

### 3. ARMED FORCES, MILITRY TECHNOLOGY

# TO WHAT EXTENT ARE RUSSIAN 'ANTI-ACCESS' AND 'AREA-DENIAL' SYSTEMS DEFENSIVE OR OFFENSIVE IN CHARACTER?

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#### ABSTRACT

In recent years, A2/AD capabilities are one of the top subjects of press and media discussions aimed to examine contemporary European security order as well as the ability of the NATO to conduct collective defence. In this context, Russian A2/AD capabilities are considered as one of the biggest threats for NATO member states in the case of a potential conflict. Trying to answer whether Russian A2/AD systems are defensive or offensive in character, a given answer can be that the systems are both. A reason is that combat systems are not only defensive or offensive in character nowadays. The above mentioned phenomenon of modern, complex combat systems allowed Russia to build up A2/AD capabilities which are recognized as very efficient during defensive operations. On the other hand, the systems provide the ability to carry out offensive operations in accordance with the old rule – attack effectively first and A2/AD bubbles could facilitate it within their range. Moreover, the capabilities are a key element of efforts to reconstruct Russia's superpower position.

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## To what extent are Russian 'anti-access' and 'area-de- nial' systems defensive or offensive in character?

In recent years, 'anti-access' and 'area-denial' capabilities (abbreviated as A2/AD) are one of the top subjects of press and media discussions aimed to examine contemporary European security order as well as the

ability of the North Atlantic Treaty Organization (NATO) to conduct collective defence. In this context, Russian A2/AD capabilities are considered as one of the biggest threats for NATO member states in case of potential

conflict. What is more, technical capabilities of the Alliance are repeatedly presented as insufficient to maintain the credibility of the Article 5 on Crisis Response Operations execution. Thus, the aim of the paper is to evaluate the character of the Russian A2/AD concept including applied weapon systems defining available capabilities within it.

An analysis of the literature in the field of Russian A2/AD capabilities has made it possible to put forward a thesis that a defensive, in essence, Russian A2/AD systems are intended to be a component of the revisionist attempts (offensive in character) to restore the superpower position and implicate the vital threat for security order in Europe. Therefore, the first part of the paper will focus on explaining the basic idea and historical development of the A2/AD concept as well as on presenting modern weapon systems defining its capabilities. It allows the recognition of the overall character of the A2/AD concept. The second part of the paper will focus on reasons for Russia's development of A2/AD capabilities. Next, it will be analysed if Russian supremacy in the A2/AD field is a real threat for NATO members from Eastern Europe and if the capabilities are more offensive or defensive in character. Then, measures the NATO ought to take to successfully deal with the A2/AD challenge will be recommended. Finally, a conclusion referring to the thesis will be presented.

### 'Anti-access' and 'area-denial' concept and its essence.

*Anti-access* and *area-denial* are modern terms referring to warfighting strategies focused on preventing an opponent from operating military forces near, into, or within the contested region' (Tangredi, 2013, p. 1). Then, Sam J. Tangredi, the author of *'Anti-access Warfare. Countering A2/AD Strate-*

*gies'* book elaborates his idea and claims: 'Denying access to an enemy is a natural objective for any defender and should be considered an integral component of any military campaign. [...] Therefore, the objective of anti-access or area-denial strategy is to prevent the attacker from bringing its operationally superior forces into the contested region or to prevent the attacker from freely operating within the region and maximizing its combat power' (Tangredi, 2013, p. 1-2).

Concluding the above quotes, the general aim of the A2/AD concept is not complex itself. According to Stephen Frühling and Guillaume Lasconjarias, the authors of an article entitled 'NATO, A2/AD and the Kaliningrad Challenge', it is 'the best way of prevailing over a distant adversary, especially if it is superior in overall military power, is to prevent it from deploying its forces into the theatre of conflict in the first place' (Frühling and Lasconjarias, 2016, p. 97).

Above quotes explain the modern, overall idea of the concept which was shaped through history by changes in warfare. Thus, it is worth examining key steps in the development of strategies and weapon systems aimed to hold antagonists from attacking key areas.

The historical development of the A2/AD concept starts with the construction of defensive walls like the Great Wall of China (first walls were built in the 7th Century CB) and the Hadrian's Wall (first works were begun in 122 AD). After that, castles and fortresses and finally various coastal defence bastions were built aimed to stop a threat from the sea or to deny military build-up on the beaches (Frühling and Lasconjarias, 2016, p. 97).

More recently, an important step in the concept development has been made by the use of radars as a core element of the strategy to defend Great Britain against

German invasion. The application of this air anti-access strategy enabled them to win the Battle of Britain in 1940 (Frühling and Lasconjarias, 2016, p. 97). Next, during the same war, the Germans set up the Festung Europa coastal-defence system from Norway to Spain. This system was aimed to deny access during expected invasion by the anti-fascist coalition forces (Frühling and Lasconjarias, 2016, p. 97).

The above mentioned historical examples of using the A2/AD strategies and weapon systems lead to the conclusion that the A2/AD concept is defensive in nature, meaning that 'used or intended to defend or protect' (Oxford English Dictionary, 2006, p. 375). Nevertheless, it is worth taking into consideration a quote from Sun Tzu:

**'Attack is the secret of defence; defence is the planning of an attack'**  
– Sun Tzu, *The Art of War*.

The quote leads to the impression that there are no strategies or fighting methods intended to defeat an opponent which are only defensive in character. Continuing this line of reasoning, there are no combat systems only the ones that are defensive in character, too.

Therefore, during the World War II, Japan used *kamikaze* bombers as a crucial element of strategy to prevent the U.S. forces from gaining military bases on the Pacific islands (Frühling and Lasconjarias, 2016, p. 97). Then, during the Cold War, the Soviets planned to hold reinforcement of the NATO by the U.S. Armed Forces' [...] through submarines and air- and surface-launched anti-ship cruise missiles, as well as through air and missile attacks on major sea- and airports [...] (Frühling and Lasconjarias, 2016, p. 97). Above strategies ought to be considered offensive in character, understood as: 'involved or used in active attack'

(Oxford English Dictionary, 2006, p. 992). An offensive approach to the strategy of denying access for the opposed forces corresponds to the widespread statement:

**'The attack is the best form of the defence'** – Carl Von Clausewitz.

Finally, the conclusion drawn from the analysis of the concept idea and its historical development is that the A2/AD concept has a defensive nature but the technical development of the weapon systems (the core elements of A2/AD) gives new capabilities that allow for using combat tools that are offensive in character as an important element of purely defensive strategy.

Contemporary terms 'anti-access' and 'area-denial' were created in the United States, after the first Gulf War, (Frühling and Lasconjarias, 2016, p. 97-98). Next, a key step in the existing understanding of the concept has been taken by the U.S. CSBA. 'In 2003, the Center for Strategic and Budgetary Assessments (CSBA), defined 'anti-access' as enemy actions which inhibit military movement into a theater of operations, and 'area-denial' operations as activities that seek to deny freedom of action within areas under the enemy's control' (McCartchy, 2010, p. 2). Finally, since November 2010, the terms has appeared in official publications issued by the U.S. Department of Defense (Tangredi, 2013, p. 33). 'Anti-access' has been defined as:

'Those actions and capabilities, usually long-range, designed to prevent an opposing force from entering an operational area' (JOAC, 2012, p. 6), and 'area-denial' as: 'Those actions and capabilities, usually of shorter range, designed not to keep an opposing force out, but to limit its freedom of action within the operational area' (JOAC, 2012, p. 6).

The Joint Operational Access Concept (JOAC) also includes conceptualized anticipated threats caused by A2/AD capabilities that future opponents will be able to use to fight against the U.S. Armed Forces. According to the JOAC, '[...] future state and non-state adversaries "see the adoption of 'anti-access' and 'area-denial' strategies against the United States as a favorable course of action for them" [...]' (Boland, 2012). Thus, threats potentially caused by adversaries' A2/AD capabilities are considered as a future emerging security challenges which should be countered by NATO forces. In addition, this publication was a guideline for the development of supporting service doctrines implying the relevance of the A2/AD capabilities such as the Air-Sea Battle Concept (ASB), and the Joint Concept for Entry Operations (JOEC) (Boland, 2012). In this point, it may be summed up that the U.S. Department of Defence focuses on military aspects and offensive capabilities that would be used by the U.S. expeditionary forces. Moreover, it contains measure offensive in character to overcome modern A2/AD systems which are a form of conventional warfare the U.S. expeditionary forces would most likely face in a next conflict. So, the U.S. treats the A2/AD concept as offensive in character, regardless of its defensive essence.

Concluding this part of the paper, it can be stated that the A2/AD concept has defensive essence but this strategy is not exclusive for a defender or a weaker military opponent only. What is more, despite the fact that the terms were coined for the U.S. Armed Forces requirements, and originally are military operational level definitions, the terms are not exclusive for the military only. The A2/AD capabilities can be a relevant component of strategy, and even grand strategy, they also can include international diplomacy, internal political and economic activities (Tangredi, 2013, p. 5).

Moreover, from the military perspective, the components of A2/AD capabilities include '[...] air defenses, counter-maritime forces, and theatre offensive strike weapons, such as short- or medium-range ballistic missiles, cruise missiles, and other precision guided munitions' (Williams, 2017). Systems like these are classified as conventional warfare means and can be used successfully during defensive as well as offensive operations. Also, offensive cyber warfare and electronic warfare can be classified as the non-kinetic components of A2/AD capabilities. Finally, high readiness and special operation forces units are categorised as A2/AD forces, which are more offensive than defensive in character.

As it was mentioned in the introduction, A2/AD systems are considered as an emerging challenge for security order in Europe. Especially, the rise of Russian A2/AD capabilities is reported to be a big threat for NATO member states like Estonia, Latvia, Lithuania and Poland. Thus, the next part of the paper will be devoted to examining the reasons and character of Moscow's efforts in this field.

### **A2/AD capabilities – a key element of Russia's super power position.**

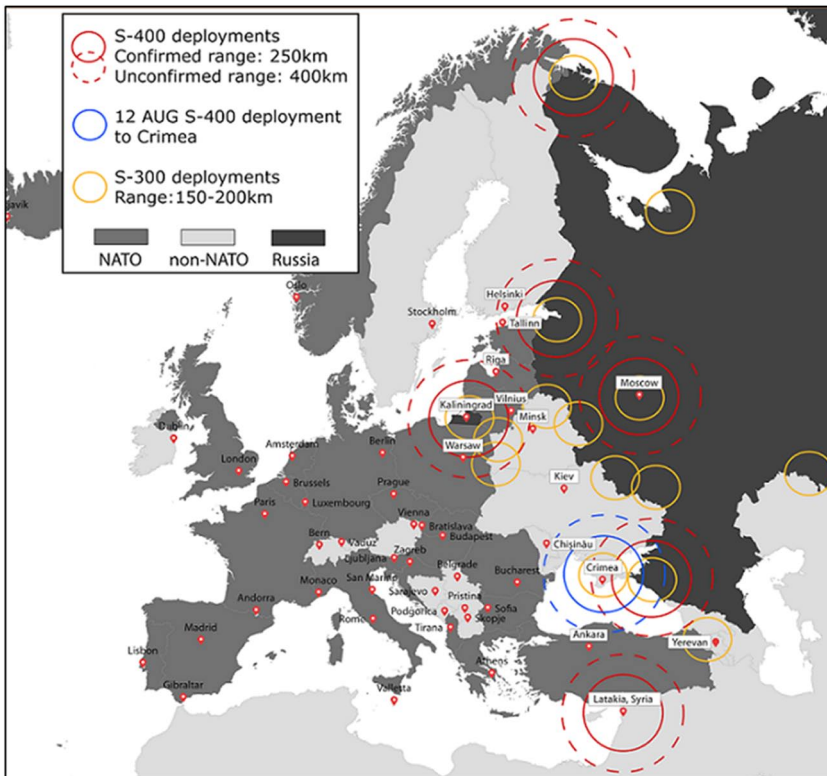
Based on lessons taken from the performance of U.S. Armed Forces during the Gulf War, Russia understood that they will not be able to defeat coalition (NATO) forces in a linear conflict. Additionally, after poor operation in the Chechen Wars President Putin executed radical reforms in organisation and technical modernisation of the Russian Armed Forces. These changes were boosted by experiences from the Georgian conflict in 2008 (Frühling and Lasconjarias, 2016, p. 98). What is more, '[...] Russian forces continue to benefit from the significant resources that have been

allocated to them by President Vladimir Putin, and are better prepared, better trained and better equipped than a few years ago' (Frühling and Lasconjarias, 2016, p. 100). Nevertheless, Russia is aware that currently the NATO has supremacy in conventional means of armed struggle. Thus, one of the ways to deal with that is systematically developed conventional A2/AD capabilities.

The above position is confirmed by Loic Burton: 'In response to NATO's unmatched

ability to conduct large scale airspace operations, Russia has established large anti-access /area-denial (A2/AD) exclusion zones or 'bubbles' around the Baltic states, the Black Sea, the Eastern Mediterranean and the Arctic. These A2/AD bubbles allow Moscow to deny the use of airspace in these areas and dramatically constraint the movement of ships and land forces in case of crisis' (Burton, 2016). Figure 1 shows the existing deployment of Russian A2/AD systems.

Figure 1. Deployment of Russian A2/AD systems (August 2016)



Source: Burton, Loic. 2016. Bubble Trouble: Russians A2/AD Capabilities, <http://foreignpolicyblogs.com/2016/10/25/bubble-trouble-russia-a2-ad/> (accessed 25 October 2016).

To better understand whether Russian A2/AD systems are offensive or defensive in character, it is important to analyse the implemented capabilities from Moscow's

as well as Brussels's (NATO's) perspective. According to Korteweg and Besch, Vladimir Putin challenges the European security order as a result of his feeling of

being surrounded by the NATO. On this account, Russia defined a potential danger caused by NATO enlargement in the military doctrine as follows (Korteweg and Besch, 2016):

'[...] a) build-up of the power potential of the North Atlantic Treaty Organization (NATO) and vesting the NATO with global functions carried out in violation of the rules of international law, bringing the military infrastructure of NATO member countries near the borders of the Russian Federation, including by further expansion of the alliance;

[...] c) deployment (build-up) of military contingents of foreign states (groups of states) in the territories of the states contiguous with the Russian Federation and its allies, as well as in adjacent waters, including for exerting political and military pressure on the Russian Federation' (The Military Doctrine of the Russian Federation, para. 12 a, and 12 c).

Concluding the above opinion and quotes from the Russian doctrine, it can be said that the development and modernisation of A2/AD systems is nothing else like building modern fortifications as equipoise to NATO's military supremacy. What is more, fortifications are usually considered to be defensive in nature. In this light, Russian A2/AD capabilities may be found as defensive in character. Unfortunately, on the other hand, Russian efforts in this area strictly correspond to statements made by President Vladimir Putin:

'If you are not able to fight, hit first'  
– Vladimir Putin (Jaeski, 2017).

The above statement can give impression that his intent is to develop capabilities that will give Russian Armed Forces a possibility of attacking effectively first if decided. Thus, A2/AD systems seem to be designed not only to protect the Russian Federation territory but to create preconditions to con-

duct limited offensive operations.

Moreover, first, remembering that the 'near abroad', from the Russian point of view, stretches, '[...] from the Arctic down across the [...] Eastern Europe and towards the Black Sea [...]' (Korteweg and Besch, 2016), covering many countries with a significant number of Russian minority, which were former Soviet republics, including Georgia, Moldova, Ukraine, and present NATO members like Estonia, Latvia and Lithuania (Korteweg and Besch, 2016). Second, based on the latest experiences from Russian action in Georgia, Crimea, Syria and the Donbas region in Eastern Ukraine, one can claim that the A2/AD capabilities are used by Moscow to ensure freedom of movement during offensive operations. Hence, A2/AD systems defensive in essence are used in actions which are offensive in character. This offensive use of the A2/AD capabilities ought to be found as a potential threat, especially for nations which are recognized by Moscow as a 'near abroad'.

Next, looking from the NATO's point of view, a significant rise in Russian A2/AD capabilities, which were shown to public after engagement in the Syrian conflict, is found as a vital threat for the Allies. For example, General Philip Breedlove, the former Supreme Allied Commander in Europe said in September 2015:

'As we see the very capable air defence beginning to show up in Syria, we are a little worried about A2/AD bubble being created in the eastern Mediterranean. [...] Russia has developed a very strong A2/AD capability in the Black Sea. Essentially their cruise missiles range entire Black Sea, and their air defence missiles range about 40 to 50 percent of the Black Sea. These very sophisticated air defence capabilities are not about [the Islamic State], they are about something else' (Gibbons-Neff, 2015).

Additionally, in January 2016, General Frank Gorenc, commander of the United States Air Force in Europe and Africa, said about Russian A2/AD systems deployed in the Kaliningrad district:

'It is very serious. Obviously, we continue to monitor it. They have every right to lay that stuff out. But the proliferation and the density of that kind of A2/AD environment is something that we are going to have to take into account. [...] They are using cruise missiles, they are using bombers. It is clear that they are desiring to show what ability they have to affect not just regional events but worldwide events' (Gladstone, 2016).

The above statements of recognised experts indicate that Russian A2/AD systems are considered to be offensive in character and what is more, the systems cause a great threat to the international security. Therefore, the next part of the paper will examine existing deployment and threats for NATO members caused by Russian A2/AD systems.

## Threats caused by Russian A2/AD systems

Based on available, unclassified data, Russia possesses conventional A2/AD capabilities like [...] missile defence systems, anti-ship cruise missiles, submarines, high-readiness brigades and special forces' (Korteweg and Besch, 2016). Next, other obtainable sources divide Russian A2/AD systems into three groups: air defence, land based strike, and naval strike. First, Ian Williams lists the following air defence systems: the S-300, and S-400 long range anti-air missiles, and the *Buk* family highly mobile surface-to-air missiles. Next, he classifies the following as land based strike systems: the SS-26, and *Iskander* short range offensive ballistic missiles, and also the *Oniks* anti-

ship missiles. Finally, according to Williams, the naval strike category includes SS-N-30A Kalibr type cruise missiles and SS-N-27 *Sizzler* anti-ship missiles (based on Williams, 2017). In addition, to have a full range of Russian A2/AD systems, air based strike group ought to be mentioned as well. The systems belonging to this category include *Raduga KH-15* and *KH-22*, as well as the most advanced *KH-101* and *KH-102* air-launched cruise missiles.

Then, trying to examine potential threats caused by Russian A2/AD capabilities (commonly called A2/AD bubbles), it is worth starting with the Arctic region. The Russian A2/AD bubble in this region is considered as a secondary importance to the NATO, but not for Norway. This country desires more involvement and systematically shows that radars deployed on the Kola Peninsula together with the Northern Fleet's battleships armed with anti-ship and anti-aircraft missile systems have a potential to threaten the sea lines of communication of the Allies (Burton, 2017). But, on the other hand, one can claim that Russia needs this bubble to protect access to the Murmansk Maritime Base. Thus, the character of the capabilities is both offensive and defensive.

Second, in the Black Sea region, after the annexation of the Crimean Peninsula, Russia deployed varied A2/AD systems, including the Bastion-P shore-based anti-ship missile system armed with the P-800 *Oniks* missiles and the S-300 PMU anti-aircraft missile systems. Besides, public opinion was informed about the planned deployment of *Tu-22M3 Backfire* bombers, *Tupolev Tu-142*, and the Ilyushin Il-38 maritime patrol and anti-submarine aircrafts in this area of operation (Burton, 2017). In addition, after the deployment of S-400 missiles systems cooperating with S-300 missiles systems there, a range of the

impact of A2/AD systems was extended over the Eastern Black Sea, Eastern Turkey and Georgia (Burton, 2016). Nevertheless, according to Burton, despite the extended range of impact of the A2/AD bubble over Turkey, Bulgaria, and Romania, they are not in danger. This bubble should not prevent the NATO from reinforcing these countries in the event of armed conflict with Russia (Burton, 2016). Thus, facts presented above imply that A2/AD systems deployed in the Black Sea region mainly aim to prevent a NATO offensive operation against Russia and eventually they can ensure freedom of offensive operations in Ukraine, Georgia and Moldova. So, from the NATO's perspective, the systems may be found as more defensive than offensive in character.

Third, within the Eastern Mediterranean, Yakhont anti-ship cruise missiles, Iskander missiles, S-400 and S-300 air defence missiles systems '[...] deployed in Syria create A2/AD bubble in the region, [...] allowing Russia to control most of the Eastern Mediterranean airspace' (Burton, 2016). The only NATO member whose security can be directly affected by A2/AD systems deployed there is Turkey. But, the examination of the available information allows claiming that there is no direct threat for Turkish security. In addition, from the perspective of the defence of the Russian territory, this bubble seems to be unnecessary. Nevertheless, the bubble is an important element of building the image of Russian Armed Forces as a modern and high combat ready power. Additionally, the strong military presence in the region allows Moscow to keep control over the Syrian conflict and ensure the freedom of military operations and political presence in the region to support Assad's regime. Moreover, Russia must be considered by international community as one of the main players able to contribute to the effective end of the Syr-

ian crisis. Therefore, it can be inferred that these systems ought to be found as offensive in character.

Finally, the Baltic region is most often considered as the biggest threat for the European security order. This is where the A2/AD bubble deployed in the Kaliningrad enclave is a real challenge for the NATO. Firstly, on the Russian side, the Kaliningrad region is heavily militarized. There are deployed radars and K-300P Bastion-P shore-based mobile anti-ship missile batteries armed with the Mach 2.5+ supersonic sea-skimming the P-800 Oniks missiles. Also, there are S-400 Triumf, and SA-21 Growler missiles (Burton, 2016), which are protected by the Pantsir-S surface-to-air gun-missile systems. It is reported that a range of offensive weapon systems deployed in the Kaliningrad region effectively render the north-east part of Polish and almost whole Lithuanian airspace '[...] no-fly zones for conventional non-stealthy aircraft' (Burton, 2016). Secondly, on the NATO's side, according to Burton, there is '[...] NATO's small footprint in the region and the geographic isolation of the Baltic States accentuate this threat' (Burton, 2016). Agreeing with Burton's argument and taking into account the fact that the land, sea, and air roads of military reinforcement of those states are in the direct range of Russian anti-air and anti-ship missiles systems, the conclusion is that this situation is a real threat to the territorial integrity and even independence of Lithuania, Latvia and Estonia. Furthermore, the fact of deployment of military units (e.g. brigade of maritime infantry), intended for offensive operations, proves the offensive character of these technical installations. Finally, this estimation corresponds with Moscow's attempts to build a superpower position in the Baltic Sea region. Thus, offensive A2/AD capabilities are necessary to achieve political goals.



In addition, the proof of the offensive destiny of the Russian A2/AD systems is large-scale military exercises conducted in the Baltic and Black Sea regions recently. These exercises aimed to demonstrate the top capability level and combat readiness of the Russian Armed Forces after reorganization and technical modernization. Moreover, the A2/AD systems were used as a core element of operations whose goals were to reinforce troops deployed in the Kaliningrad and Eastern Mediterranean regions very fast. So, these systems were used to ensure the execution of operations offensive in character.

To conclude this part of the paper, General Gorenc is right that Russia has its sovereign right to develop and deploy any kind of weapon systems appropriate for its own protection. Additionally, one can say that Russian A2/AD systems are nothing else like building 'fortifications' that are defensive in character to protect its own territory. This way of thinking about the use of systems is represented even by the current Supreme Allied Commander, Transformation (SACT) General Denis Mercier. In 2015, General assessed the Russian A2/AD system as defensive in character (intended to defense only) and not threatening the security order in Europe (Brzeski, 2016).

Nevertheless, the combination of above opinions and facts about the offensive design of the systems contradicts the opinion about their only defensive nature. Additionally, from the military point of view, Russian A2/AD systems ought to be considered as combat tools allowing an execution of offensive operations within its range of impact on an opponent.

A military threat is of course vital but, the most terrifying argument for the fact that Russian A2/AD capabilities are a real danger for the NATO Eastern Flank members is

public awareness of Russian supremacy in these lethal means of combat. Such a belief can lead to the situation in which there will be no political will in countries like Italy, France or Spain to support their Allies from Eastern Europe in the event of an armed conflict. The lack of NATO's solidarity and unity can be caused by the awareness of a significant number of possible human losses during the combat operations against Russia possessing modern combat systems, which the Allied troops will not be able to defeat successfully without a large number of losses among soldiers facing the fight.

Finally, a real necessity of the combat readiness of NATO's armed forces to confront Russia determined to restore its superpower position strengthens Vladimir Putin's rhetoric, who said that:

'[...] he could, if he wanted, have Russian troops not only in Kiev, but also in Riga, Vilnius, Tallinn, Warsaw and Bucharest within two days' (Frühling and Lasconjarias, 2016, p. 109).

Accordingly to above threats, it will be subsequently suggested what kind of both military and political measures the NATO ought to take to successfully deal with the A2/AD challenge.

## Ways of responding to the A2/AD challenge.

The NATO needs a comprehensive approach to deal with the A2/AD emerging challenge, being a specific combination of available military and political measures. Starting with examining the military readiness to combat with Russian A2/AD systems, General Breedlove's opinion should be quoted:

'We have the tools, but we do not have nearly enough of them. [...] Right now we are almost completely dependent on air forces and aviation assets in order

to attack the A2/AD problem' (Majumdar, 2016).

His opinion leads to the conclusion that the NATO has not enough sophisticated combat measures to defeat Russian A2/AD systems. The only ones available today to fight effectively in such a hostile environment are the U.S. F-35s and F-22 Raptors fifth-generation aircraft. Therefore, NATO member states ought to first increase the number of currently possessed fighting systems offensive in character such as surveillance aircraft and low observable standoff air-launched cruise missiles – the JASSM (Joint Air-to-Surface Standoff Missile). The above technical modernisation is necessary to be able to successfully defeat the A2/AD systems deployed in the Kaliningrad enclave in the event of collective defence of the Baltic States. Also, NATO member states that are directly threatened by the offensive components of Russian A2/AD bubbles ought to develop defensive A2/AD capabilities for their own protection by purchasing the Patriot air-and-missile defence systems, or in cooperation with the U.S., develop, for example, an 'antibalistic shield'.

Second, the NATO has to strongly demonstrate its solidarity, determination and credibility to defend its members (Korteweg and Besch, 2016). A very good step in this direction was made during the last NATO summit in Warsaw, in July 2016. A decision about the deployment of four battalion size battle groups in the Baltic States and Poland, together with the U.S heavy brigade size battle group in Poland within Enhanced Forward Presence (EFP) ought to show Moscow that the NATO is ready to deploy its troops even in the region where Russia has supremacy in conventional combat capabilities. Nevertheless, this positive stance from the NATO side should be supported by investment in equipment

that provides capability to defeat both the offensive and defensive components of Russian A2/AD systems.

Third, the NATO ought to invest in preparation of its members' armed forces to operate in the Eastern European area of operation. This is because, after the years of training and equipping troops for non-Article 5 mission in Afghanistan, a significant number of states has armed forces which are not combat ready to execute Article 5 missions (Korteweg and Besch, 2016). As a result, the NATO must establish new training policy responding to current threats caused by Russian revisionism. One of the objectives of military exercises ought to be increased readiness of NATO's forces to move across Europe. Next, scenarios of exercises ought to include identified and predicted threats caused by Russian A2/AD systems and training objectives should force commanders to deal with them and to accomplish a mission with minimum human losses.

To start the intellectualisation of political measures, the NATO should first closely cooperate with countries like Sweden and Finland to avert a Russian attack on Finnish and Swedish islands. A reason is that the occupation of these islands would allow for enlarging the impact zones of Russian A2/AD systems. Thus, the NATO ought to promote defence cooperation between Sweden, Finland and its member states like Poland, Lithuania, Latvia and Estonia (Korteweg and Besch, 2016).

Second, the NATO ought to use all possible political measures to prevent the transfer of modern technologies which may be used by Russia to enhance further possessed A2/AD capabilities. At the same time, politicians should promote building a positive attitude among decision makers and public to develop NATO's necessary capabilities in this area.

Finally, attempts to run a peace dialogue with Russia ought not to be stopped because convincing Moscow that the NATO is not against Russia is the best but at the same time, the most challenging way to counter threats to the European security implicated by the A2/AD systems.

## Conclusion

Analysis of the accessible literature allows for a clear statement to be made that 'anti-access' and 'area-denial' are relatively new definitions related to combat strategies, and that the core idea of denying an opponent's access to the territory strategic for defender is defensive in nature.

Then, trying to answer whether modern A2/AD systems are defensive or offensive in character, the given answer can be that the systems are both, as combat systems are not only defensive or offensive in character nowadays. So, almost any technical system can have both the defensive and offensive use. Even more, offensive combat tools can be used as a key element of defensive strategy.

The above mentioned phenomenon of modern, complex combat systems allowed Russia to build up A2/AD capabilities, which are recognized as very efficient during defensive operations. On the other hand, the systems provide the ability to carry out offensive operations in accordance with the old rule – attack effectively first and the A2/AD bubbles could facilitate it within their range. Moreover, the capabilities are a key element of efforts to rebuild Russia's superpower position in the Baltic and Black Sea regions. Thus, Russian A2/AD systems – in that theatre – are more ofensive than defensive in character.

Finally, threats caused by the systems are forcing NATO to be prepared as soon as possible to counter Russian supremacy in conventional A2/AD capabilities and to be

fully prepared to conduct collective defence in accordance with the Article 5 of the NATO Treaty. If this is not done, Russia will achieve its strategic goal, which is the destabilisation of NATO members' solidarity and unity. Furthermore, Russia will be able to restore the former Soviet sphere of political and economic influence, including NATO members like Estonia, Latvia, Lithuania, Poland, Romania, and Bulgaria. Thus, the Russian systems pose real threats to the security order in the eastern part of Europe.

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