-based missiles, sea-based missiles and aircraft with dual capabilities
- Balance between limited nuclear planning and military force.

5. Applying Deterrence by Denial in the Baltic Region

denial-based deterrence seeks to deter an aggressor by making the chance of a successful attack improbable, cost-prohibitive, or untenable. The NATO capabilities of deterrence by denial are many. Showing these capabilities and inducing a sense of future failure will be effective in Russia's cost-benefit analysis. Of course, Russia's anti-denial ability can also increase the probability of achieving Moscow's political goals and, as a result, create a balance that opens the way for political negotiations (Klein and et al,2019:4). To ensure the success of deterrence by denial without imposing exorbitant costs on NATO member states, the alliance needed a new model. This new model was pushed forward on three axes: the strengthening of national forces, the strengthening of NATO and American units stationed in the region, and finally the ability to quickly strengthen forward presence of ground force units with forces from Europe. Before examining these three axes, it is necessary to note that geographical and logistical issues play a direct role in deterrence by denial.

Both sides have strategic weaknesses. Suwalki gap cannot be ignored either. NATO has access to the Russian coast from St. Petersburg to Kaliningrad by sea and air; but the parties' options for action are limited. Russia has two very short coastlines in the Baltic Sea. In contrast, NATO and the EU have a long coastline. On the other hand, NATO's options in the east of the Baltic Sea are very limited and it is not possible to deploy military forces in this region and in the vicinity of Poland (Leps,2020:12).

NATO enjoys several natural geographic advantages that enable a denial-based deterrent strategy based on an AD operational concept. In particular, the geography of the Baltic Sea favors a defensive operational concept because of its relatively small size and shallow depth, with only a few

navigable passageways and numerous choke- points. Approximately half of Russia's maritime cargo transits through the Baltic Sea, thereby providing NATO and its partners economic leverage in a potential crisis. By extension, NATO should plan to deny Russia access to the North Atlantic via the GIUK (Greenland–Iceland– UK) Gap and further afield to the Barents Sea between Svalbard and Norway's northern coastline (Klein and et al,2019:6). As mentioned, Russian forces stationed in the Kaliningrad exclave pose a particular predicament to NATO and its partners. Nevertheless, despite its menacing appearance, Kaliningrad may actually be a Russian vulnerability rather than a strength.

It should be noted that Russia has such a geopolitical weakness in Skagerrak Strait. The strategic problem is that in the event of war the Russian navy cannot get out of the Baltic Sea, either, due to the Skagerrak Strait, which connects to the North Sea. The narrow strait is controlled by NATO members Denmark and Norway; and even if the ships made it, the route to the Atlantic goes through what is known as the GIUK gap in the North Sea—which we will see more of when we look at Western Europe (Marshall,2016:32). Now we will examine the axis of NATO deterrence by denial.

5-1. Strengthening the National Forces

One of the most important elements of deterrence in the Baltics is the Host Nations Support (HNS) plan. Without this plan, NATO's deterrence in the Baltics will remain intact. According to the NATO Logistics Guide, HNS is: " the civil and military assistance provided by an host nations to the forces located in or transiting through that host nation's territory ". (NATO, 1997). Here the role of the Baltic States becomes crucial. All three Baltic countries have been able to spend two percent of their GDP on military budgets in line with their duty in NATO. The Lithuanian army is the largest national army in the region, with 21,000 conscripts. In the table below, you can see the information about the army of the three Baltic countries, which has been collected from different sources:

Table (1): Formation of the Forces of the NATO Protégé States

Country	Number of Soldiers	Land Force	Sea Force	Air Force
Latvia	6,900 army troops and 7,500 part-time National Guard troops	one infantry brigade	one coastal patrol regiment	An air regiment, a cargo squadron and a radar squadron
Lithuania	21,000	one mechanized infantry brigade and one motorized infantry brigade	one naval regiment	An air regiment, 12 cargo planes, reconnaissance and helicopters
Estonia	6,700 army troops and 15,800 volunteers of the Defense League	one infantry brigade and one cavalry brigade equipped with artillery fire and anti-aircraft capability	4 explosive weapons	An air regiment of a helicopter transport squadron

(Source: IISS,2021)

The data in the table shows that the support of the HNS is not valid without the presence of coalition forces in the Baltic Sea. The weakness of the Baltic states is a serious issue. The Baltic countries ignore the split within NATO members and believe that NATO will protect them. likewise, along with this optimism, they have also started to strengthen their national defense systems. In 2001, Estonia and Latvia signed a joint contract with the company Lockheed Martin with the aim to purchase new “TPS-117” long-range radar systems to expand both countries’ air surveillance capabilities. Estonia has focused on joint procurements with other countries. In 2009–2010 a joint procurement for purchasing medium-range air surveillance radar systems was conducted with Finland to jointly purchase 14 medium-range air surveillance radar systems, “Thales-Raytheon Systems Ground Master 403”, of which 12 are used in Finland and two in Estonia. The price of one radar system was 11.3 million euros and it has been estimated that, thanks to the joint procurement, the price of the equipment was about 50% lower than it would have been in the case of an independent procurement (Veebal and Ploom,2018:187). In general, all three Baltic countries are part of small size states and their resources are limit. The list of military bases built in alliance with NATO in these countries can be seen in the following table:

Table (2): The main NATO Facilities in the Three Baltic Countries

Lithuania			Latvia			Estonia		
	Forces	Fortifications		Forces	Fortifications		Forces	Fortifications
Rukla military base	The German forces, the EFP and the Lithuanian Iron Wolf Cavalry	barracks, logistics support area, 25 square kilometers training ground	Ādaži military base	The EFP, The headquarters of NATO's multinational forces in the north	Four barracks, rooms for 2100 soldiers, firefighting facility, vehicle maintenance facility, security camp	Tapa military base	American forces and the Estonian army	Modern tanks worth 11 million dollars, equipped with a P.S.O. M
Šiauliai military base	NATO air force headquarters in the Baltic Sea	military evacuation airport, refueling station, airport, runway, with the capacity of two C-5 cargo planes, two C-17 planes, four C-130 planes, 14 jets and 8 helicopters	Lielvārde Military base	US Air Force commandos	complete facilities	Ämari military base	The host of the second batch of NATO Baltic Air Policing Mission	Wide airport runway, capacity of 12 planes
Pabrade military base	The training place of German forces, the EFP, the forces of the Lithuanian army and the American rotational units in Lithuania	75 square kilometer training ground, the first civil warfare training center						

5-2. Reinforcement of NATO Units

Although NATO itself has not made any comments on the support HNS, the practical activities of the alliance after 2014 indicate its broad support. For example, from this year, the EFP could, according to current plans, receive two waves of reinforcements. The first to arrive would be NATO's Very High Readiness Joint Task Force (VJTF)—also known as the Spearhead Force—which consists of, at most, 13,000 personnel. The Spearhead is the most rapidly deployable part of the Enhanced NATO Response Force (NRF) the rest of which would follow later. At most, the complete NRF consists of 40,000 personnel (including the Spearhead) (Kühn,2018:28). These initial

steps were intensified in 2018 at the Brussels Summit. NATO adopted the "NATO Readiness Initiative", known as " Four-Thirty ", which aims to design 30 regiments, 30 squadrons and 30 warships to be deployed in the mission area for 30 days (NATO,2021).

Taken together, these actions showed that the core of NATO's ability to prevent Russia from gaining victory in the Baltic Sea is based on the ability to quickly move forces to the region and support the national forces and HNS. On the other hand, NATO increased the EFP forces in the Baltics, where multinational forces were deployed in the three Baltic states and Poland. These forces are able to fill the gap in the national arsenals of the Baltic countries. Twelve countries including England, Poland, Latvia, Lithuania, Estonia, Germany, Canada and US are members of these forces. In the table below, you can compare the capabilities of Russia and NATO in the region. It should be noted that Finland and Sweden are not officially members of NATO yet (on April 2023, Finland officially became a member of NATO and Sweden has also applied for membership). However, they have had high-level cooperation with the coalition.

Table (3): Comparison of Russian Forces and the Forces of NATO's Northeast Flank in the Baltic Sea

	Russia	Baltic States	Poland	Finland	Sweden	Total NATO Alliance
Active Forces	102,000	34,250	123,000	21,500	15,150	217,150
Reserve Forces	9000	45,000	18,500	216,000	31,000	350,700
Tank	757	3	606	100	120	865
Heavy Artillery	612	136	616	420	23	1219
Infantry Combat Equipment	1276	48	1611	212	396	2358
War Aircrafts	345	0	95	62	96	315
Combat Helicopter	+76	0	28	0	0	28
patrol Aircraft	51	0	10	2	5	24
Navy Fighters	15	4	0	0	0	6
Submarine	19	0	3	0	5	14

(Source: Binnendiik and Rodihan,2020:9)

From the table above, it can be seen that there is a kind of imbalance in the conventional forces of Russia and the West. This is another evidence of the vulnerability of the region, both in terms of logistics and quick response, against a possible Russian attack. Even if NATO intervenes, at least in the first days of the attack, Russia will have the upper hand. Meanwhile, the help of the US becomes important. After Ukraine crisis, US has played a more active role in deterring the Baltic, but the main reason why Washington is interested in Baltic events is not clear. Perhaps the best explanation is that US's goal is to maintain its strategic depth and hegemonic leadership in Europe. Beyond this, the tension in the Baltics is considered a golden opportunity for the US to sell weapons, transfer technology and other commercial concessions. After a 9-year hiatus, the US has activated its second naval fleet in the Baltic region since 2018, and this event is referred to as a symbol of US return to Europe. Among the US plans in this field is the "European Deterrence Initiative (EDI)". According to this initiative, the US annually allocated 4-6 billion dollars to NATO missions and began to modernize its infrastructure and train forces to quickly respond to Baltic threats (The European Deterrence Initiative: A Budgetary Overview,2021:1).

5-3. Strengthening European Forces

What all the Baltic states have in common is that they see Russia as a major threat to their national interests. Russia has pursued an aggressive policy against Norway in the Arctic; Sweden is afraid of Gotland Island; Finland has had a conflict called the "Winter War" with Russia, and because of its geographical proximity, it is afraid of Russia more than others and is trying to open the way for dialogue. The Baltic and Polish governments are also afraid of Russia's threat and are the main defenders of NATO and US presence in the region. The close cooperation between NATO and the countries of the region on the one hand and the countries of the region with each other is observed on the other hand. In coastal border, the interaction between land and sea forces is critical to deal with hybrid threats.

Regional defense cooperation includes police, hybrid, educational cooperation, etc. In the current security situation and increasing military and civilian threats from Russia, NATO seeks to increase cooperation with its partner countries in Sweden and Finland with the aim of ensuring the security of the Baltic region. Finland and Sweden, no longer neutral but not yet in NATO, face the prospect of operating in the shadow of Russia's

current A2/AD capabilities, as well as the possibility that in a crisis Moscow might move its systems forward to their islands of Åland or Gotland, respectively. This would of course draw Sweden and/or Finland into the conflict. Similarly, Sweden could be drawn in because of NATO's need to use its airspace or territory in order to circumvent a Russian missile threat from the Kaliningrad exclave. Sweden has already taken a number of steps to adapt to the threat from Russia's new A2/AD capabilities, including putting a garrison on the island of Gotland, dispersing aircraft at peacetime bases, purchasing the Patriot air defence system and forming closer defence ties with the United States (Dalsjö and et al,2019:16).

In this regard, regional mechanisms such as regular political dialogues and consultations, exchange of information about Russia's hybrid threats, cooperation in the field of training and military exercises, expansion of joint actions, etc. have been put on the agenda. All three sides of this triangle have played a role in strengthening the NRF. In addition, by signing a memorandum of understanding, they committed to provide logistical support to NATO forces (Dalsjö and et al,2019:17). In the figure below, you can see the regional security cooperation arrangements with the initiative of Sweden and Finland:

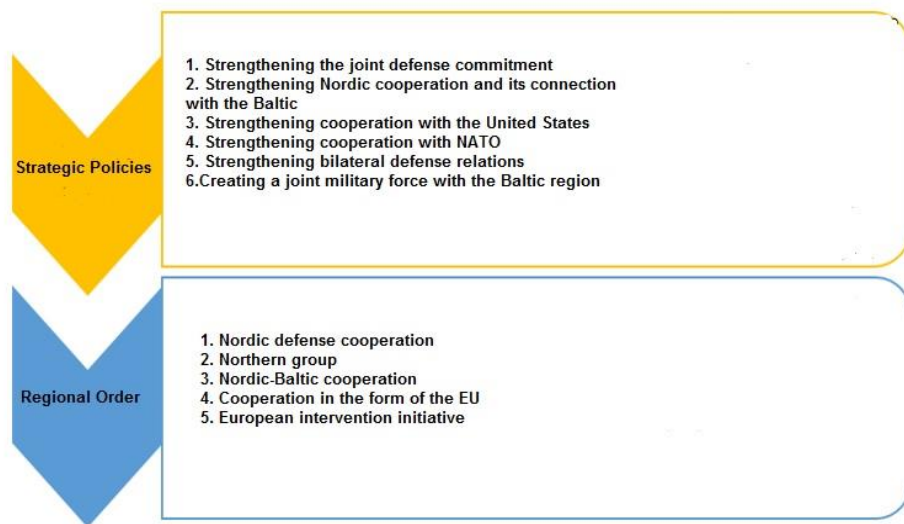


Figure (5): The Security-Defense System of Finland and Sweden

The British naval fleet in the region includes 20 ships and boats. Ships stationed in several UK docks are ready to be sent on multi-month missions

in the Baltic Sea. The units of the Royal Navy are also visible among the British battalion present in the Baltic. The number of British soldiers present in the Baltic is about 2000 people (Behling,2019). In addition to these forces, Danish, Norwegian and Dutch soldiers and ships, whose approximate number of soldiers is around 1000, are also constantly patrolling the area.

Germany is also an important pillar for NATO in this region. The German Navy has close cooperation with the Baltic states. The result of this cooperation was the holding of the NATO military commanders' summit, the formation of the Baltic Naval Command and the High Operations Center. The German Air Force cooperates closely with the NATO Response Force. As a quasi-hegemonic power in Central Europe, Germany has the opportunity to establish itself as the first political power in Europe. After all, US greater focus on the Pacific region has provided space for Germany to play a greater role in this region. Germany's foreign and security policy document with the slogan "new power - new responsibility" paid attention to this issue even before the 2014 Ukraine crisis. This document states that: "Given the reduction of US resources, Germany's greater presence in the world will be inevitable. Based on this, it is expected that the cooperation of partners will be strengthened. This means that Europe and Germany have to take on more responsibilities and duties" (SWP,2013:6).

The issue of joint NATO maneuvers in the Baltic is another important factor for strengthening cooperation. For example, we can mention the 2010 Saber Strike Mission led by the US in Riga. Of course, Latvia has hosted several other important operations, such as Summer Shield and the BALTOPS in 2018 in Talsi region (Vasegh and et.al,2021:355). Fourteen NATO allies along with Finland and Sweden participated in the exercise BALTOPS 22 with over 45 ships, more than 75 aircraft and 7500 personnel (NATO, 2022). Therefore, two results will be certain: first, the Baltic Sea will be a point of contention between Russia and NATO, and second, global stability is always the main goal of the foreign policy of countries such as Finland and Sweden in the region. Russia's threat can lead to the departure of these two countries from neutrality. This issue will create new fronts and sensitivities for Moscow.

6. Assessing NATO's Deterrence in the Baltic Sea

The ultimate goal of NATO's extended deterrence in the Baltic Sea is to reorient Russia's cost-benefit calculations in such a way that the attacking

actor considers the possibility of retaliation and the impossibility of victory. Here threats are used as a coercive tool. Threatening to punish the other player with the use of strategic nuclear weapons also has the same result. According to Snyder, three conditions are necessary for successful deterrence: credibility, communication, and capability (Snyder,1961). Accordingly, deterrence succeeds when the combination of all elements is in the right place, and fails when the deterrence threat is not supported by a combination of sufficient capability, high credibility, and strong communication. Therefore, it can be said that NATO's successful deterrence requires that, first, the allies show the political will to act collectively against aggression; second, to be fully aware of the sufficient military capability to respond to Moscow; third, there is a will to share the risk, responsibility and cost. Now we will examine these three elements in NATO's extended deterrence in the Baltic Sea.

6-1. Communication

The meaning of communication is to what extent the deterrent forces have the ability to respond quickly and logistically to the crisis. The Ukraine crisis showed that Russia is willing to use force to protect its interests. This issue caused NATO's vigilance and its limited attention to deterrence. After the annexation of Crimea to Russia, Obama announced in his trip to Tallinn that NATO is not only willing to guarantee the independence of each member of the alliance; rather, it should enhance Rapid Response Force so it can deploy even more quickly and not just react to threats, but also deter them. (Remarks by President Obama to the People of Estonia,2014). This proposition was later raised by other European leaders.

Many geographical coordinates, such as the small island of Piriissaar in the heart of Estonian Peipus Lake and adjacent to Russian waters or the Curonian Spit on the border of Russia (Kaliningrad) and Lithuania, have created challenges for NATO's deterrence. NATO and the Baltic states are seeking to destroy Moscow's ability to create critical space in their favor. In order to be more prepared, NATO should provide logistics and material conditions for the movement of large units in the operation area. This work requires money and time, and this is not possible for NATO, which is not in good condition and is under the pressure of operations in other regions. In fact, military mobility, the rapid movement of armed forces and equipment across national borders has become an important defense policy.

Inadequate urban infrastructure is another problem for NATO. For example, there are not enough bridges to transport heavy equipment in the region. Of course, because the creation of infrastructure must be done by the countries of the region and in some cases by the EU; NATO can only play the role of facilitator (Major,2019). Russia's biggest bargaining chip in a potential conflict would be the Suwalki Gap. There are four possible solutions to the Suwalki dilemma for NATO:

- The first option is learning to live with it. This is called mutual vulnerability. The vulnerability of the Baltic states is balanced by the vulnerability of the Kaliningrad oblast.
- The second option is enhanced NATO presence in the vicinity of the gap. It would take deployment of relatively large and mobile NATO force in the immediate vicinity of the Suwalki Gap capable of silencing Russian artillery, intercepting short-range missiles, shooting down aircraft, and entering the corridor with heavy armor to protect both sides of it enabling reinforcements to arrive to Baltic states.
- The third option is regime change in Belarus. The obvious drawback of that option is timing
- The fourth and final option is to quickly take out Kaliningrad in case of conflict. The Suwalki corridor can be secured on very short notice—literally within the first hours of conflict—if the Russian forces deployed in the exclave are incapacitated (Sokov,2019).

It does not seem that any of these solutions are practical according to the current situation. Without the necessary infrastructure such as networks, transportation hubs and energy supply lines, it will be difficult to move and deploy NATO forces in the region. Some believe that the deployment of troops in Poland will solve the problem of geographical distance. Others are advocating the presence of reinforced advance forces to resolve the issue of the Suwalki gap. As it was mentioned, US has started to deal with the defense infrastructure of Europe. in the collection for the reasons discussed in this article; Including the Suwalki gap, the state of the coastline, etc., the situation of NATO forces is very vulnerable in terms of communication. This vulnerability shows itself more in conventional conflict.

6-2. Capability

The second element of deterrence assessment is capability. Capabilities have two conventional and non-conventional dimensions that were discussed. Military capabilities and regional cooperation were also examined. Based on

this, the most important capabilities are resilience against hybrid and cyber-attacks, frontline force structure, joint defense planning, ability to cooperate in military equipment, training and joint military operations, military cooperation and convergence arrangements, and finally, the strength of HNS.

The ability of the regional defense of the Baltic states and their allies against Russia is under question. NATO's current type of deterrence in the region is more based on punishment than denial. Nowhere in the world is the weakness of deterrence models more evident than in the Baltics. As far as conventional capabilities are compared, Russia has an unarguable conventional supremacy in the Baltic region. Shlapak and Johnson³⁹ estimate that in a short-term (approximately 10 days), Russia could force 27 fully ready battalions (30–50,000 soldiers) equipped with armoured vehicles to an attack on the Baltics without needing to stop its military activities in Ukraine. NATO, on the contrary, will be able to immediately respond only with predominantly lightly armoured forces, consisting of the military forces of the Baltic countries and of a severely limited number of the military forces of the US and its partners. according to an optimistic estimate, NATO could deploy elements from 3 airborne infantry brigades, 1 Stryker brigade, and 1 US armor brigade. Hence, in the early stage of the conflict, Russia has advantages in tanks, infantry fighting vehicles, attack helicopters, cannon artillery, long-range rocket artillery, short-range air defense, and long-range air defense. Russia also has an advantage as far as the range of the cannon and rocket artillery and the range of the Multiple-Launch Rocket Systems are concerned (Veebal and Ploom,2018:183).

In general, combat operations in the Baltic Sea require small ships and amphibious vehicles to support land operations. Due to the deployment of the Russian missile system in Kaliningrad, Moscow can bombard most of the Baltic Sea. This position allows Russia to close the entry routes of force to the Baltic Sea by land, sea and air. On the other hand, Moscow has the possibility of economic and military blockade of the Baltics from land, sea and air. This country can easily send its troops into Lithuania and Poland through Kaliningrad and Belarus. The task is to break through the Russian defensive umbrella around Kaliningrad with the land-based air force. In the conflict for access to the Baltic Sea, mine warfare (the use of various explosive devices) is very important; because sea routes are limited and flat.

6-3. Credibility

Capability is a condition to achieve credibility. According to Osgood, the validity of deterrence means that the measures of deterrence are appropriate to the goals (Osgood,1957:242). The credibility of deterrence depends on certain conditions, but due to its controversial nature, it is difficult to assess which conditions and what period of time deterrence becomes credible. In credibility we study something that is expected to never happen. Several factors have been proposed for effective deterrence. For example, van der Putten, Meijnders and Rood believe that international cooperation and clear transmission of the message of deterrence to the adversary are two necessary conditions to achieve valid deterrence. These two conditions must be based on real ability (Van der Putten and et al,2015:8). credible NATO deterrence requires the following indicators:

- improved conventional defense capabilities in the Baltic states
- improved capabilities for employing nuclear weapons in a Baltic conflict using existing
- changes in planning, doctrine, and exercises to improve the feasibility, timeliness, and credibility of nuclear use
- improvements in NATO's military-related infrastructure, including (Davis and et al,2019: xi)

In the early stages of the conflict between Russia and the Baltics, the resilience of the military forces of the regional governments is very important. Extended deterrence has two audiences: the aggressor who makes the threat and the protégé who is threatened. Depending on the policy of the patron, actions by the protégé to close the deterrent gap may be encouraged or discouraged by the patron. For example, if a patron's policy is to retain influence or hegemony over the protégé, the protégé seeking agreements with the patron's rivals would signal a capability or credibility gap that the patron's policy would drive them to close. Since the Baltic states are part of the multinational NATO alliance, their actions and reactions to the United States and NATO response must be considered as to whether they indicate abandonment fears (Hank,2020:2-3); but the weakness of the national defense of the Baltic states is an important factor in questioning the credibility of deterrence.

The coalition's deterrence credibility is also fragile due to differences in members' views. The dispute over the use of nuclear weapons by NATO nuclear states was discussed earlier. In fact, member states differ on values

and perceptions of risk. On the other hand, core values such as democracy, rule of law, and etc. are also a source of controversy. For example, after the Warsaw summit in 2016, which strengthened the Baltic and Nordic factions in response to Russian threats; the concern of the southern wing rose (Dempsey,2017:6). It can be said that this difference is not new; but now it has intensified and questioned the credibility of deterrence. In case of any conflict in the region, the possibility of France using nuclear weapons to defend the coalition seems unlikely, because France's interests lie in the southern flank. Beyond this, according to the economic concerns of the European members of NATO, despite the turbulent environment of the Baltic Sea, these countries have always moved towards reducing their military budgets (Koolae and Tishehyar,2006:56).

From Russia's point of view, NATO's strategic deterrence will not stop the attack. In the event of a war, forces based in Kaliningrad would allow for air defense of Russian territory and disabling of threatening NATO infrastructure, such as the missile defense system based in Poland. In addition, Moscow can prevent NATO's unlimited use of the Baltic Sea by conducting naval and air operations in the southern part of the sea, while also limiting their access to the Baltic straits. As a result, ground operations will be limited by suspicious attacks.

7. Conclusion

No area in Europe is as militarized as the Baltic Sea. NATO, EU and Russia are bordering dangerously in this region. The number of military maneuvers and incidents between the Russia and NATO members is increasing day by day. The geographical conditions of the Baltic and Russia's military doctrine show that this country has unpleasant plans for NATO. On the other hand, after several decades of crisis management in the region outside the alliance, NATO has forgotten the method of rapid deployment of forces and the transfer of armed forces and equipment to the region. After 2014, NATO's deterrence in the Baltic became increasingly important. The current situation in the Eastern Baltic is not only worrisome, but very dangerous. There is no cooperation between Russian and Western forces to prevent dangerous situations.

It was interpreted through detailed indexing of each structural variables. In this regard, it became clear what is meant by Russia's threats in the Baltic. In the second place, NATO's extended deterrence based on punishment and denial against these threats was scrutinized. Finally, whether NATO's

deterrence in the Baltics has been successful is discussed. From all the discussions, it became clear that NATO's deterrence in terms of communication, capability and credibility in this region is under question and this issue has put the Russians in a more dominant position and their military maneuvers are taking on more aggressive dimensions day by day.

It is clear that NATO is struggling with many problems in the fields of alliance and strategic commitment, credible nuclear deterrence, cooperation to strengthen the structure of frontline forces, and joint multinational planning in the northeastern flank, but on the other hand, it has progressed to a great extent in areas such as regional defense obligations, support of host nations, execution of maneuver operations under joint command, sharing defense information of members, and cooperation to deal with Russia's hybrid threats.

Proving the will and capacity for NATO's effective deterrence in the Baltics seems essential. In this regard, any aggression against the Baltic states should be met with a strong NATO military response. It is very important that this response has a multinational aspect. The discussion confirmed that NATO deterrence has produced a series of dilemmas that will lead to the failure of this strategy. These dilemmas are:

- The dilemma of choosing between detente or tension: this dilemma is the result of the paradox in the nature of deterrence. Successful deterrence requires proving capability to the competitor; but this issue will lead to tension.
- The second dilemma is choosing between ethics and efficiency.
- The third dilemma is choosing between defense strategy and deterrence strategy. If extended deterrence is fully established; its logic will lead to rejection of defense strategy; but if denial is strengthened and its problems are solved, defensive strategy can be used as a supplement.

To solve these dilemmas, NATO members must strengthen their military. The findings of the article show that NATO will face several problems to send its army. If NATO cannot convey the intention of defending the Baltic to Russia, it is possible that Moscow will mistake any deployment of troops as the start of a NATO attack and respond to it. As soon as NATO sends its reinforcements, Russia may activate its anti-doping capabilities and cut off air and sea routes. Therefore, NATO will also find the solution in full war and will attack this capability of the Russians. This will cause the conflict to be extended to the territory of Russia.

Russia is very likely to turn to nuclear weapons out of fear of defeat and this will complicate the situation. Therefore, if we want to reach a final conclusion based on George's formula, we can say that the situation is not in favor of NATO deterrence. If the formula range is considered between 0-1; according to what was mentioned, we reach the following relationship:

$$1(1+1) \geq (1-0) 0.5$$

$$2 \geq 0.5$$

In the table below, you can see the final estimate of NATO's deterrence and its consequences.

Table (4): General Assessment of NATO's Deterrence Situation in the Baltic Sea

	Credibility of Deterrence by Punishment	Credibility of Deterrence by Denial
The Possibility of Retaliation	Somewhat low	High
Damage Estimation	High	Low
Status Perspective	Hard	Hard

Therefore, we can conclude that the status of NATO is clear for the three Baltic countries. If a military attack is carried out against them, Clause 5 of the charter will be activated. On the other hand, Russia is sensitive to its interests in the Baltic Sea. This region is one of the weak links in Russia's defense since the collapse of the Soviet Union. If there is even the slightest crack in this area, the Russians will prefer to form a crescent that goes south from the Baltic Sea and then southeast to the Ural Mountains. In fact, even a limited confrontation between the Baltic states has the capacity to turn into a war or a strategic crisis.

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References

1. Behling, F (2019). Briten kommen mit Armada in die Ostsee. 54. <https://www.kn-online.de/Nachrichten/Schleswig-Holstein/Britische-Marine-kuendigt-grosse-Seemanoever-in-der-Ostsee-an>.
2. Bergmane, U (2020). Fading Russian Influence in the Baltic States, *Orbis*, 66 (3), 479-488. doi: 10.1016/j.orbis.2020.05.009.
3. Binnendiik, H; Rodihan, C (2020). Geometries of Deterrence: Assessing Defense Arrangements in Europe's Northeast: Atlantic Council.
4. Brauß, H; Krause, J (2019). Was will Russland mit den vielen Mittelstreckenwaffen? *Zeitschrift für Strategische Analysen (Cooperation Committee of the Peace Movement Schleswig-Holstein)*, 3 (2), 154-166. doi:10.1515/sirius-2019-2005.
5. Brauss, H; Stolcescu, K; Lawrence, T (2020). Capability and Resolve: Deterrence, Security and Stability in the Baltic Region: Konrad Adenaur Stiftung.
6. Chalmers, M (2011). Words That Matter? NATO Declaratory Policy and the DDR. November 17. https://media.nti.org/pdfs/NTI_Framework_Chpt2.pdf.
7. Dalsjö, R; Berglund, C; Jonsson, M (2019). Bursting the Bubble? Russian A2/AD in the Baltic Sea Region: Capabilities, Countermeasures, and Implications: Malmö University.
8. Davis, P.K; Gilmore, J; Frelinger, M. D. R; Geist, E; Gilmore, C. K; Oberholtzer, J; Tarraf, D.C (2019). Exploring the Role nuclear weapons Could Play in Deterring Russian Threats to the Baltic States: RAND. doi:10.7249/RR2781.
9. Flanagan, S. J; Osburg, J; Binnendijk, A; Kepe, M; Radin, A (2019). Deterring Russian Aggression in the Baltic States Through Resilience and Resistance: RAND. doi:10.7249/RR2779.
10. Ghasemi, F (2007). Deterrence Model of Iran's Foreign Policy: A Theoretical Approach, *Geopolitics Quarterly*, 3(7), 97-127. doi: 20.1001.1.17354331.1386.3.7.5.0. **[In Persian]**
11. George, A.L; Smoke, R (1989). Deterrence and Foreign Policy, *World Politics*, 41 (2): 170-182. doi:10.2307/2010406.
12. Hank, J (2020). Credibility of US Deterrence in the Baltic States after Crimea's Annexation: Center for Strategic Deterrence Studies.
13. IISS (2021). *The Military Balance 2021*: The International Institute for Strategic Studies.
14. Jervis, R (1979). Deterrence Theory Revisited: in *World Politics*, *World Politics*, 31 (2), 289-324. doi:10.2307/2009945.
15. Kaitseliite (2021). Estonian Defence League. 9 19. <https://www.kaitseliit.ee/en/edl>.
16. Klein, R; Lundqvist, S; Sumangil, E (2019). Baltic Left of Bang: The Role of

- NATO with Partners in Denial-Based Deterrence: INSS.
17. Knof, J (2010). The Fourth Wave in Deterrence Research, *Contemporary Security Policy*, 31 (1), 1-33. doi:10.1080/13523261003640819.
 18. Koolae, E; Tishehyar, M (2006). Geopolitical Transformations and Changes in the Mission, Structure and the Functions of International Organizations (Case Study: NATO), *Geopolitics Quarterly*, 2 (5), 56-89. doi: 20.1001.1.17354331.1385.2.5.3.7. **[In Persian]**
 19. Kühn, U (2018). Preventing Escalation In teh Baltic: Carnegie Endowment for International Peace.
 20. Leps, H (2020). Die Militarisierung der Ostsee: Zusammenarbeitsausschuss der Friedensbewegung.
 21. Marshall, T (2015). *Prisoners of Geography: Ten Maps That Tell You Everything You Need to Know About Global Politics*: Elliot and Thompson.
 22. Major, C (2019). Die Rolle der Nato für Europas Verteidigung: Stiftung Wissenschaft und Politik.
 23. Mearsheimer, J (2014). *The Tragedy of Great Power Politics*. Trans: Cheginizadeh, G. A.: Ney. **[In Persian]**
 24. Mossalanejad, A (2015). NATO's Regional Security Policymaking to Confront with Chaos-Generating Indications. *Geopolitics Quarterly*, 11 (37), 1-38. doi: 25.1001.1.17354331.1391.8.28.5.7.**[In Persian]**
 25. Muzyka, K; Consulting, R (2021). *Russian Forces in the Western Military District*: CNA.
 26. NATO (1997). Chapter 12: Host Nation Support. 10 15. <https://www.nato.int/docu/logi-en/1997/lo-1213.htm>.
 27. — (2015). NATO. September 3. <https://b2n.ir/f67629>.
 28. — (2021). NATO Secretary General Jens Stoltenberg Following the Meeting of the North Atlantic Council in Foreign Affairs Ministers' session. 4 1. https://www.nato.int/cps/en/natohq/opinions_184462.htm.
 29. — (2022). NATO. 16 NATO Allies and Partners Take Part in Exercise BALTOPS 22. 6 10. https://www.nato.int/cps/en/natohq/news_196240.htm.
 30. NPR. (2018). Nuclear Posture Review. Febraury -. <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>.
 31. Osgood, R (1957). *Limited War: The Challenge to American Strategy*: University of Chicago Press.
 32. Peck, M (2019). How A \$125 Million Baltic Guerrilla Force Could Stop Russia: Report. April 30. <https://nationalinterest.org/blog/buzz/how-125-million-baltic-guerrilla-force-could-stop-russia-report-55077>.
 33. Pishghahifard, Z; Arab, H (2011). Geopolitics of Baltic Sea and its Regional Importance, *Geopolitics Quarterly*, 7 (23), 53-79, <DOI:20. 1001.1.17354 331.1390.7.23.3.8>. **[In Persian]**

34. — (2014). Remarks by President Obama to the People of Estonia. 93. <https://obamawhitehouse.archives.gov/the-press-office/2014/09/03/remarks-president-obama-people-Estonia>.
35. Snyder, G (1961). Deterrence and Defense: Princeton University Press.
36. Sokov, N (2019). How NATO Could Solve the Suwalki Gap Challenge. 31. <https://nationalinterest.org/feature/how-nato-could-solve-suwalki-gap-challenge-55347>.
37. SWP (2013). New Power New Responsibility: SWP.
38. Szymański, P; Gotkowska, J (2015). The Baltic states' Territorial Defence Forces: OSW.
39. — (2021). The European Deterrence Initiative: A Budgetary Overview: Congressional Research Service.
40. Tunander, O (1989). The Logic of Deterrence, *Journal of Peace Research*, 26 (4), 353–365. <http://www.jstor.org/stable/423658>.
41. Van der Putten, F.P; Meijnders, M; Rood, J (2015). Deterrence as a Security Concept against Non-Traditional Threats: Clingendael Monito.
42. Vasegh, M; and et al (2021). Expansion of NATO Territory in the Baltic Region, the Black Sea, and Eastern Europe, and its Consequences for Islamic Republic of Iran, *Human Geography Research Quarterly* 53(1): 343-364, <DOI: 10.22059/jhgr.2020.279402.1007901>. **[In Persian]**
43. Veebal, V; Ploom, I (2018). The Deterrence Credibility of NATO and the Readiness of the Baltic States to Employ the Deterrence Instruments, *Lithuanian Annual Strategy Reveiw*, 16 (0), 171-200. doi:10.2478/lasr-2018-0007.
44. Veebal, V; Ploom, I (2019). Are the Baltic States and NATO on the Right Path in Deterring Russia in the Baltic? *Defense and Security Analysis*, 35 (4), 406-422. doi: 10.1080/14751798.2019.1675947.
45. Vseriov, J (2021). Constructing Deterrence in the Baltic States: ICDS.
46. Yazdani, E; Touiserkani, M and Bahrami, S. (2011). NATO and National Missile Defense, *Gopolitics Quarterly*, 7 (24), 25-53. doi: 20.1001.1.173543 31.1390.7.24.2.9. **[In Persian]**