

Strengthening the Strategic Balance in the Baltic Sea Area

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1. Introduction

In the past decade, a new reality has emerged that has profoundly worsened the security situation in the Euro-Atlantic space. Russia has followed an increasingly aggressive anti-Western policy of revisionism and has become, once again, a direct and open threat to NATO. This is particularly true for the Eastern Flank of the Alliance, including the Baltic states and Poland. NATO, as a whole, is vastly superior to Russia, militarily¹ and especially economically. But in the sub-regional context of the Baltic Sea area the picture looks quite different, given the obvious imbalance of conventional forces there and certain advantages perceived by Russia, especially those concerning geography and time.

The purpose of this paper is to identify the best possible ways to achieve and sustain a durable strategic balance in the Baltic Sea area in order to minimise the risk of overt or covert Russian aggression against the countries of the region. The focus is on regional defence and deterrence against Russia, in terms of the allied combat-ready conventional forces that need to be in place or ready to be deployed to the North-Eastern Flank of NATO. However, due to the methodology adopted in this paper, it is not intended to simply and mechanically calculate the increase in NATO's forward presence in the Baltic states and Poland and the sufficient and timely reinforcements that would be necessary to counter any type of Russian aggression in the region. The emphasis is on deterrence (think-tank), rather than warwaging (tank-thinking).

While the further strengthening of overall societal resilience and the self-defence capabilities of the Baltic states is an important element in deterring possible Russian aggression, this paper's focus is on the overall efforts required of the Alliance as a whole to improve the military strategic balance in the region. This paper will argue, from the outset, that NATO's deterrence against Russia has a particular dimension in the Baltic Sea region.² Russia will certainly strive to avoid a full-scale war with NATO,³ even if it may threaten to escalate a potential crisis situation, but it could, nevertheless, be tempted to provoke and exploit a "local conflict". The Western concept of deterrence includes strong political and economic pillars,⁴ but these alone – in the context of the Baltic Sea area – may not persuade an opportunistic and antagonistic Russia to ignore a favourable moment, even if it miscalculates, to gain political and military victories. Russia may be ready to make certain deals with the West (e.g. JCPOA⁵ concerning Iran or potentially in Syria), but this has little to do with true cooperation and the strengthening of European security. Dialogue with Russia is necessary, alongside solid deterrence, in order to secure communication and avoid miscalculation, but it should not feed illusions and wishful thinking. Russia's ambitions

¹ Except the nuclear component.

² It is worth mentioning that certain allies on NATO's southern rim are struggling with other types of threats and challenges, particularly massive illegal immigration. However, the role of NATO, as a defensive military alliance, in dealing with southern non-military threats is difficult to determine. Nevertheless, the preservation of strong solidarity at 28 is crucial for the future of the Alliance.

³ Which would be essentially a WWII scenario that goes beyond the scope of this study paper.

⁴ Besides NATO, the EU plays, in this sense, and equally important role.

⁵ The 5+1 Joint Comprehensive Plan of Action.

and intentions are clear – to break up the post-Cold War security architecture, to undermine NATO and the EU, and to weaken the Transatlantic Link – and these goals are not going to change in the foreseeable future.

The conclusions and recommendations of this paper are both political and military, and are based on a thorough analysis of the political considerations formulated above and of the requirements for deterrence and defence set out below. They stem from a comparative examination of NATO and Russian military postures, their conventional force distributions in the Baltic Sea theatre, potential reinforcements and Russia's anti-access and area denial capabilities, and considerations of the most likely worst-case scenario.

This paper reflects the personal opinions of the authors and is based solely on public information. The authors are very thankful to the National Defence Committee of the Riigikogu (Estonian Parliament) for having sponsored the paper, as well as to a large number of interviewees from Estonia and allied nations for providing valuable insights and background information.

2. The Role of Deterrence and Defence

The core business of NATO is to preserve the peace and prevent attacks against allied territory. In the Baltic Sea region this requires the establishment of a credible deterrence and defence posture directed at Russia.

Deterrence is aimed at persuading a potential aggressor that the costs of its actions will far outweigh the benefits and/or that the probability of success is low enough not to warrant those actions. Deterrence can be achieved either by threatening to impose unacceptable costs in response to unwanted actions (deterrence by punishment) or by threatening to deny an adversary the ability to achieve its military and political objectives through aggression (deterrence by denial). The strategy of deterrence by punishment may combine various political, economic and military (conventional and nuclear) instruments. Deterrence by denial relies mostly on conventional military forces and is closely linked to the existence of capabilities for forward defence and to the resilience of the targets of aggression.

To be successful, a deterrence posture needs to be credible in the eyes of the adversary. World history abounds with cases where deterrence failed because the attacking states underestimated the other party's ability and/or determination to fight.⁶ Therefore, the credibility of deterrence requires: 1) political will and resolve to respond forcefully to aggression; 2) effective means of response (military capability); 3) visible signals of resolve and the capability to influence an adversary's perceptions. Thus NATO's defence and deterrence strategy in the Baltic Sea region and its military posture has not only to assure the populations of the member states in the region of

⁶ A classical case is the 1982 Argentine attack on the Falkland Islands, when its military government greatly underestimated Britain's resolve and ability to fight for the far-away islands.

the Alliance's willingness and ability to wage war and protect them, but also - most importantly - to convince the Russian leadership that this would be the case.

Continuous demonstration of NATO's solidarity and its determination to protect its member states is the very basis of deterrence. To this end, the Alliance must identify Russia in clear terms as a threat to its security, and subsequently seek to establish an effective deterrence posture to counter Russia's policy. This would not by any means exclude dialogue with Russia, when necessary. On the other hand, an important lesson from the Cold War that is worth re-learning is that *détente* and dialogue with the Soviet Union was possible only due to the existence of a strong defence and deterrence posture on NATO's side.⁷

In order to be credible, these statements need to be backed up by real means. A regional military imbalance can by itself cause strategic instability and thereby invite aggression. If the Kremlin perceives NATO's military posture to be too weak to counter an aggression, Russia may mistakenly believe that the Allies lack the resolve to fight, and may be tempted to challenge NATO's Article 5 collective defence commitments. Such possible misperceptions can only be prevented by a robust NATO regional posture and credible strategic signals.

Russia's current military advantage lies in its ability to undertake wars that are limited in space and time, and to employ the elements of surprise and speedy action. Various degrees of ambiguity might be useful, but not always necessary to camouflage Russia's involvement and aims in any conflict. Most probably, the Kremlin does not presume that the Allies would leave unanswered any aggression against NATO territory. However, Russia may assume that NATO's response would take quite some (precious) time and may thus seek a relatively quick and inexpensive victory based on the belief that it can rapidly achieve its objectives and establish a *fait accompli* situation on the ground. Thereafter, Russia would aim to dictate terms to the Alliance, including possible threats of nuclear escalation, in order to divide the Allies and complicate decision-making. Such a strategy would demonstrate Russia's belief that it may be able to offset NATO's (and the EU's) conventional military and economic strengths.

During the Cold War, Soviet aggression was universally considered in the West to be an existential threat to all democratic nations and nuclear deterrence thus formed the backbone of NATO's deterrence policy.⁸ While nuclear weapons retain their role as the supreme guarantors of security in the overall strategy of the Alliance, the threat of their use in response to a limited aggression in the Baltic Sea area, considering the potentially catastrophic consequences, cannot be credible enough for the purposes of deterrence. Therefore, effective conventional military deterrence and defence is the key. This requires the combination of deterrence by punishment and by denial. While the Alliance possesses, through US military power, a clear superiority in overall conventional military capability, this is not sufficient for credible deterrence, because

⁷ The 1967 Harmel Report was the seminal document in NATO's history that introduced parallel policies of dialogue and deterrence.

⁸ Until 1960-s the strategy was the use of devastating „Massive Retaliation“ with nuclear weapons. Later, NATO employed the concept of Flexible Response, according to which depending on the exact situation a wide range of military options from conventional forces to strategic nuclear strikes would have been used to respond.

Russia may assume that it can achieve its goals and introduce a de-escalation logic before significant NATO forces can arrive in the Baltic theatre.

Effective deterrence in the Baltic Sea area thus depends on the regional military balance. NATO's sub-regional defence posture does not have to match Russia's military posture. There is no need to return to the Cold War model of broadly comparable numbers of corps and divisions facing each other over the inner German border. Instead, the goal should be to have enough forces in place to deny Russia the possibility of a quick and easy achievement of its military objectives in the event of aggression. The existence of sufficiently strong forces on the ground is a much more powerful message than the mere promise to retaliate. It will not only diminish the risk of conflict to the maximum possible extent, but is likely a far more cost-effective option, as well. While an adequate forward defence posture is more expensive than a symbolic presence, it is incomparably cheaper than the need to retake lost territory after a failure of deterrence.

Finally, in communicating its posture to the Russian side, NATO needs to signal that the Alliance is united and determined, that it has the capabilities to respond to possible Russian moves, and most importantly, that its actions are of a purely defensive nature and do not pose any threat to Russian security. In this regard, the transparency of NATO's actions remains very important.

All these ingredients are necessary in order to create a credible and effective deterrence posture and diminish the possibility of war ever breaking out in the Baltic region. The NATO Defence Ministers decided in February 2016 that a multinational forward presence would be established in order to enhance the Alliance's defence posture on the Eastern Flank. Further decisions and details are expected in June, at the next defence ministers' meeting, and finally from the NATO Summit in Warsaw, in July 2016.

3. NATO's Defence Posture

3.1. The Armed Forces of the Baltic states

Estonia, Latvia and Lithuania possess relatively small armed forces due to their limited resources. The backbone of their force structure consists of light ground forces, and they have virtually no air and naval combat capabilities. Estonia relies on a reserve force built up through conscription, while Latvia and Lithuania mostly focus on the regular component, although Lithuania has recently re-introduced conscription.

Estonia has just one battalion-size combat unit manned by regulars, and therefore relies on the mobilisation of reservists to reach wartime strength, the operational part of which should consist of 21,000 troops.⁹ Currently, the ground forces component of the operational structure consists of one infantry brigade and a homeland security structure built around the Defence League.¹⁰ A second infantry brigade is being set up. The Latvian Army consists of a light brigade formed around two combat battalions. In addition, a volunteer National Guard serves as a reserve force.¹¹ The Lithuanian ground forces include one partly mechanized infantry brigade, territorial defence units, and a second brigade that is currently in the process of formation. Estonia, Latvia and Lithuania should thus be able to gather forces totalling four to five brigades, supported by territorial defence units. These forces would be composed mostly of light infantry troops with limited armour and fire support.

The Air Forces of the Baltic states have no air combat capability. Instead, they focus on air surveillance, host nation support and assistance to NATO's air policing mission. Their only air defence capability is based on very short-range systems, like Stinger and Mistral, which are designed for the battlefield air defence of land force units. There are no capabilities to provide air and missile defence for larger areas or fixed infrastructure. The three navies consist of mine countermeasures vessels and small patrol craft that lack any capabilities for sea denial or control.

The Baltic states are increasing their defence related investments. Estonia has already been spending at least 2% of GDP on defence since 2012. Latvia and Lithuania currently spend less than 1.5% of GDP, but both have committed themselves to reach the 2% benchmark in the next few years.¹² Using these increments in funding, the three countries are undertaking major procurement projects, in particular to improve manoeuvrability, fire support, anti-armour and anti-air capabilities of their armed forces.¹³

⁹ Mobilisation of reserves at brigade level was tested in May 2015 during the exercise Siil/Steadfast Javelin that involved the participation of over 13,000 personnel (more than 50% were reservists).

¹⁰ A voluntary national defence organisation that has about 15,000 members.

¹¹ Around 8,000 members.

¹² Combined defence spending of the Baltic States in 2016 amounts to a little less than 1.4 billion euros - Estonia 451 mil, Latvia 368 mil and Lithuania 574 mil.

¹³ The main procurement projects in process include CV-90 infantry fighting vehicles (IFV) and Javelin anti-tank guided missiles (ATGM) for Estonia, CVR(T) armoured vehicles and Stinger surface-to-air missiles for Latvia, PzH 2000 self-propelled artillery systems, Boxer IFV-s and Javelin ATGM-s for Lithuania.

3.2. Polish Armed Forces

Poland's Armed Forces are the largest and most capable among the eastern allies. Their total manpower is around 100,000 personnel in active service and some further 20,000 in reserve. The Polish Army has an active manpower of 48,000 servicemen and a large force structure composed of three divisions with 13 manoeuvre brigades, ten of which are armoured or mechanized. Poland has significant numbers of heavy weapons. For example, its force of 900 tanks is NATO's largest in Europe after Turkey. While large parts of its inventory still consist of Warsaw Pact era legacy equipment, Poland has also invested heavily into the modernisation of its capabilities. As part of an ongoing major military modernisation effort, it has earmarked more than 30 billion euros over a ten-year period to acquire advanced weapon systems and capabilities.¹⁴

Poland is currently re-assessing the structure of its armed forces with special emphasis on strengthening the territorial defence component. Another element of the re-organisation would be the establishment of new garrisons in the Eastern Poland, closer to the source of the threat. The government is also reportedly considering the need to increase the total manpower of the armed forces to 150,000 troops. Poland could bring many useful capabilities to the defence of the Baltic states, but as a state bordering Russia and its satellite Belarus, it focuses primarily on the defence of its own territory. The bulk of its forces would probably not be available to respond to a contingency on the territory of Baltic states.

3.3. Other Allied forces in the Baltic region

Allied military presence in the Baltic region was almost non-existent for an entire decade following the accession of Estonia, Latvia and Lithuania to NATO in 2004. The Alliance's footprint was limited to four fighter aircraft for the Baltic Air Policing mission. Only after Russia's aggression against Georgia, in 2008, did NATO start to consider (rather slowly) the requirements for the defence of the Baltics and engage in small-scale collective defence exercises in the region. However, the Alliance remained very hesitant to prioritise the improvement of its defence posture in the Baltic region.

NATO and individual Allies, in particular the US, launched the so-called assurance measures only in spring 2014, in response to Russia's annexation of Crimea and the subsequent invasion of the Donbas. Alongside parallel steps to implement changes in NATO's force posture,¹⁵ these measures became part of NATO's Readiness Action Plan, as agreed at the Wales summit in September 2014. The US contribution to these measures is called Operation Atlantic Resolve.

The Wales package was a compromise reached in response to the immediate need to react to Russian aggression, aimed mainly at reassuring those member states most exposed to the threat. Nevertheless, it has not included the deployment of combat

¹⁴ Including air and missile defence systems, long range artillery, submarines armed with cruise missiles and JASSM missiles for its fleet of F-16 fighters.

¹⁵ Adaptation measures.

forces that would be ready to engage in operations. As a result, the Alliance's military posture in the Baltic Sea region has seen only modest adjustments.

Currently, the US Army maintains a rotational presence of company-sized units for training and exercises in the Baltic states and in Poland.¹⁶ Other allies (e.g. Germany, Poland, UK) deploy small contingents for shorter time periods. The US Army has also established in Lithuania a storage site for the military equipment used in training and exercises, but has yet to create similar storage sites in Latvia and Estonia. As part of its rotational deployments to Europe, the US Air Force has periodically deployed fighter aircraft and A-10 ground attack planes to the Baltic region. The overall number and complexity of NATO and allied-led exercises in the region has increased significantly, but their size remains small compared to Russian exercises.¹⁷

The size of the peacetime Baltic Air Policing mission has been expanded. It now comprises four fighter aircraft based at Šiauliai, Lithuania and a similar number at Ämari, Estonia. Allies provide aircraft for four months on a rotational basis. The Baltic Air Policing remains a peacetime mission and its transition, in a crisis, to air defence remains unclear. In the maritime field, the Standing NATO Maritime Group (SNMG 1) that is built around frigate-class ships and the Standing NATO Mine Countermeasures Group (SNMCMG 1) are geographically focused on the North and Baltic Seas. However, the bulk of their everyday activities takes place in the North Sea, and there is no persistent presence of NATO naval forces in the Baltic Sea.

In order to improve the command, control and co-ordination of multinational units, small headquarters called NATO Force Integration Units have been set up on the territory of six eastern allies, including one in each of the Baltic states. They are tasked to co-ordinate between NATO and national structures and forces, as well as to prepare and support exercises and deployments. In addition, the manning of the Headquarters of the Multinational Corps North-East in Szczecin, Poland, has been strengthened. This HQ has a particular focus on the collective defence tasks in the Baltic Sea area.

¹⁶ About 150 troops per country.

¹⁷ In 2015 the biggest Allied and multinational exercises in the north-eastern region of NATO were Siil/Steadfast Javelin in Estonia (over 13,000 troops), BALTOPS 2015 in the Baltic Sea (5,600 troops), Sabre Strike 2015 in Baltic states and in Poland (6,000 troops).

3.4. NATO reaction forces

Given the very limited NATO military posture in the Baltic area, its response to a security crisis there would depend heavily on the timely arrival of rapid reaction forces to supplement the indigenous forces of the Baltic states. These forces, either multinational or national, would need to arrive sufficiently early and possess capabilities that would serve to deter further escalation. At the Wales Summit in 2014, NATO established a rapid reaction Very High Readiness Joint Task Force (VJTF) to spearhead the Alliance's military response to crises. This force is built around a brigade-sized land force component, supported by special forces, air and naval assets. Its composition rotates on an annual basis and the function of the framework nation is taken in turn by the seven largest European nations.¹⁸ The US contributes to the VJTF primarily with various enabling capabilities.

The VJTF should be able to deploy a lead element at 48 hours' notice, with the rest of the force following within seven days. However, these timelines specify the force's ability to start deploying, not its actual arrival in the theatre of operations. Because its units rotate and because it is not tied to any particular area of operations, the VJTF cannot have its equipment and supplies pre-positioned. Therefore, in reality, the actual arrival of troops with all their equipment is expected to take much longer. Logistical hurdles in the way of rapid deployment would be greater if the framework nation was geographically distant from the Baltic theatre.¹⁹ In addition, the actual arrival of the VJTF in the case of a crisis is not immediately assured. The SACEUR (NATO's operational commander) has been given authority to initiate activities to prepare the VJTF for deployment, but the movement of troops would still require a prior political decision by the member states at the North Atlantic Council. Making this decision in a forum of 28 sovereign states will inevitably take some time. Therefore, the value of the VJTF as a quick responder and an effective instrument in combat operations is rather questionable.²⁰ It seems rather to be a political tool to demonstrate NATO's solidarity and the multinational character of its response.

The VJTF could be reinforced by follow-on forces, i.e. the rest of the NATO Response Force (NRF) package. Besides the VJTF, the NRF includes two multinational ground force brigades with heavier equipment and significant air and maritime components; thus in the end, NATO could deploy up to 40,000 troops.

Several larger allied nations maintain their own national high readiness reaction forces. In the case of conflict, these forces may be deployed faster than the VJTF itself. The US has designated the 82nd Airborne Division²¹ as its Global Reaction Force. This unit keeps one brigade combat team ready to be deployed anywhere in the world within 96 hours of notification, including a battalion that can be deployed within 18 hours. The United Kingdom has a high readiness battalion-sized battlegroup in its 16th Air Assault Brigade. However, the nature of these troops (airborne infantry) sacrifices

¹⁸ France, Germany, Italy, Poland, Spain, Turkey and the United Kingdom.

¹⁹ This is currently the case with Spain, the lead-nation of VJTF 2016.

²⁰ Its military value is also limited by the fact that it is based on the concept of low-level multinationality, which is untested in conventional combat.

²¹ Based in Fort Bragg, North Carolina.

heavy combat capabilities for mobility. They are not designed to counter an enemy that employs heavy armoured formations.

3.5. European military capabilities

The public and politicians in most European countries have largely ignored defence issues and needs for many years. Consequently, their defence spending has continuously dropped during the past two decades. The EU's financial crisis further exacerbated this trend, and the average share of defence expenditures of NATO's European member states dropped from 1.70% of GDP in 2009 to a mere 1.43% in 2015. The European Allies have drastically reduced their force structures and left many key capabilities to degrade, resulting in the erosion of fighting power.²² Combat forces with sufficient firepower for the defence of Europe against a heavily armed adversary have been largely disbanded in favour of lighter capabilities that are better suited to operations in distant and more permissive theatres, mostly against irregular opponents. Entire national force structures have been reformed with only this requirement in mind. For example, expeditionary operations have taken place in conditions where air superiority has been guaranteed; consequently, only limited numbers of land-based air defence systems remain in the inventories of NATO armies.

With over 1.4 million military personnel listed in the armed forces of the European Allies (excl. Turkey) in 2015, the overall numbers may still look impressive. However, the reality is rather different. Many forces and capabilities often exist only on paper, because their low level of combat readiness means that their real availability is questionable.²³ Among the smaller European allies, very few retain real capabilities for combined operations. Some of these nations have for years spent 70-80% of their defence budgets on personnel costs. These problems are aggravated by the fragmented nature of the European defence landscape resulting from a lack of integration among national armed forces. Moreover, the freedom of movement of troops and equipment within Europe is hampered by bureaucratic restrictions.²⁴ As regards air forces, while European allies still possess significant fighter aircraft capability, their overall airpower is hampered by crucial shortages in a broad range of enabling capabilities.²⁵ These shortages have been vividly demonstrated during recent operations, especially in the 2011 Libyan air campaign.

The changes in the security environment have lately forced many European nations to finally take a critical look at their defence capabilities and priorities. At the Wales Summit, the Allies agreed to a Defence Investment Pledge promising to spend 2% of

²² The data published by the International Institute for Strategic Studies shows that together the three largest European Allies – France, Germany and the United Kingdom – and the US EUCOM nominally have 141 regular combat battalions in their force structures. In 1990, West Germany alone had 215 combat battalions.

²³ For example, according to the leaked report to the Bundestag in September 2014, the majority of German combat systems cannot be used immediately for missions.

²⁴ This has prompted the Commander of US Army in Europe to call for the establishment of a „Military Schengen Zone“.

²⁵ Examples include Intelligence, Surveillance and Reconnaissance (ISR), Suppression of Enemy Air Defence (SEAD), Electronic Warfare (EW), Air-to-Air Refuelling (AAR).

their GDP on defence, and at least 20% of their defence budgets on investments in major equipment. While the data for 2016 shows that the further decline of defence expenditures seems to have stopped in most nations, net increases are mostly rather small and not sufficient to regenerate lost capabilities.

3.6. US force posture in Europe

The United States armed forces remain by far the most capable military in the world. While in recent years it has also slashed its military manpower and expenditures, American military personnel numbers still exceed 1.3 million and it will spend 585 billion USD on defence in 2016. The US defence budget makes up over 72% of the overall NATO defence expenditures.

However, the global priorities of the US military have undergone significant changes. During the Cold War period, the US stationed over 300,000 military personnel in Europe.²⁶ In the last 25 years, the US force posture in Europe has been steadily and continuously declining. Today, only around 65,000 US personnel remain permanently based in Europe. Moreover, their current basing mostly reflects the posture inherited from the Cold War era, with the bulk of forces stationed in Germany, Italy and the United Kingdom. This means that the geographical disposition of US military strength in Europe does not reflect the geostrategic reality of the present day and the fact that the easternmost Allies are NATO's new frontline states.

The cuts to the US force posture in Europe have been particularly severe on Army units, leaving just 28,000 forward-stationed troops in Europe. Only two light brigade-sized combat units remain permanently stationed in Europe – the 2nd Cavalry Regiment in Germany and the 173rd Airborne Brigade in Italy. Neither of these is meant for major conventional combat against heavy forces. For helicopter support of ground troops, the US Army in Europe maintains two battalions of the 12th Combat Aviation Brigade in Germany.

The US Air Force has seven main operating bases in Western and Southern Europe and its fleet in Europe includes more than 200 fighter, attack, rotary-wing, tanker, and transport aircraft. In 2015, for the first time ever, four F-22 Raptors were deployed to Europe for a short period. These aircraft were stationed in Germany, but also made visits to air bases in Poland and Estonia. The possibility of permanently stationing these highly capable fighter aircraft in Europe has so far been excluded. Europe may have to wait until 2020 – 2021 for the permanent presence of the US Air Force's 5th generation aircraft, when two squadrons of F-35 stealth multirole fighters should be based in United Kingdom.

The US Navy and Marine Corps presence in Europe is mainly focused on the Mediterranean theatre. The US Sixth Fleet is based in Naples, Italy, and the Spanish port of Rota is home to four Aegis-equipped destroyers. Spain also hosts a US Marine

²⁶ The US Army alone had in Europe roughly 200,000 troops including two Army Corps with heavy armoured forces and all the associated enabling capabilities.

Corps quick reaction force. In Northern Europe, the Marine Corps has a major pre-positioning storage site in Central Norway.

As part of the build-up of NATO's European ballistic missile defence system, the US has completed the construction of an Aegis Ashore missile defence facility in Romania. A similar installation in Poland is expected to become operational in 2018. It should be noted that these missile defence capabilities are specifically designed to counter missile threats from the Middle East, but they are not configured to defend Allies against Russian missile attacks.

In June 2014 President Obama launched the European Reassurance Initiative (ERI), designed to boost confidence in those NATO Allies that are most threatened by Russia's resurgence, and to bolster their security and military capacity. As part of this initiative, additional forces are rotated from the US mainland to Europe for training and exercises. The US Army has stored a set of equipment for one armoured brigade combat team (BCT)²⁷ in Europe for the use of units rotating from US.

The Pentagon budget request for fiscal year 2017 foresees a four-fold increase in ERI funding. The amount of money allocated for increased presence and activities in Europe is planned to reach 3.4 billion USD.²⁸ The US intends to use this money to ensure the full-time rotational presence of an armoured BCT in Europe. In addition, equipment for an additional BCT will be pre-positioned to be used by forces deployed from the US in the event of a crisis. It has been also indicated that this equipment will be stored in warehouses in Western Europe, rather than positioning it further east, where it is actually needed. The US also intends to position in Europe equipment for one divisional-level HQ²⁹ and for additional combat support and combat service support units, including for one artillery brigade.

While the implementation of these plans will significantly increase the amount of US equipment stationed in Europe, the number of permanently stationed personnel is not foreseen to increase despite the conclusion drawn by the commander of US forces in Europe, General Philip Breedlove, that "rotating presence is no substitute for permanent force presence". The updated EUCOM Theatre Strategy published in October 2015 explicitly states that "USEUCOM cannot fully mitigate the impact felt from a reduction in assigned military forces through the augmentation of rotational forces from the United States. The temporary presence of rotational forces complements, but does not substitute for an enduring forward deployed presence that is tangible and real. Virtual presence means actual absence." In early 2016, the National Commission on the Future of the Army specifically recommended to permanently station an Armoured Brigade Combat Team in Europe.

²⁷ A Brigade Combat Team is US Army's basic manoeuvre unit consisting of 3,000 to 5,000 troops.

²⁸ ERI budget for fiscal year 2015 amounted close to 1 billion USD and for 2016 around 800 million USD.

²⁹ Without actually deploying the personnel of the HQ.

4. Russian Military Posture

Since 2009, following lessons learned from its aggression against Georgia, Russia has:

- Initiated an **ambitious process of modernisation**³⁰ in its armed forces. Some 364 billion euros will be spent modernising, by 2020, up to 70% of Russia's conventional armaments and its entire nuclear arsenal.
- Sustained a **rapid increase of its defence budget** until 2015. The budget for 2016 is projected at 40.88 billion euros.³¹ The defence budget (and the SAP) is now under severe stress due to financial shortages, but remains nevertheless Russia's top funding priority.
- Implemented **radical reforms in the defence sector**. A new strategic command structure and territorial division has been established, brigade-sized deployable units have become the norm,³² and the number of contract soldiers has grown constantly.
- Actively employed a **military doctrine largely based on asymmetry**, often referred to as "hybrid warfare", which entails the use - under the cover of deniability and ambiguity – of various political, economic, informational, cyber and military instruments against a difficult or superior adversary. It allows Russia to use effectively *provokatsiya*, *dezinformatsiya* and *maskirovka* tools, and to conveniently escalate situations.
- Frequently conducted **massive military exercises**, especially in the Western direction, in order to improve the capability of the Russian Armed Forces' command structures to conduct medium- and large-scale joint operations, and to improve the combat readiness of its troops.³³
- Deployed its **most advanced offensive weapons systems to the Western MD**. E.g. the 26th Missile Brigade in Luga (120 km from Narva) was the first to be fully equipped with Iskander-M mobile short-range ballistic missile systems.³⁴

³⁰ The State Armaments Program (SAP) that entails huge orders from Russia's military industrial complex: 400 land-based inter-continental and submarine-launched ballistic missiles, 8 strategic nuclear submarines, 20 attack submarines, 50 combat surface ships, 100 satellites, 600 aircraft and 1200 helicopters, 28 regiments of S-400 and 38 division of *Vityaz* air defence systems, 10 brigades of *Iskander-M* ballistic missiles, 2300 tanks and 2000 self-propelled and tracked guns, as well as many other various types of equipment.

³¹ That is 5% less than in 2015, and makes up some 4% of Russia's GDP.

³² Even though some tank and combined armies will be re-established, and tank and combined arms divisions will be recreated, there will be no significant return to the Soviet era heavy and clumsy defence make-up.

³³ These exercises have grown to levels and include scenarios unseen since the Cold War: more than 100,000 troops and thousands of pieces of equipment involved, whole fleets on alert at sea, strategic bombers imitating nuclear strikes against European capitals etc.

³⁴ Another example: the first batches of the new generation main battle tanks T-14 Armata and infantry fighting vehicles T-15 Kurganets will be delivered to the 1st Tank Army in the Western MD.

- Continued to **surprise, provoke and threaten NATO Allies**, especially by conducting large combat readiness control exercises in the Western MD, including the Kaliningrad Oblast and the Baltic Sea maritime and air space.³⁵
- Repeatedly issued **nuclear “messages”** of intimidation to the Allies.³⁶ Russia constantly tests NATO’s resolve and readiness to act in a potential “local conflict” that it threatens to escalate to the use of (tactical) nuclear weapons.
- Emphasised the **development of offensive capabilities**, including precision-guided munitions (e.g. short- and medium-range ballistic and cruise missiles) and means of cyber and electronic warfare.
- Essentially **stepped out of conventional arms control regimes**, most notably the CFE Treaty, thus promoting a policy that is contrary to the principles of transparency, predictability, confidence building and accountability.
- Demonstrated its **ability to deploy forces well beyond its borders** (Syria), and **establish effectively anti-access and area-denial zones** in strategic outposts (Syria, in addition to Crimea and the Kaliningrad Oblast).

The excessive deployment of Russia’s conventional and nuclear forces in the western and southwestern directions, stretching from the Kola Peninsula to the North-Caucasus, including the militarised outposts of the Kaliningrad Oblast and Crimea, is not just a legacy of the Soviet past and a matter of the geography and distribution of Russia’s population and economic powerbase. It is primarily about the defence-versus-offense paradox concerning Russia’s perception of a threat from the West and the South, and its political ambition to exert power and inclination to use military force against neighbours. It should be clear by now that NATO’s more than two-decades-long efforts to establish relations of partnership and cooperation with Russia, based on transparency, predictability and trust, have not succeeded. Most European Allies, as well as Sweden and Finland, have greatly reduced their military strength and expenditures, and the US considerably has reduced its military presence in Europe - but Russia’s plans and increasingly hostile attitudes towards the Alliance have not changed.

4.1. Russian Armed Forces

The present military administrative division of Russia was instituted in January 2010, when four military districts (Western, Central, Southern and Eastern MD) were established. In December 2014, the Arctic Joint Strategic Command was formed on the basis of the Russian Northern Fleet. Thus, the Russian armed forces have been reorganised into peripheral MDs that are designed to act in their respective strategic directions, including the Far North, with active support from the Central MD, and provisions to rely on certain military assets from other MDs.³⁷ Airborne troops and

³⁵ These exercises may be used by Russia as a cover for launching a surprise attack, as was the case in Crimea in 2014.

³⁶ Also Sweden and Finland.

³⁷ See Annex 1 on Russian combat forces readily employable in the Western direction.

strategic nuclear forces (long range aviation, missile forces) remain under central command. Russia has put great emphasis in recent years on increasing the combat readiness and deployability of its forces. It has also organised several multinational exercises, especially with its closest ally Belarus, and has demonstrated a capability to mobilise other armed and paramilitary forces, as well as civilian structures, alongside the regular armed forces.

A military conflict is usually characterised by a fight for territory, which in turn dictates a focus on land forces and operations. However, Russia has made significant progress in the conduct of joint operations, and its capable airborne and aerospace forces, as well as its navy fleets cannot be ignored. In fact, these components are crucial, especially in the early stages of a conflict, before ground forces become fully engaged.

Analyses made on Russia's military activities related to Ukraine, since February 2014, indicate that an army brigade can usually generate one Battalion Tactical Group (BTG) that is combat ready, rapidly deployable and sustainable for a rotation of up to 4-6 months in the deployment area.³⁸ The tactics used in the Donbas suggest that Russia's armed forces prefer to avoid initial direct contact in favour of a massive superiority in firepower.³⁹ A recent war gaming report by the RAND Corporation states that Russia may, drawing only on the Western MD pool of forces, have available some 25 manoeuvre battalions, 10 artillery battalions, 5 surface-to-surface missile battalions and 6 attack helicopter battalions, as well as 27 fighter and bomber aircraft squadrons.⁴⁰

In addition to these forces, one should not ignore the fact that in stark contrast to NATO's post-Cold War nuclear posture Russia's nuclear triad,⁴¹ is not only meant to be a last resort strategic deterrent, but is also included in the operational planning process and in exercises involving conventional forces. Large snap exercises in the Western MD involving TU-95M strategic bombers have made that case very eloquently. The Engels Air Force Base, where most of Russia's TU-95, TU-160 and TU-22M strategic nuclear bombers are based, is located conveniently close to NATO's Eastern Flank.⁴²

4.2. The Western Military District

The Western MD, established in 2010, spans from the Arctic Ocean to Ukraine and from the Ural Mountains to the Baltic Sea, covering the most populated area of Russia. Its HQ is in Saint Petersburg and it includes, besides 3 armies and separate formations and units of the ground forces, the Baltic Fleet, the Northern Fleet and significant airborne, aerospace and strategic missile forces.⁴³ The geographic location of these

³⁸ See Annex 2

³⁹ Up to 75% of Ukrainian casualties have been caused by Russian artillery and MLRS systems.

⁴⁰ The report is focused on land and air operations, and therefore it does not include navy assets.

⁴¹ The land (mobile and silo based), air (strategic bombers) and maritime (strategic submarines) nuclear components.

⁴² Long-range aviation elements can be redeployed to any available and suitable air bases in Russia or even beyond its borders.

⁴³ The RF AF's chain of command is not entirely geographically based. Officially, the Northern Fleet, airborne troops and strategic forces are under central command, although their *de iure* and *de facto* subordination remains somewhat unclear.

massive Russian forces in the Western MD⁴⁴ (and the Southern MD), the establishment and rearrangement of new army formations (including three new army divisions), and the reopening of a number of air bases and other facilities that were closed down after the end of the Cold War, suggests that Russia is actively preparing for large scale operations in three strategic directions: the Far North (Scandinavia and the Arctic), the West (the Baltic Sea area and Central Europe) and the South (Ukraine, the Caucasus and the Black Sea area).

Russia's most able and rapidly deployable forces in the Western MD are 3 airborne and air assault divisions, as well as 3 Spetsnaz brigades, supported by transport aviation, army aviation and aerospace squadrons. The core of the ground forces, Russia's second offensive echelon in the Western direction, consists of 3 armies that are now undergoing a process of reform.

The 6th Army has its HQ in Saint Petersburg, and is positioned directly against Estonia, Latvia and Finland. It includes motor rifle, artillery, missile, anti-aircraft missile, and army aviation brigades that have been significantly reinforced (including with contract soldiers) and supplied with modern equipment since 2008. These forces are concentrated mainly in the Pskov Oblast, the surroundings of Saint Petersburg and the Karelian Isthmus.

The 1st Tank Army will include two re-established Soviet-era elite units located in the Moscow Oblast (the 4th Tank Division "Kantemirovskaya" in Naro-Fominsk and the 2nd Motor Rifle Division "Tamanskaya" in Kalininets), in addition to tank, motor rifle and other brigades. This army is clearly designed to launch offensive operations through Belarus against Poland, the Baltic states and Central Europe, as well as Ukraine.

The 20th Combined Army with its HQ in Voronezh is practically to be formed anew, and positioned in the rear in order to support the 6th and the 1st armies. While there will be no great difference in the make-up of the 1st and 20th armies,⁴⁵ the tank army will have more main battle tanks and the combined army will have more infantry fighting vehicles. They will be both the very first to receive batches of new generation T-14 Armata MBTs and T-15 Kurganets IFVs (although probably not sooner than 2020).

The Western MD, in combination with the Southern MD, includes the bulk of Russia's conventional forces. In the event of a conflict, Russia would not have to mobilise and deploy massive forces to operate in the Baltic Sea theatre, as it already has (almost) all it needs there, especially considering NATO's present posture in the region. Russia also calculates that any long-distance massive deployments would not go unnoticed and would present NATO with vital reaction time. Most importantly, the geography of the Baltic Sea area emphasises the relevance of Russian forces located in the Kaliningrad, Pskov and Leningrad oblasts, as well as the importance of Belarus, which combine to form a "straitjacket" around the Baltic States.

⁴⁴ Up to 40% of the entire Russian armed forces personnel.

⁴⁵ Each will have one reconnaissance and one surface-to-air missile brigade, as well as a logistics brigade, missile and artillery units, a helicopter regiment and other units, including reconnaissance and attack drone units.

4.3. Kaliningrad Oblast and the Baltic Fleet

The strategic importance of the Kaliningrad Oblast, the Russian armed forces' heavily militarised westernmost outpost, sandwiched between NATO Allies Lithuania and Poland, cannot be underestimated. The oblast hosts the HQ (in Kaliningrad city) and the bulk of the Baltic Fleet, as well as substantial forces for territorial and coastal defence that possess advanced anti-access and area denial (A2/AD) capabilities, especially in air defence and electronic warfare. Given the relative ease with which Russia can deploy dual-capable mobile short-range ballistic missile systems and tactical nuclear weapons there, in addition to its most advanced air defence mobile systems, the oblast's military significance grows exponentially.⁴⁶

The Baltic Fleet has more than 50 ships and 2 submarines⁴⁷ harboured in its main base in Baltiysk and its other bases, in Kronstadt and Saint Petersburg. The fleet's primary task is to defend Kaliningrad Oblast and the maritime lines of communication between the navy bases, but it can be used as a key A2/AD element to enforce a sea blockade of the Baltic states and Poland, operating in the entire maritime area from the Gulf of Finland through the approaches to Åland Islands (Ahvenanmaa) and from Gotland Island to the southern rim of the Baltic Sea. Given the very small naval assets of the Baltic states, the yet to be developed Polish navy, the greatly reduced Swedish naval potential, the fact that Finnish naval capabilities are meant almost exclusively for its own coastal defence, and the rather limited and temporary allied maritime presence in the area (Standing NATO Maritime Group One and naval vessels of individual allies), the Baltic Fleet seems to overshadow the Baltic Sea.

Kaliningrad Oblast also hosts the 336th Marine Infantry Brigade in Baltiysk and the 79th Motor Rifle Brigade in Gussev (each have about 4,000 personnel), as well as the 7th Motor Rifle Regiment in Kaliningrad. In addition, the 152nd Guards Missile Brigade in Chernyakhovsky is a powerful force (if it hasn't done so yet, Russia may easily replace the *Tochka-U* tactical missile systems with *Iskander-M*). Last but not least, the oblast hosts a *Voronezh-DM* latest generation early-warning radar station in Pionersky, which has a range of up to 10,000 km and is capable of tracking simultaneously 500 football-size objects.

Russian ground forces (including marine infantry) in Kaliningrad Oblast are more than sufficient for territorial and coastal defence, and may therefore be used in offensive operations against Lithuania and Poland. The Baltic Fleet is obviously not just a self-defence instrument, but a combat force meant to exert control over the Baltic Sea and eventually blockade the Baltic states.

⁴⁶ See Annex 3

⁴⁷ Modernized *Kilo*-class submarines can deploy Russia's most advanced supersonic dual-capability anti-ship cruise missile, *Kalibr*, which can also be used as a land-attack or anti-submarine cruise missile. It may be launched from different maritime platforms, including small corvettes, and has been tested against targets in Syria.

4.4. The Pskov and Leningrad Oblasts

The concentration of forces in the Pskov area, a military spearhead against Latvia and Estonia, includes the 76th Guards Air Assault Division. This combat-weathered⁴⁸ elite unit is made up of two air assault regiments⁴⁹ and supporting units with a total of 6,000-7,000 personnel. Pskov also hosts the 2nd Independent Spetsnaz Brigade.⁵⁰ Both units have been kept fully manned (with contract soldiers and NCOs), and the Spetsnaz brigade has also seen major upgrades since 2008. The 15th Army Aviation Brigade in Ostrov, formed in the summer of 2013, is an army helicopter formation that maintains dozens of Mi-28N Night Hunter and Ka-52 Alligator attack helicopters, as well as Mi-8MTV-5 and Mi-26T combat transport helicopters, and has clear offensive capabilities.⁵¹

In 2009, the 25th Motor Rifle Brigade was established as a completely new unit in the Vladimirsky Lager military base, in Estonia's immediate vicinity.⁵² Luga⁵³ is home to the 9th Artillery Brigade and the 26th Missile Brigade, which was totally rearmed with Iskander-M mobile ballistic missile systems (at least 12 launchers). The 138th Motor Rifle Brigade near Saint Petersburg (Kamenka) has been equipped with modernised T-72B3 tanks.⁵⁴ Yet to be confirmed reports suggest that another army aviation helicopter brigade (similar to the one in Ostrov) may be established in Pushkin, in the vicinity of Saint Petersburg. In that area, there is yet another concentration of air bases (including Levashovo) and long-range air defence units equipped with S-400 Triumph systems.

These Russian forces exceed by far the peacetime strength of the Baltic states, not only in personnel strength, but also in their heavy and sophisticated equipment.

4.5. Belarus

Belarus is nominally an independent nation, but is linked to Russia by a binding Union State treaty. In addition, the air defences of the two countries are totally integrated and their armed forces regularly conduct bilateral large-scale exercises (e.g. the Union Shield). Notwithstanding the occasional somewhat independent position of the dictatorial president Alexander Lukashenko vis-à-vis the Kremlin, Belarus has no chance to deny the use of its air space and territory to Russia in the event of an imminent crisis. In military terms, Belarus is an extension of Russian armed forces,

⁴⁸ It has extensive combat experience from Russia's aggression against Georgia (South Ossetia, August 2008) and Ukraine (Crimea, March 2014, and the Donbas, from August 2014), as well as from two wars in Chechnya, in the 1990s.

⁴⁹ Regiments (one each) of artillery, air defence, engineering, communications, maintenance and logistics.

⁵⁰ This brigade has a somewhat smaller personnel strength (perhaps 1,000-1,500) compared to the other brigades listed below (around 3,000).

⁵¹ Capabilities demonstrated in several combat readiness exercises, including in close proximity to the Estonian and Latvian border.

⁵² On the eastern side of Lake Peipus, approximately halfway between Pskov and Luga.

⁵³ Some 100 km south-east of Narva.

⁵⁴ It took part in the massive exercises that were conducted right before the March 2014 invasion of Eastern Ukraine, and it stands, together with the 76th AAD and the 2nd SpNBde on permanent combat alert.

offering Russia another geographic advantage (also in relation to the Kaliningrad Oblast), and creating even more problems for the Baltic states, Poland, and NATO as a whole, especially in terms of defence planning.

Russia is interested in the use of air bases in Belarus. In the summer of 2013 it deployed Su-27M3 fighter aircraft to Lida Air Base, near the Belarus–Lithuania border, and intends to deploy two more squadrons (a whole regiment) to Baranovichi Air Base, a little to the south of Lida.⁵⁵ One may not exclude that Russia might in future also desire to station combat-ready ground forces in Belarus. Last but not least, Belarus may join forces with Russia in a crisis situation and its possible contribution of troops and other assets to Russian military operations should be also taken into account. Belarus has around 100 attack and multirole combat aircraft and some 20 attack helicopters,⁵⁶ as well as three mechanised, two mobile and one spetsnaz brigade.⁵⁷

⁵⁵ For now, President Lukashenka opposes Russia's plans.

⁵⁶ Mig-29, SU-25 and Mi-24. There is no reason to assume that their serviceability is higher than in the Russian Air Force (i.e. lower than 50%).

⁵⁷ The combat readiness of these units may theoretically be close to their Russian analogues, but they lack warfare experience, motivation and funding compared to Russian standards.

5. Anti-Access and Area Denial (A2/AD)

Anti-access usually refers to long-range capabilities designed to prevent an advancing enemy from entering an operational area, while area-denial normally denotes capabilities of shorter range designed to limit an enemy's freedom of action within an operational area.⁵⁸ A2/AD is first of all an instrument of intimidation, creating a "bubble" over land and sea and extending into the air space to the maximum effective range of various types of missiles (including dual-capable ones) that are capable of destroying an enemy's ground troops and military installations, aircraft and vessels from home territory, air or maritime platforms. A2/AD also includes electronic warfare systems for the effective jamming of an enemy's communications and electronics (especially against radar systems and attacking missiles), long-range multiple launch rocket systems etc.

A notable A2/AD "bubble" that affects directly and deeply the defence of the Baltic states, Poland, Finland and Sweden has existed for many years in the Kaliningrad Oblast. However, it rose to NATO's attention only after Russia's grab of Crimea and aggression against Ukraine. Since then, Russia has effectively established two more "bubbles" in Crimea, affecting NATO's South-Eastern Flank in the Black Sea theatre, and in Syria, creating serious implications for Turkey and Israel, and for the whole Eastern Mediterranean space.⁵⁹ In addition, in the event of an imminent major conflict with NATO, Russia may decide to attempt to enforce a "super-bubble" in the North-Atlantic in order to prevent North-American reinforcements from reaching Europe. This would be achieved by deploying its Northern Fleet, including strategic nuclear submarines, and long-range strategic bombers through the ocean passages between Greenland, Iceland, and UK. Such a "super-bubble" would be part of a WWII scenario going well beyond the scope of this paper, which focuses on Russia's A2/AD capabilities in the Kaliningrad Oblast and the Baltic Sea area.

The Kaliningrad Oblast is sandwiched between NATO allies Lithuania and Poland. In peacetime, Russia has direct access to the oblast for military transit etc. only by air and maritime corridors over the Baltic Sea. The Baltic states are linked to the rest of NATO only by a 100 km land border between Lithuania and Poland, and are sandwiched between Russia, Belarus and the Baltic Sea, hundreds of kilometres away from Germany and the Danish Straits. In geopolitical terms, the Kaliningrad Oblast is a vulnerable Russian exclave, even if it is heavily militarised, whereas the Baltic states, while a more accessible area for Allies, are an equally exposed "semi-exclave" of NATO.

Russia's deployed forces and A2/AD capabilities in the Kaliningrad Oblast go far beyond the defensive needs of that particular region. A2/AD capabilities include⁶⁰ the most advanced air defence mobile systems (S-400 Triumf / SA-21 Growler with an operational range of up to 400 km) and dual-capable mobile short-range ballistic

⁵⁸ JOAC, Joint Operational Access Concept, 2012, Annex A Glossary. http://www.dtic.mil/doctrine/concepts/joint_concepts/joac_2012.pdf

⁵⁹ At the time of writing, Russia had pulled out most of its aircraft from Syria. However, Russia's naval and air force footholds in Syria remain in place.

⁶⁰ In addition to various short range systems.

missile systems (Iskander-M / SS-26 Stone with an operation range of up to 500 km) that are able to cover large portions of the territory of Poland and the Baltic states, as well as the Baltic Sea. Even if we suppose that Russia has not yet deployed to the oblast the full range of its most advanced A2/AD capabilities, it can relatively easily (having prepared infrastructure and trained personnel in place) build up a multi-layered and difficult to penetrate “bubble”. The same goes for tactical nuclear weapons that may also be already deployed to the Kaliningrad Oblast. These capabilities are thus not only meant to deter NATO and to defend the oblast, but to reverse the geopolitical picture, transforming the Baltic states into a NATO “exclave” that the allies would be effectively prohibited from massively reinforcing.

While the Kaliningrad Oblast is Moscow’s spearhead military outpost in the direction of the West, projecting A2/AD far beyond the exclave, Russia may effectively encircle the Baltic states and cover them with a yet larger “bubble” using:

- The Baltic Fleet – by moving naval forces all along the eastern perimeter of the Baltic Sea from Kaliningrad to Kronstadt, and sealing strategically important maritime areas between the Kaliningrad Oblast and Sweden’s island of Gotland, as well as the mouth of the Gulf of Finland;
- Russian Air Force and Long-Range Aviation assets – by patrolling over the Baltic Sea area controlled by the Baltic Fleet with large numbers of attack aircraft and even strategic nuclear bombers (for intimidating Allies);
- A2/AD capabilities in mainland Russia– by using already deployed or rapidly deployable medium and long-range capabilities to the Leningrad and the Pskov Oblasts; e.g. the 26th Missile Brigade in Luga is fully equipped with Iskander-M mobile systems;
- Belarus – by using the territory and air space of Russia’s ally for ground and air operations, in particular to prevent NATO reinforcements crossing the Polish-Lithuanian border (artillery/MLRS fire from the Kaliningrad Oblast and Belarus would be a sufficient challenge) or even to create a land corridor connection between the Kaliningrad Oblast and Belarus.

Russia has repeatedly tested its ability to employ all these elements in the Zapad exercises (2009 and 2013) and Union Shield exercises (together with Belarus, 2011 and 2015), as well as massive no-notice combat readiness control exercises (e.g. December 2014 and March 2015). The Russian armed forces have demonstrated their readiness to establish an air and maritime, and even a ground blockade of the Baltic states, by surprise and very quickly (in a few days). However, their expressed ability to quickly occupy and exert full control over the Baltic states, depends to a large extent of the resistance offered by indigenous and other allied forces on the ground.

The Baltic states do not possess any means of their own to counter effectively and defend against Russia’s advanced A2/AD capabilities. They have virtually no air, coastal and missile defence capabilities, and neither have NATO Allies seriously considered how to fill these gaps. In fact, even the most important military facilities in the Baltic states routinely used by the allies - the air bases in Āmari and Siauliai - are not protected properly, and their role in the transition from air policing to air defence has yet to be clearly defined.

6. The Most Likely Worst Scenario

Many experts consider that should a conflict between Russia and the Baltic states occur, it would likely involve Russian minorities, allowing Russia to undermine NATO and the EU under the cover of deniability and ambiguity. Russia would thus hope to achieve at least certain political goals while acting below the threshold that would trigger NATO's Article 5. Russia would further decide over military escalation, negotiation from a position of strength or retreat, depending on reactions from NATO and EU, and the resilience of the attacked nations. In the worst case, such a conflict would evolve linearly through mid-intensity warfare to the high-end, i.e. full-scale war.

The first responders to a "hybrid" crisis would surely be indigenous law enforcement and/or military forces, with any in-place Allied forces standing ready to assist e.g. by securing key military installations and infrastructure, including APODs and SPODs.⁶¹ Russia might be successful in escalating such a situation rather rapidly - in a few days or weeks - before it would be ready to act overtly, including through the use of force. However, any Donbas-like scenario in the Baltic states would have, for Russia, notable limitations and deficiencies. First, the Kremlin has not achieved its desired results in Ukraine with these tactics, including in the occupied Donbas. Second, the Alliance and the Eastern Flank allies have carefully studied Russia's "hybrid warfare" and Ukraine's counter actions, and would be prepared to respond swiftly and adequately. In addition, in such a scenario Russia would compromise its primary advantage – rapidly gaining the initiative and upper hand by exploiting the elements of surprise and time. The first days would be crucial, and if Russia hesitated to intervene militarily, the Allies would likely have time to respond and take control of the situation. Most importantly, without unambiguous Russian military support, the "separatists" would have little chance to control sections of Russia's borders with the Baltic states, which would be vital for their success. However, Russian military support would lead inevitably to open conflict with NATO. Russia's chances to achieve significant and durable political gains vis-à-vis NATO/EU and the Baltic states, or even elsewhere, would be very slim.

A related scenario that is also widely considered envisages a surprise "limited incursion" following a sudden "incident" (i.e. a provocation). The Russian armed forces (especially airborne troops, army aviation etc.) have repeatedly exercised such scenarios (e.g. the takeover of "unknown airfields") just behind the eastern borders of Latvia and Estonia.⁶² Such a sudden "incursion" would undoubtedly surprise the attacked nation and NATO, and might be exploited by Russia to demonstrate the Alliance's vulnerability and inability to defend its entire territory, and to provoke political divisions in the Western camp. Nevertheless, such an overt aggression would automatically be seen as an act of war against NATO (Article 5), which would lead to a political, economic and military response. Narva is not Crimea (or Donbas). The Alliance, and even more so the Baltic states, would not negotiate over territorial integrity or tolerate a *fait accompli*. Equally, the political and military significance of Narva or Daugavpils for Russia is not comparable to that of Crimea, or even Abkhazia

⁶¹ Air Port of Debarkation, Sea Port of Debarkation.

⁶² E.g. from 15 to 20 February 2016 in the Pskov Oblast (2,500 troops).

and South-Ossetia.⁶³ Russia would lose much more than it might gain in such a scenario.

President Putin would certainly not prefer just to tease the Alliance and risk serious loss, but instead to administer a *coup de grâce* to NATO, i.e. to implement a scenario that includes the separation of the Baltic states from the rest of Allied territory, and their eventual occupation. This scenario has been repeatedly exercised by the Russian armed forces in regular planned large-scale military exercises (“Zapad”, involving the Western MD and other forces, and “Union Shield” together with Belarus), as well as massive no-notice combat control exercises (e.g. in December 2014 and March 2015). Russia has attacked Georgia and Ukraine closely following such scenarios and using the same set of forces that were employed in previous large-scale military exercises. This would be a far bigger political blow to NATO and the EU that – if successful - would also allow Russia uncontested strategic military advantage in the Baltic Sea area, and could possibly “solve” the question of the Kaliningrad exclave. The Kremlin would have no problem finding a pretext, especially if US/NATO-Russian relations become critical elsewhere (e.g. concerning Syria and/or Turkey).

Russia has demonstrated its ability to impose effectively A2/AD in the maritime environment and the airspace surrounding the Baltic states. A Russia invasion through Belorussian territory towards the Kaliningrad Oblast through the 100 km wide Suwałki Gap (Polish and Lithuanian territory), coupled with operations against Estonia and Latvia from the Leningrad and Pskov Oblasts could follow the air and maritime blockade if NATO did not react in a timely and forceful manner, and did not have a proper forward presence in place. It is also of note that Russia has simulated tactical nuclear strikes in an obvious attempt to intimidate NATO Allies (and Sweden). This was most likely done in order to suggest a scenario in which a surprise attack would lead to the consolidation of a quick *fait accompli* in a “localised” conflict. Russia has thus acted in an irresponsible and provocative manner, using its nuclear deterrent to intimidate NATO Allies, and even non-NATO countries.⁶⁴

While any of the scenarios described above may actually occur, NATO’s military planners must consider that Russia – even if it does not wish a large-scale war with NATO – would not miss a good opportunity to exploit NATO’s political divisions and sub-regional weakness in the Baltic Sea area. A slowly developing “hybrid” situation or a rapid “incursion” that evolves into a NATO-Russia “frozen conflict”, which neither side would favour, is unlikely to occur. Russia would be more likely to act according to what it has rehearsed, counting on its A2/AD capabilities in the area – i.e. to threaten the Baltic states entirely and seriously, not only at the micro-level.

⁶³ Russia is obsessed by its military outposts and exclaves as means of power projection in different geopolitical contexts on the whole territory of the former Soviet empire. As Armenia is one of these outposts, Russia could not accept Georgia, and potentially Azerbaijan becoming members of NATO, making Armenia another exclave surrounded by NATO countries and moving the strategic Russia-NATO boundary to the Caucasus Mountains. Russia thus decided to set up military exclaves on Georgian territory, behind the mountains, by brutal force. However, the Baltic states are – differently from Georgia – members of NATO, and Narva and Daugavpils would not offer such military or political advantages to Russia.

⁶⁴ Which is a sign that the non-aligned status of Finland and Sweden counts for little in Russian strategic and operational planning.

7. NATO's Defence Posture Compared to Russia's Military Posture in the Baltic Sea Area

NATO retains overall conventional military superiority over Russia, thanks to US military power, but this advantage has been eroding. This has occurred on the one hand due to Russia's massive military modernisation and on the other because the Allies re-focused on fighting mostly low-end adversaries after 9/11, alongside the general demise of European militaries.

At the same time, the challenge posed by the Russian military is of a different qualitative nature to the one presented by terrorist organisations or rogue states in the Middle East. Western militaries have become used to freedom of operation in permissive environments where they enjoy overwhelming qualitative superiority. A conflict in the Baltic area would be of a completely different nature. Russia possesses sufficient numbers of high-end capabilities to contest NATO's superiority in all domains of warfare. Russia's A2/AD capabilities can deny freedom of access and manoeuvre to NATO forces in the air, at sea and on land, in the whole Baltic operating environment. Russia can also bring massive firepower to the battlefield that may result in high numbers of casualties.

The military balance in the Baltic Sea area is mostly shaped by the fact that Western military power is not immediately available in the region. Leaving aside the local forces of the countries of the region, the current NATO land force presence in the Baltic theatre consists of small-scale (mostly company-sized) deployments for training and exercises. While this ensures the continuous presence of US and other Allied boots on the ground, these forces are not equipped or tasked to engage in defensive operations. The same is true of the air domain, as the NATO Air Policing mission, while performing a vital peacetime role, is not designed for the air defence of the region. At sea, the situation is even more unbalanced, because NATO's maritime presence in the Eastern Baltic remains only sporadic.

The Alliance would need to rely on the arrival of rapid reinforcements and further follow-on forces to deter and defend against Russian aggression. The deployment of reinforcements to the Baltic states, however, in a situation where Russian A2/AD capabilities are operational, is rather questionable. Moreover, as a result of the degradation of European forces and capabilities, only the United States has the broad spectrum of military capabilities necessary to mount a defence operation against a major attack in the Baltic Sea region. However, the reorganisation of the US global military posture has left its combat capabilities in Europe in a depleted state, something that will only be partially remedied by the ongoing and further planned return of US Army equipment to Europe. In the case of a large-scale conflict with Russia, the bulk of US forces would still have to be transported over the Atlantic, but moving heavy brigades from US to the Baltic theatre would take weeks.

Finland and Sweden, non-aligned nations and close partners of the Alliance, remain "grey areas" in the context of NATO and Russian regional postures. In the case of conflict, the use of their airspace and maritime environment, as well as airfields and other key infrastructure, would become critical for the Alliance. However, the political ambiguity of these countries does not support NATO's regional defence planning.

NATO has so far been very cautious, and has undertaken only symbolic steps towards increasing forward presence on the Eastern Flank. Russia, meanwhile, already has in place almost all it needs to act against the Baltic states and Poland. NATO's current posture in the Baltic Sea area cannot be considered by any means sufficient to deter possible Russian aggression, including the efficient use of its A2/AD capabilities. It does not signal robust resolve and actual military capability to credibly back up the Alliance's commitments to defend NATO's territory in the Baltic region. This gap between rhetoric and available capabilities constitutes a dangerous vulnerability that needs to be remedied.

8. Conclusions and Recommendations

Russia is a clear and direct threat to NATO's Eastern Flank. The Kremlin shows no intention of altering its policy of confrontation with the West or changing the course of its militarisation process, especially in the Western direction. This, in addition to Russia's aggression against Ukraine, is a violation and invalidation of the 1997 NATO-Russia Founding Act.

- The Russian threat has to be clearly acknowledged, treated as a strategic long-term challenge and taken fully into account in NATO's defence planning and future posture in the Baltic Sea area.
- NATO has to agree that it has no further commitments vis-à-vis Russia to refrain from stationing substantial combat forces on the territories of its easternmost members.⁶⁵
- Russian nuclear rhetoric should be countered with clear signals that there is no possibility of a limited nuclear conflict. Any Russian use of nuclear capabilities, however limited, would be a game-changer and would trigger a nuclear response.

The West has not been able to prevent Russia from attacking its neighbours or seizing military opportunities for political and economic gains as far afield as Syria. NATO's overall deterrent may fail to keep Russia from undertaking a new "localised" military adventure even against NATO Allies, first of all in the Baltic Sea area. This could happen if the Kremlin was tempted by apparent opportunities or miscalculated in its perceptions of NATO's political indecisiveness and military weakness in the region. Russia must, therefore, see concrete evidence of the Allied forces that are meant to deter it. NATO's forward defence, in the 2 to 4 year perspective, has to move from a symbolic to a meaningful presence. Reassurance is part of deterrence and defence, but not their equal.

- NATO has to design a military posture that meets the test of deterrence in the specific context of the Baltic Sea area.
- NATO's defence planning, which is currently excessively based on the deployment of reinforcements and deterrence by punishment should evolve towards deterrence by denial and adequate forward presence in the Baltic states, Poland and the Baltic Sea area.

⁶⁵ The scope and the meaning of the term "substantial combat forces" used in the Founding Act is undefined. The amount of troops recommended in this paper may not be considered to be in excess of these levels, but the acknowledgement of the inapplicability of this restriction would be important in order to signal the indivisibility of the Alliance's security.

- The Alliance should not only increase the forward presence of Allied ground forces in the Baltic states and Poland, but also air forces and other necessary assets, and maintain a robust naval presence in the Baltic Sea.

The forward presence should be designed to deter Russia from taking action according to a “hybrid”, incursion or blockade and land corridor⁶⁶ scenario. NATO’s forward deployed forces, alongside indigenous forces, would be the first responders to an aggression and must provide sufficient capability to counter Russia in low-end scenarios. In the case of a major attack, these forces should be able to offer stiff resistance in order to raise the costs of aggression and buy time for the arrival of reinforcements. The ability of the deployed forces to engage in combat would also serve as a “trip-wire”, ensuring that the conflict would not remain localised, and bringing about a powerful response by the Alliance. In addition, NATO needs to address seriously the Kaliningrad Oblast A2/AD “bubble” problem through the deployment of effective anti-A2/AD capabilities in the Baltic states and the Suwałki gap area.

NATO’s regional deterrent will gain sufficient momentum and credibility only if nuclear and other large Allies deploy forces to the Baltic region. This would unambiguously flag to Russia that NATO means serious business. The aim would not be to imitate a Cold War situation or scenario, but to confront today’s reality. To meet these purposes, the forward presence must balance two key aspects: military effectiveness and multinationality.

- Military effectiveness requires the forces to be combat ready, and possess equipment and supplies necessary to engage the enemy. This requires certain capabilities (e.g. medium-range air defence) that the Baltic states themselves will not be able to acquire in the foreseeable future. In terms of manoeuvre formations, the baseline consideration should be brigade-sized unit(s), instead of companies or battalions.
- The multinational character of the response would demonstrate solidarity and burden sharing among Allies. US leadership in the build-up of a defence posture in the Baltic area would be essential, but other contributions must be part of these efforts, as well. The US should provide the framework and certain key capabilities to be complemented by contributions from other Allies.

NATO Allies should agree on a package of forces and capabilities along the lines described below. The ground forces component should consist of:

- A heavy/armoured US Brigade Combat Team, with one battalion stationed in each of the Baltic states. A continuous presence by US forces in each of these countries also has substantial political significance.

⁶⁶ Between the Kaliningrad Oblast and Belarus.

- A multinational NATO brigade including contributions from different member states, according to a long-term rotation plan (akin to the VJTF rotation plan). The UK, France and Germany should each deploy a battalion, and other Allies could contribute as well. It may be worth considering the stationing of this brigade in areas close to the Suwałki gap.
- These forces need to be accompanied by the necessary enabling capabilities, including army aviation elements, electronic warfare systems etc.
- Prepositioning of equipment for an additional US Brigade Combat Team in the region.
- A divisional-level HQ should be established in the region with a US general to command these units.

This posture would ensure the continuous presence of two brigades, in addition to the indigenous forces of the Baltic countries. In case of emergency, the Allied deployed force could be quickly expanded to 3 or 4 brigades, including the deployment of VJTF.

Air and missile defence requires:

- Adequate air and missile defence systems and assets (e.g. Patriot missiles) for the protection of key facilities and infrastructure.
- Full use of air bases in the Baltic states and Poland that have been entirely renovated and outfitted with state-of-the art equipment, through both national and NATO financing.
- At least two squadrons of fighter and/or multirole aircraft should be deployed in these countries, in addition to the handful of aircraft performing the peacetime Baltic Air Policing mission.
- A clear definition and exercising of the transition from peacetime air policing to air defence.

NATO's maritime presence in the Baltic Sea should be:

- Increased significantly, both in terms of SNMG1's size, and the frequency of its visits and exercises in the vicinity of the Baltic states and Poland.
- Reinforced with national contributions. The US should consider maintaining a persistent naval presence in the Baltic Sea region.
- Upgraded with capabilities to penetrate and thus make inefficient the A2/AD bubble (e.g. submarines).

The deployment and maintenance, for as long as necessary, of these forces and assets in the Baltic region is both feasible in financial terms, especially considering the

comparatively huge cost of failed deterrence and the restoration of NATO's integrity, and doable in practical terms. NATO has all the forces and assets that are actually needed in the Baltic Sea area, but they are simply in the wrong place.

Host Nation Support (HNS) would require more resources, including financial, to support a larger Allied forward presence. The Baltic states and Poland would need to further develop HNS capabilities and infrastructure, including facilities for the basing of Allied troops, training ranges etc.

- Additional costs related to deployments etc. should be covered by Allies and host nations on a fair (e.g. 50/50) basis.
- Forces deployed should be engaged in activities, including exercises, at levels not lower than prescribed in order to preserve their combat readiness, and to better adapt to local conditions in the operational area.

Alongside the strengthening of the forward presence component, the Alliance needs to refine capabilities for the deployment of reinforcements and follow-on forces.

- The Allies should demonstrate their ability, in collective defence exercises, to rapidly move large numbers of troops, including to the Baltic region.
- The SACEUR should be granted the authority to activate pre-determined measures in order to increase readiness or even deploy forces whenever there are clear indications of imminent attack against Allies.
- Secured access to the Baltic states, that requires – first of all – the neutralization of Russia's A2/AD "bubble" in the Kaliningrad Oblast, should be prominently addressed in NATO's regional defence planning.

Russia will undoubtedly react negatively to any move by NATO in the direction of strengthening the defence of the Alliance's Eastern Flank. The Kremlin would likely accuse NATO of escalating regional tensions and provoking an "arms race" etc., and it may even use, once again, nuclear blackmail in order to test NATO's determination.⁶⁷ The Alliance should not submit to Russian intimidation and blackmail, and should do all that is necessary for credible deterrence and defence. One should not ignore the fact that Russia continues to strengthen its military posture, according to its own plans, particularly in the Western/Baltic direction, whatever NATO does or does not do in this context.⁶⁸

The time factor is essential, not only concerning NATO's ability to react to an imminent threat, but especially with regard to the actual build-up of NATO's regional deterrent in the Baltic Sea area. It goes without saying that the deployment only of combat-ready

⁶⁷ E.g. by announcing Moscow's "response" in terms of the deployment of tactical nuclear weapons to the Kaliningrad Oblast (which may, in any case, be already there).

⁶⁸ NATO's measures, including the increase of forward presence, serve as mere propaganda excuses for the Kremlin in order to "justify" Russia's speedy militarisation and belligerent behaviour.

Allied troops makes sense. They must not just be in place, but also capable to act as first responders together with the indigenous forces of the Baltic states. Considering the speed at which developments evolve in Russia's policy, and the level of unpredictability, these plans have to be elaborated in detail, agreed and implemented as soon as possible.

Russia should no longer be allowed to perceive the Baltic Sea area as one in which its military can act unchallenged. NATO's defensive efforts should strengthen the balance of conventional forces and capabilities in the region, thus not only reassuring its Allies on the Eastern Flank, but – most importantly – deterring Russia and minimising the risk of conflict.

Annex 1 – Russian Armed Forces

The total manpower strength of the Russian armed forces is estimated at 771,000, including 150,000 personnel in C2⁶⁹ structures. The five branches of armed forces are (in thousands): army (230), navy (120), aerospace forces (140), strategic missile forces (80) and airborne forces (45, including a spetsnaz brigade).⁷⁰ The rear services – that offer combat service support – stand separately from these branches. In addition, the Russian armed forces rely on a large “hot reserve”, estimated at around 2 million, which includes conscripts who have passed through the 12-month compulsory military service in the last 5 years.⁷¹ In 2015, the number of contract soldiers (*kontraktniki*) surpassed the number of conscripts (more than 300,000). Paramilitary forces, estimated at around 700,000, including the 200,000 strong Interior Troops, as well as FSB-controlled Border Troops should also be taken into account. In addition, Russia may also use thousands of “volunteers” in hybrid warfare situations.⁷² The main conventional military assets and most capable forces that may be readily used by Russia in offensive operations in the western and southwestern directions are:

Airborne Forces and Spetsnaz⁷³

- 4 airborne and air assault divisions (3 in the Western MD and 1 in the Southern MD) and 2 air assault brigades
- 6 spetsnaz brigades (3 in the Western MD and 2 in the Southern MD)

Ground Forces

- 1 tank division, 1 combined arms division and 1 tank brigade (Western MD)
- Some 20 motor rifle brigades (7 in the Western MD)
- 3 missile brigades and 1 coastal missile brigade (in the Western MD)
- 6 artillery brigades (4 in the Western MD and 2 in the Southern MD)

Aerospace Force

- 10 main Air Force bases in the Western and Central MDs and 4 Transport Aviation bases.⁷⁴

⁶⁹ Command and Control

⁷⁰ Other Spetsnaz units are subordinated to Russia’s military intelligence (GRU).

⁷¹ Reservists are mobilised in case of a major conflict when regular armed forces need massive reinforcements.

⁷² Mostly active military personnel “on vacation”, but often physically fit retired military personnel (estimated around 250,000), who are financially or “patriotically” motivated.

⁷³ One may add to this list also airborne and spetsnaz troops that are located even in Russia’s Far East, because these are forces deployable over long distances and are all under central command.

⁷⁴ About two thirds of Russia’s estimated total number of fighting squadrons and fixed and rotary wing aircraft (100 long-range bombers, 1100 fighters and multirole aircraft, 250 transport aircraft, 400 attack helicopters with serviceability status to be increased to 67%) may be used in the western and southwestern directions in case of major conflict. Russian official reports state that more than 200 new

Navy

- The Baltic Fleet that operates more than 55 vessels in the Baltic Sea, including 2 *Kilo*-class and 1 *Lada*-class submarines, as well as 3 frigates, 2 destroyers, 26 corvettes, 9 landing ships and 12 minesweepers.
- The Black Sea Fleet that operates in the Black Sea and the Mediterranean Sea, and consists of some 50 vessels, including 4 new and improved *Kilo*-class submarines and its flagship, the *Slava*-class guided missile cruiser *Moskva*.
- The Northern Fleet that operates from the Arctic Ocean to the North Atlantic, and has 42 submarines and 38 warships, including 6 *Typhoon*-class nuclear-powered ballistic missile submarine⁷⁵ and its flagship, Russia's only aircraft carrier *Admiral Kuznetsov*.
- 4 naval infantry brigades (1 in the Kola Peninsula, 1 in the Kaliningrad Oblast and 2 in Crimea) and Naval Aviation bases of the Nordic, Baltic and Black Sea fleets.

aircraft were delivered to the Air Force in 2015, including batches of SU-34s and SU-35s, as well as Ka-52 Alligator attack helicopters.

⁷⁵ 4 *Borei*-class submarines are under construction and another 4 have been ordered

Annex 2 – Russian brigade and BTG typical build-up

Russian Heavy Mechanised Brigade

A Russian Army HMB is made up of three battalions and supporting units with a typical strength of 3,000 and a maximum of 4,500 personnel.

Russian combined arms Battalion Tactical Group (BTG)

A Russian Army combined arms BTG is usually made up of three companies with a total strength of 400-700 personnel, 10-15 MBTs, 30-40 ACVs and IFVs, 6 mortars, 6 MLRS SP, 12-18 heavy artillery pieces and 4-14 AD SP platforms.

MBT – Main Battle Tank. The T-14 Armata 5th generation MBT will replace by 2020-2025 (2,300 pieces) the older T-90, T-80 etc. versions that are now in active use.

ACV – Armoured Combat Vehicle.












IFV – Infantry Fighting Vehicle. The T-15 Armata and Kurganets-25 will largely replace BMP, BMD and MT-LB platforms.

MLRS – Multiple Launch Rocket System. A wide range of systems with short- to long-range operational capabilities, including TOR-1 *Buratino* (6 km), BM-21 *Grad* (30 km), BM-27 *Uragan* (35 km), BM-30 *Smertsh* (90 km), 9A52-4 *Tornado* (90 km).

AD SP – Air Defence Self-Propelled (system). Short- to medium-range systems include 2K22 *Tunguska* / SAZ19 *Grison* (10 km), 9K33 *Osa* / SA-8 *Gecko* (10 km), 9K330 *Tor* / SA-15 *Gauntlet* (12 km), Pantsir S-1 / SA-22 *Greyhound* (20 km), 9K37 Buk M1/M2 / SA-11 *Gadfly* / SA-17 *Grizzly* (45-50 km).

Annex 3 - Russian Military Posture in the Kaliningrad Oblast



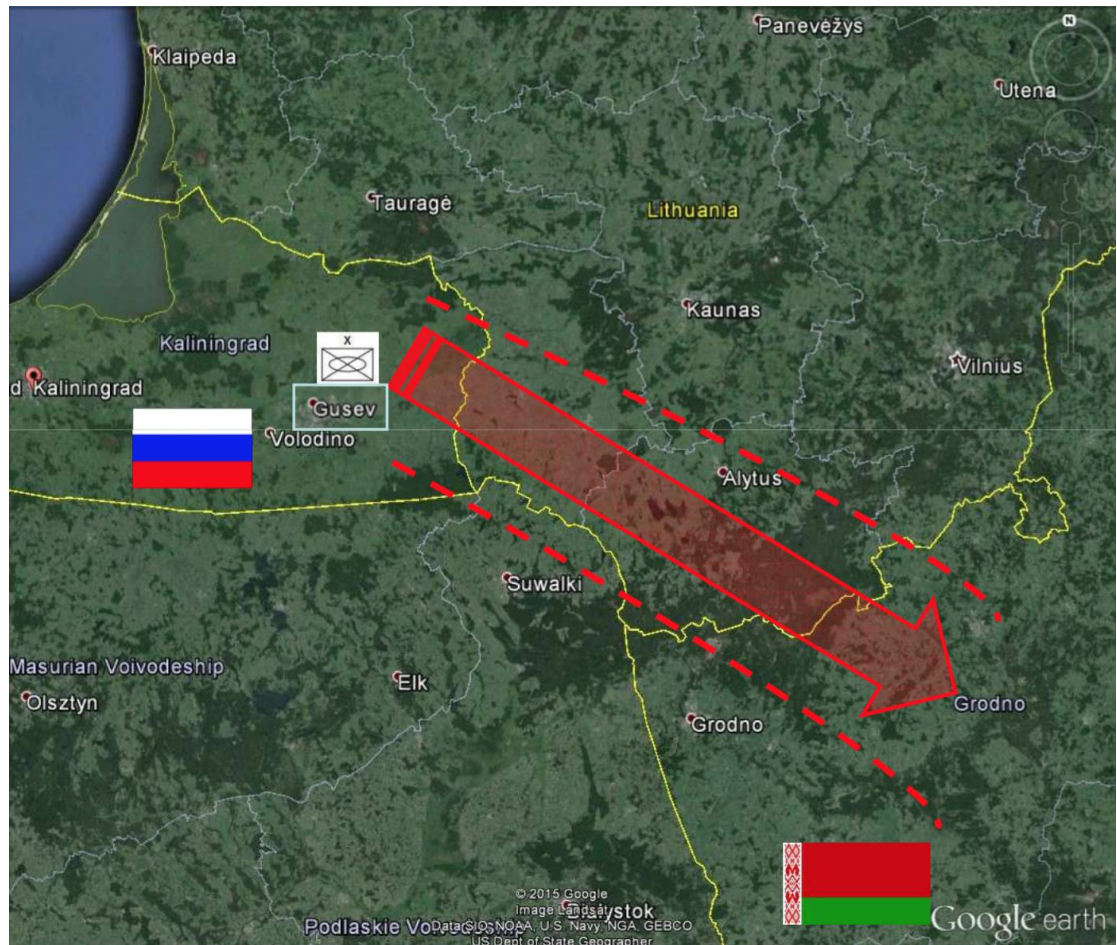
	Electronic Warfare		Missile Air Defence
	Missile		Amphibious
	Engineer		Infantry
	Artillery		Reconnaissance
	CBRN		Air Mobile
	Mechanized Infantry		

III Regiment (*polk*)

X Brigade

Courtesy of Dr. Igor Sutyagin, Senior Research Fellow, Royal United Services Institute

Annex 4 - The Suwałki gap



Courtesy of Dr. Igor Sutyagin, Senior Research Fellow, Royal United Services Institute

Some Key References

Benitez, Jorge (Ed.). *Alliance at Risk: Strengthening European Defense in an Age of Turbulence and Competition*. Atlantic Council, February 2016.

<http://www.atlanticcouncil.org/publications/reports/alliance-at-risk>

Breedlove, Philip M. *U.S. European Command: Theatre Strategy*. October 2015.

<http://eucom.dodlive.mil/2016/01/eucom-announces-updated-theater-strategy/>

Development, Concepts and Doctrine Centre, UK Ministry of Defence. *Future Security Challenges in the Baltic Sea Region: A study for the Swedish Armed Forces*. November 2015.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/494595/20151201-Baltic_sea_regional_security.pdf

Hicks, Kathleen H., and Conley, Heather A. *Evaluating Future U.S. Army Force Posture in Europe. Phase I Report*. Center for Strategic and International Studies, February 2016.

<http://csis.org/node/49035/publication>

Lasconjarias, Guillaume and Larsen, Jeffrey A. (Ed.). *NATO's Response to Hybrid Threats*. NATO Defense College, December 2015.

Schlapak, David A., and Johnson, Michael. *Reinforcing Deterrence on NATO's Eastern Flank*. RAND Corporation, February 2016.

http://www.rand.org/pubs/research_reports/RR1253.html

Stoltenberg, Jens. *The Secretary General's Annual Report 2015*. NATO, January 2016.

http://www.nato.int/cps/en/natohq/opinions_127331.htm

The Heritage Foundation. *2016 Index of U.S. Military Strength*. Washington, 2016.

<http://index.heritage.org/military/2016/>

The International Institute for Strategic Studies. *The Military Balance 2016*. London, 2016.

U.S. European Command. *Operation Atlantic Resolve 2015*.

http://www.defense.gov/News/Special-Reports/0514_Atlantic-Resolve

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