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IOANNA-NIKOLETTA ZYGA

NATO-RUSSIA RELATIONS AND MISSILE DEFENSE:
“STICKING POINT” OR “GAME CHANGER”?

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The publication discusses the NATO/U.S. -Russia deadlock over missile defense and explores the factors behind Russia's claims and concerns. In doing so, the paper analyzes strategic stability, which is the dominant theme in Russia's opposition to the deployment of a ballistic missile defense, assesses whether the planned NATO missile defense architecture adversely affects Russia's strategic capabilities, describes the obstacles to cooperation on missile defense, and suggests prospects for cooperation between Russia and NATO/U.S. in the sphere of missile defense.

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I alone am responsible for any mistakes within this paper.

LIST OF ABBREVIATIONS AND ACRONYMS

ABM Treaty	Anti-Ballistic Missile Treaty
ALTBMD	Active Layered Theater Ballistic Missile Defense
AN/TPY-2	Army Navy/Transportable Radar Surveillance System
BMD	Ballistic Missile Defense
CFE Treaty	The Treaty on Conventional Armed Forces in Europe
CTBT	Comprehensive Nuclear Test- Ban Treaty
DTCA	Defense Technical Cooperation Agreement
EPAA	European Phased Adaptive Approach
FMCT	Fissile Material Cut-Off Treaty
FY	Fiscal Year
ICBM	Intercontinental Ballistic Missile
INF Treaty	Treaty on the Elimination of Their Intermediate-Range and Shorter-Range Missiles
ISAF	International Security Assistance Force
MAD	Mutual Assured Destruction
MIRV	Multiple Independently Targeted Reentry Vehicle
NATO	North Atlantic Treaty Organization
NIE	National Intelligence Estimate
NMD	National Missile Defense
NRC	NATO-Russia Council
RAMOS	Russian-American Observation Satellite Program
SAP-2020	State Armaments Program to 2020
SDI	Strategic Defense Initiative
SM-3	Standard Missile 3
SORT	Strategic Offensive Reductions Treaty
START	Strategic Arms Reduction Treaty
THAAD	Theater High Altitude Area Defense
TMD	Theater Missile Defense
VKO	Air-Space Defense

NATO-RUSSIA RELATIONS AND MISSILE DEFENSE: “STICKING POINT” OR “GAME CHANGER”?¹

I. Introduction

At the November 2010 Summit in Lisbon, the leaders of the North Atlantic Treaty Organization's (NATO's) 28 member countries agreed that missile defense constitutes a core element of the Alliance's collective defense and decided to develop a missile defense capability with the aim of protecting its “populations, territories and forces against the growing threat of ballistic missile attack.”² To this end, NATO's Active Layered Theater Ballistic Missile Defense (ALTBMD) – designed to protect NATO's deployed forces – will be expanded and integrated with the U.S. European Phased Adaptive Approach (EPAA), which was endorsed by the Alliance Heads of State as a “valuable national contribution” to NATO's missile defense plans. Equally important is that during the meeting of the NATO-Russia Council (NRC) on November 21, NATO leaders invited Russia to cooperate with NATO in the area of missile defense. At the NRC meeting, then-Russian President Dmitry Medvedev pledged his support for cooperation with NATO on missile defense. The NRC Joint Statement reads as follows:

We agreed to discuss pursuing missile defense cooperation. We agreed on a joint ballistic missile threat assessment and to continue dialogue in this area. The NRC will also resume Theater Missile Defense Cooperation. We have tasked the NRC to develop a comprehensive Joint Analysis of the future framework for missile defense cooperation.³

More than a year and a half after the Lisbon summit, however, the NATO-Russia negotiations for cooperation on missile defense have yet to produce a serious breakthrough. Initially, Medvedev proposed that NATO and Russia should build a “sectoral” missile defense shield; according to the sectoral approach, the two sides would jointly develop a system with full-scale interoperability that would protect both NATO's European territories and Russian territories against ballistic missile threats posed by Iran and other states. A sectoral missile defense system would purportedly give Russia “red button” rights, thus allowing Russia and NATO to assume responsibility to defend against incoming missiles over a specific sector of Europe. Medvedev's sectoral approach was a nonstarter for the Alliance, which supports a fundamentally different approach: the development of two independent missile defense systems that will coordinate with each other.

Subsequently, missile defense became a source of acute tension between Russia on the one hand and NATO and the U.S. on the other. Ultimately, NATO officially rejected Medvedev's plans in June 2010. “Our territorial missile defense system will be part of our collective defense framework. We cannot outsource our collective

¹ This material will be published as a charter of the Carnegie Moscow Center book, *World In Their Hands: Ideas From the Next Generation*.

² NATO, *Lisbon Summit Declaration Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Lisbon*, 2010, http://www.nato.int/cps/en/natolive/official_texts_68828.htm.

³ NATO-Russia Council, *NRC Joint Statement at the meeting of the NATO-Russia Council held in Lisbon*, 2010, <http://www.nato-russia-council.info/en/official-documents/official-document-11/>.

defense obligations to non-NATO members,” NATO Secretary General Anders Fogh Rasmussen stated during a speech on missile defense at the Royal United Services Institute.⁴ NATO’s vision entails the deployment of “two separate systems with the same goal, which could be made visible in practice by establishing two joint missile defense centers, one for sharing data and the other to support planning.”⁵

For their part, Russian political and military leaders have waged a fierce campaign against NATO missile defense plans. The nucleus of the problem is that despite assurances by both NATO and U.S. officials that the system aims to protect against a growing ballistic missile threat, especially against an Iranian missile threat, Russia claims that the planned system is targeted against it and will negate its nuclear deterrent. Russia’s syllogism is as follows: Iran does not pose a threat to the U.S. and its European allies; therefore, the only reason to deploy the system is to target Russia. In particular, Moscow has not stopped its demands for a legally binding pledge that the missile defense will not negate its strategic deterrent. After Spain reached an agreement with the U.S. to host elements of the planned missile defense system on its territory, the Russian Ministry of Foreign Affairs issued an announcement urging Washington to provide legal guarantees that the planned missile defense system will not be directed against Russia’s strategic nuclear forces.⁶ Moscow issued a similar statement following Bucharest’s agreement to deploy a missile interceptor base.⁷

Senior Russian government officials also voiced their opposition to the European missile defense plans. “Any attempts by those in NATO who dream of neutralizing our strategic potential will be futile,”⁸ said Russia’s former Envoy to NATO and current Deputy Prime Minister Dmitry Rogozin. Then-President Medvedev even went as far as to say that failure to reach agreement on missile defense might provoke a new arms race: “In the next 10 years, the following alternatives await us – either we reach agreement on missile defense and create a full joint cooperation mechanism, or, if we don’t go into a constructive agreement, a new phase of the arms race might begin.”⁹ In a more recent statement, labeled by many analysts as “Cold War rhetoric,” Medvedev stated: “If the situation continues to develop not to Russia’s favor, we reserve the right to discontinue further disarmament and arms control measures.”¹⁰ The Russian Chief

⁴ RUSI, “the Secretary General’s Speech,” Speech delivered at the Twelfth RUSI Missile Defense Conference, Whitehall, London, June 15, 2011, <http://www.rusi.org/events/past/ref:E4CF77C90E3362/info:public/infoID:E4DF8CB5F15F42/>.

⁵ NATO, *The Secretary General’s Annual Report 2011*, p.10, http://www.nato.int/cps/en/natolive/news_83709.htm.

⁶ Ministry of Foreign Affairs of Russia, *Commentary of the Ministry of Foreign Affairs of Russia regarding the agreement between the United States and Spain to base four ships with SM-3 interceptor missiles and Aegis missile weapons control systems on Spanish territory* [Kommentarii MID Rossii otnositelno dogovorennosti SSHA i Ispanii o bazirovanii na ispanskoj territorii chetyrekh korablei s protivoraketami SM-3 i sistemoi upravleniya raketnym oruzhiem “Aegis”], 2010, http://www.mid.ru/brp_4.nsf/newline/A55194AF2E96CB7DC32579210020AA15.

⁷ Ministry of Foreign Affairs of Russia, *Commentary of the Ministry of Foreign Affairs of the Russian Federation in regards to the conclusion of an agreement between the United States of America and Romania with respect to the location of the deployment of US missile defense system ground-based interceptor missiles on the territory of Romania* [Kommentarii MID Rossii v svyazi s soobshcheniem o dostizhenii dogovorennosti mezhdru SSHA i Rumyniei otnositelno mesta razmeshcheniya bazy raket-perekhvatchikov PRO SSHA na territorii Rumynii], 2011, http://www.ln.mid.ru/brp_4.nsf/0/3185C6529A233985C3257885005AADC9.

⁸ “Russia will counter any NATO missile defense – Russian Envoy,” *Ria Novosti*, June 7, 2011, <http://en.rian.ru/russia/20110607/164499336.html>.

⁹ “Russian president warns missile talks failure will provoke new arms race,” *Guardian*, November 30, 2010, <http://www.guardian.co.uk/world/2010/nov/30/russian-president-medvedev-arms-race>.

¹⁰ President of Russia, *Statement in connection with the situation concerning the NATO countries’ missile defense system in Europe*, 2011, <http://eng.kremlin.ru/news/3115>.

of the General Staff Nikolay Makarov argued that “the unilateral measures taken by NATO do not promote security and stability in the region.”¹¹

Currently, talks on missile defense are progressing, but very slowly, mainly because Russia remains unconvinced that its deterrent will not be undermined – a position consistently and repeatedly stated by top-level Russian officials.

At present, the development of a NATO-Russia joint missile defense system is not a viable option, mainly due to political, not technical, constraints. In short, the level of trust between the two sides prohibits such an undertaking. The aim of a joint missile defense shield would be to protect against a common threat, and Russia’s and NATO’s threat perceptions differ significantly. What is more, the joint deployment of a missile defense would imply that NATO and Russia have a genuine security partnership, like the one enshrined by the Alliance’s Article 5. Unfortunately, this is not the case.

However, one need not conclude that NATO and Russia cannot cooperate on missile defense. So far the two sides have managed to cooperate successfully on a series of issues of mutual concern: Russia is a valuable partner supporting the NATO-led International Security Assistance Force (ISAF); it cooperates with NATO in the fight against terrorism; it works together with NATO allies to train Afghan and Central Asian forces in counter-narcotics operations; it cooperates with NATO in counter-piracy initiatives; and finally, NATO and Russia have a history of cooperation in the field of theater missile defense (TMD).

In the sphere of missile defense, the best way to move forward would be to implement confidence-building measures (CBM) that will allow for greater transparency regarding the system’s capabilities and contribute to strengthening mutual relations. It is important to note that even legally binding agreements can be scrapped. Given that Russia is particularly worried about the system’s latest phases – the deployment of which will take place in the 2018 time frame – the two sides should proceed with the implementation of confidence-building measures in the interim and then reassess the missile threat as well as the potential for coordination between Russia’s newly created Air-Space Defense (*Vozdushno-Kosmicheskaya Oborona* – VKO) and the European missile defense system.

This paper seeks to analyze the factors behind Russia’s concerns and claims. In doing so, it will address the following questions:

- What accounts for Russia’s continued emphasis on strategic stability in the post-Cold War security landscape, and why does Russia emphasize strategic stability as the dominant theme in its opposition to the deployment of a ballistic missile defense system?
- Can the planned NATO missile defense architecture adversely affect Russia’s strategic capabilities?

¹¹ “Top Russian general: NATO’s unilateral measures harming regional stability,” *Russia Today*, October 10, 2011, <http://rt.com/politics/nato-makarov-russia-stavridis-467/>.

- Which factors serve as impediments to NATO-Russia cooperation on missile defense?
- What are the prospects for cooperation between Russia and NATO/the U.S. in the sphere of missile defense?

For the purposes of this analysis, a time frame up to the year 2020 is adopted for the following reasons: first, the New START Treaty (Treaty between the United States of America and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms) will expire in 2020, which subsequently means that both Russia and the U.S. will not be constrained by the Treaty and will be able to build up their nuclear potential; second, the time frame for the completion of the EPAA's fourth and last phase is 2020; third, completion of Russia's military modernization under the latest State Armaments Program is scheduled for 2020.

II. Strategic Stability and Its Importance for Russia

The doctrine of strategic stability was formulated during the Cold War, and in particular, during talks on limiting the strategic weapons of the Soviet Union and the United States. As David Holloway observed:

In the United States strategic stability came to prominence in the 1960s in the context of growing interest in arms control. It has usually been understood to consist of two elements: crisis stability and arms race stability. These elements are related because fears about present or future crisis stability could help to fuel an arms race, while an arms race could arouse fears about crisis stability in the future.¹²

Crisis stability is a situation where an all-out war is not likely. Neither side is inclined to launch the first strike because they know that after the attack, their opponent will have sufficient surviving forces to allow for a retaliatory strike that would cause unacceptable damage to the aggressor. Arms race stability describes a situation where neither side aims to bolster its nuclear potential. The Soviet planners developed both broad and narrow definitions of the strategic stability approach:

In its broad sense, strategic stability was viewed as a state in which a series of political, economic, military and other steps taken by opposing parties (coalitions) resulted in neither being able to commit military aggression. In its narrow sense, strategic stability was understood as a state of nations' strategic armed forces relations, and of relations between the states (coalitions) themselves that featured a fairly equal balance of military capabilities. This state further implied that neither party would attempt to alter its military balance of forces or try (by military means) to establish supremacy over the other for a fairly long period of time.¹³

¹² David Holloway, "Strategic Stability, Strategic Cooperation, and Missile Defense," (paper prepared for the workshop on Cooperation in Early Warning and Ballistic Missile Defense, CISAC, Stanford University, April 25-28, 2011).

¹³ Vladimir Dvorkin, "Deterrence and Strategic Stability" ["Sderzhivanie i strategicheskaya stabilnost"], in *Nuclear Reset: Arms Reduction and Nonproliferation*, ed. Alexei Arbatov and Vladimir Dvorkin, (Moscow: Carnegie Moscow Center, 2011), pp. 23-45.

Although strategic stability served as the intellectual foundation of both U.S. and Soviet national security policies, American and Soviet strategic thinkers used different terminologies to describe the concept. Prior to accepting strategic stability as the keystone of their national security policy, the principle of “equal security” – according to which the parties were to take into consideration all the factors that defined their security¹⁴ – was used by Soviet strategic thinkers. The term “strategic stability” was used for the first time in a joint document in the U.S.-Soviet Treaty on the Elimination of their Intermediate-Range and Shorter-Range Missiles (INF), adopted in 1987. The document states that the two parties are “guided by the objective of strengthening strategic stability.”¹⁵ The term was explicitly defined in the U.S.-Soviet Joint Statement on the Treaty on Strategic Offensive Arms of 1990, according to which “strategic stability was understood as such balance of strategic forces of the USSR and the U.S. (or such state of the two powers’ strategic relations) where there were no incentives for a first strike.”¹⁶ In other words, strategic stability posited that the two adversaries were deterred from initiating a strategic war vis-à-vis the other because they were vulnerable to a retaliatory strike that would inflict “unacceptable damage,” thus preserving crisis stability. Since then, the term has been codified, both in a series of arms control treaties signed by the two parties, and in key national security documents.

Despite the end of the Cold War, the nuclear war-fighting posture of strategic stability and nuclear deterrence persists and dictates strategic thinking in both the U.S. and Russia. For the reasons analyzed below, the strategic stability doctrine has had a more potent effect on Russia’s strategic planning.

To begin with, Russia ascribes more importance to its nuclear arsenal than the U.S. does. The reason is twofold. First, in military terms, the tumultuous political and economic changes that Russia experienced after the dissolution of the Soviet Union adversely affected the Russian defense industry and armed forces; this turmoil resulted in a significant deterioration of Russia’s conventional military capabilities. Subsequently, the country can only rely on its nuclear arsenal to serve as the main pillar of its national security; to put it in the words of the chief of the General Staff of the Armed Forces of the Russian Federation, General Nikolay Makarov, “nuclear weapons constitute the basic deterrent of the Russian army.”¹⁷ This reliance on nuclear weapons is demonstrated in the latest military doctrine, wherein the Russian Federation reserves the right to use nuclear weapons to respond to the use of nuclear and other types of weapons of mass destruction against it and/or its allies, as well as in the case of aggression against the Russian Federation involving the use of conventional weapons when the very existence

¹⁴ Alexander Savelyev, “Russian Defense and Arms Control Policy and Its Prospects After the Presidential Elections,” *Research Unit on International Security and Cooperation (UNISCI) Discussion Papers*, no. 17 (May 2008): p. 95, <http://www.ucm.es/info/unisci/revistas/UNISCI%20DP%2017%20-%20Savelyev.pdf>.

¹⁵ “Treaty between the United States of America and the Union of Soviet Socialist Republics on the Elimination of Their Intermediate-Range and Shorter-Range Missiles,” 1987, <http://www.fas.org/nuke/control/inf/text/inf.htm>.

¹⁶ Alexei Arbatov, Vladimir Dvorkin, Alexander Pikaev, and Sergey Oznobishchev, *Strategic Stability after the Cold War* (IMEMO RAN, 2010), p.13, http://www.nuclearsecurityproject.org/uploads/publications/STRATEGICSTABILITYAFTERTHECOLDWAR_020211.pdf.

¹⁷ “Armed Forces General Staff considers nuclear weapons a major deterrent” [“Genshtab VS rassmatrivaet yadernoe oruzhie osnovnym sderzhivayushchim faktorom”], *Ria Novosti*, February 9, 2009, <http://www.rian.ru/defense_safety/20090209/161481315.html>.

of the state is under threat.¹⁸ Second, in political terms, Russia's nuclear arsenal serves as a symbol of great power status.¹⁹

Russia is greatly concerned about the overwhelming U.S. military superiority. A source of growing concern among Moscow's strategic planners is the conventional long-range precision guided weapons that the U.S. possesses, allowing it to destroy installations in Russia while using conventional means of warfare. These weapons are "believed to present a threat almost equal to that from strategic nuclear weapons."²⁰ As Evgeni Miasnikov observes, "even modern ICBM silos may be vulnerable to precision guided weapons."²¹ Vladimir Putin also noted that in the future these weapons will be used as "weapons to achieve decisive victory over the enemy, including in a global conflict."²²

Third, although the strategic stability doctrine was crafted within the context of the East-West conflict and today the chance that a nuclear war between Russia and the U.S. will occur has been significantly reduced, the possibility cannot be completely dismissed. In Dmitri Trenin's words, "in today's world, America and Russia are no longer adversaries, but they have not become allies, or even full partners."²³

At a time when the Russo-American partnership is fragile, a series of U.S. actions further worried the Russian political and military elites. Given that "the dominant view in the Soviet government and military saw instability as deriving fundamentally from political factors rather than force structures" (as was the case in the U.S.),²⁴ Russian political and military elites were alarmed by a series of "destabilizing" U.S. actions: Russia condemned unilateral actions such as the U.S.-led NATO military intervention in Yugoslavia in 1999, as well as the U.S. invasion of Iraq. The perceived "degradation of the system of agreements and negotiations on disarmament on the part of the U.S. (including the ABM Treaty, the START I and START II treaties, agreements on theater missile defense-TMD of 1997, the Comprehensive Nuclear Test-Ban Treaty – CTBT, the Fissile Material Cut-Off Treaty – FMCT, and others) during the years of Republican administration, as well as the persistent policy of denouncing disarmament as a security-building means"²⁵ should also be added to the list of Russia's concerns. The aforementioned rendered credibility to skeptics in Russia, who argued that contingencies, that is, future U.S. "destabilizing" actions, should be taken into account.

¹⁸ President of Russia, *Military Doctrine of the Russian Federation* [Voennaya doktrina Rossiiskoi Federatsii], 2010, <http://news.kremlin.ru/ref_notes/461>.

¹⁹ Ibid.

²⁰ Nikolai Sokov, "New START Ratification in Russia: Apparent Smooth Sailing Obscures Submerged Drama and Revelations," Center for Nonproliferation Studies, January 25, 2011, <http://cns.miis.edu/stories/110125_russia_new_start_ratification.htm>.

²¹ Eugene Miasnikov, *Long-Range Precision-Guided Conventional Weapons: Implications for Strategic Balance, Arms Control and Non-Proliferation*, 2009, p. 4, <www.armscontrol.ru/pubs/en/em090918.pdf>.

²² Vladimir Putin, "Being Strong: National Security Guarantees for Russia," *Rossiiskaya Gazeta*, February 20, 2012, <<http://www.rg.ru/2012/02/20/putin-armiya.html>>.

²³ Dmitri Trenin, "Russia's Nuclear Policy in the 21st Century Security Environment," *IFRI Proliferation Papers*, 25:10, 2005, <http://www.ifri.org/files/Securite_defense/prolif_12_Trenin.pdf>.

²⁴ David Yost, "Strategic Stability in the Cold War. Lessons for Continuing Challenges," *IFRI Proliferation Papers*, 18, 2011, <www.ifri.org/downloads/pp36yost.pdf>.

²⁵ Arbatov et al, *Strategic Stability*, p. 27.

To summarize, Russia was engaging in arms control negotiations while, simultaneously, the role of its nuclear weapons in its strategic calculations was increasing both in military and political terms. Russia's leadership had to make sure that it would only agree to proceed with reductions in its strategic potential vis-à-vis the U.S. that would not undermine the ability of its forces to deter a potential aggression either against Russia or against its allies and that would still allow it to maintain its importance in the international arena. In brief, strategic stability became the theology that would allow Russia to optimize its strategic position in relation to the U.S.

The debate over missile defense is couched in terms of deterrence. Russian strategic thinkers adamantly argue that the two parties should only build limited defenses, otherwise they will upset strategic stability. The reasoning behind it is that if one party builds strategic missile defenses, it would gain strategic advantage, and thus would be more inclined to launch a first strike. It is for this reason that Russia viewed the Anti-Ballistic Missile Defense Treaty (ABM) as the cornerstone of "strategic stability." The treaty enshrined the nuclear doctrine by providing for "effective measures to limit antiballistic missile systems" with the aim of decreasing "the risk of outbreak of war involving nuclear weapons."²⁶

The missile defense debate between the two sides dates back to the 1960s, when the Soviets deployed a missile defense system around Moscow. Alarmed by Moscow's decision to build such a system, then-Secretary of Defense Robert McNamara proposed to Soviet Prime Minister Alexei Kosygin in 1967 that the two sides agree on limits to their respective missile defense shields. The latter's response was that "defensive systems that prevent an offensive are not the cause of the arms race, but are rather a factor that prevents human deaths."²⁷ Washington's response was the deployment of its own missile defense system to protect U.S. territory – Sentinel under President Johnson and Safeguard under President Nixon. Five years after the Glassboro Summit between McNamara and Kosygin, the two sides signed the ABM Treaty. Missile defense became an irritant in Soviet-American relations yet again in the early 1980s, when Reagan decided to pursue his notorious Strategic Defense Initiative (SDI), a defensive shield to protect against nuclear missiles deployed by the Soviet Union. The Soviets decried the administration's plans and actively promulgated that SDI would diminish their nuclear deterrent. This position was clearly articulated in General Secretary of the Soviet Union Andropov's response to Reagan's Star Wars Speech: "The United States intends to sever this interconnection [between strategic offensive and defensive weapons]. Should this conception be translated into reality, it would in fact open the floodgates to a runaway."²⁸ Reagan believed that nuclear deterrence is akin to "having two westerners standing in a saloon aiming their guns at each other's head – permanently. There had to be a better way,"²⁹ he argued. In line with his beliefs, Reagan abhorred the Mutual Assured Destruction doctrine, which his administration inherited. A missile defense shield was therefore needed

²⁶ "Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems," 1972, <<http://www.fas.org/nuke/control/abmt/text/abm2.htm>>.

²⁷ Andrei Kokoshin, "Ensuring Strategic Stability in the Past and Present: Theoretical and Applied Questions," Belfer Center, 2011, p. 13, <http://belfercenter.ksg.harvard.edu/publication/21157/ensuring_strategic_stability_in_the_past_and_present.html?breadcrumb=%2Fexperts%2F1714%2Fandrei_a_kokoshin>.

²⁸ Quoted in David Holloway, "The Strategic Defense Initiative and the Soviet Union," *Daedalus*, 114 (1985): p. 265, <<http://www.jstor.org/stable/20024993>>.

²⁹ Ronald Reagan, *An American Life* (New York: Simon and Schuster, 1990), p. 548.

to render nuclear weapons “impotent and obsolete.” Eventually, concerns over the system’s technical feasibility as well as a series of economic and political reasons led to the program’s termination.

When momentum resurfaced in the U.S. in the late 1990s for the deployment of a nationwide ballistic missile defense shield, or the so-called National Missile Defense (NMD) system, Russia again raised its concerns. During the U.S.-Russia Summit held in 2000, the Russian Minister of Defense underscored that the planned limited NMD programs “would mean pulling out of the 1972 Anti-Ballistic Missile Treaty” and said that “the U.S. proposal would mean restarting the arms race.”³⁰ The Clinton administration did recognize that if deployed, the system would violate the terms of the ABM Treaty and didn’t want the U.S. to go beyond the limits set by the Treaty. In line with this view, the administration actually sought a “Russian agreement to modify the ABM Treaty to allow ‘limited national defenses.’”³¹ Despite the administration’s efforts to address Russian concerns, Moscow opposed the proposed amendments to the ABM Treaty. The Clinton administration’s plans eventually faded away due to perceived doubts about the program’s technical feasibility.

Shortly after George W. Bush assumed office, the administration announced its plans to deploy a robust missile defense system. During a speech at the National Defense University on May 1, 2001, Bush revealed his plans to build a missile defense system and announced his decision to abrogate the ABM Treaty. To Bush, the U.S. needed “a new framework that allows us to build missile defenses to counter the different threats of today’s world.” To do so, Bush argued, “we must move beyond the constraints of the 30-year-old ABM Treaty [which] ...does not recognize the present or point us to the future [but] ...enshrines the past.”³² Reportedly, prior to the U.S. announcement of the abrogation of the ABM Treaty, Bush and Putin held “3 days of talks,” but ultimately “failed to reach an agreement that would permit the United States to move forward with its missile defense plans.”³³ Putin labeled the U.S. withdrawal a “mistake,” while also emphasizing the significance of “strengthening strategic stability and international security.”³⁴ From Russia’s perspective, the abrogation of the ABM Treaty served to bring the U.S. one step closer toward obtaining first strike capability. From the very first moment, Moscow vigorously opposed Washington’s plans to station a missile defense system, the so-called “Third Site,” in Poland and the Czech Republic, claiming it was designed to counter Russian missiles.

The Obama administration’s decision to shelve the Bush administration’s plans initially toned down Russia’s rhetoric. The Obama administration came to office seeking to improve relations with Russia, and indeed, the signing of the New START

³⁰ Jim Garamone, “Russia, US agree to Expand Cooperation, Disagree on NMD,” *American Forces Press Service*, June 14, 2000, <http://www.fas.org/nuke/control/abmt/news/n06142000_20006141.html>.

³¹ Stephen Young, “Pushing the Limits. The Decision on National Missile Defense,” *Coalition to Reduce the Nuclear Dangers/ Council for a Livable World Education Fund*, vii, 2000, <<http://www.missilethreat.com/repository/doclib/20000700-CRND-CLW-pushinglimits.pdf>>.

³² President Bush’s Speech on Nuclear Strategy (delivered at the National Defense University, Washington D.C, May 01, 2001), <<http://www.armscontrol.org/print/857>>.

³³ Lynn Resten, “US Withdrawal from the Antiballistic Missile Defense Treaty,” Center for the Study of Weapons of Mass Destruction, National Defense University Case Studies Series, <<http://www.ndu.edu/press/lib/images/occasionalPapers/cswmd-cs2.pdf>>.

³⁴ Savelyev, “Russian Defense,” p. 101.

Treaty was among the “reset” policy’s major achievements. Precisely because the text of the Treaty only notes that an interrelation between offense and defense exists and imposes no limits on missile defense deployment by the parties, the Russian Duma adopted a resolution upon ratification with the aim of underscoring the importance of missile defenses for preserving strategic stability. In this resolution, the interrelationship between offensive and defensive weapons was reinstated, and it was noted that “this interrelationship will become more important as strategic nuclear arms are reduced.” It also bears noting that Russia maintains the right to withdraw from the New START Treaty in case of extraordinary events that jeopardize its supreme interests and lists as such the “deployment by the United States of America, another state, or a group of states of a missile defense system capable of significantly reducing the effectiveness of the Russian Federation’s strategic nuclear forces.” It also emphasizes that “the Russian Federation shall be on alert about deployment by other states of missile defense systems and their effect on the capacity of the Russian Federation’s strategic nuclear forces.”³⁵

Initially, Russia welcomed Obama’s announcement of his European Phased Adaptive Approach and called for further dialogue. Nevertheless, following NATO’s rejection of Medvedev’s sectoral approach, which would entail the development of a joint missile defense system, Russia hardened its position and started railing against the revamped missile defense plan. Currently, Russian officials question the argument NATO and the U.S. make that the missile defense architecture will be deployed against the potential threat that emanates from Iran. They claim that Iran won’t have the capability to attack the U.S. or Europe for some time; therefore, the system must be aimed against Russia. Moscow is worried that the deployment of such a system will signal the convergence of American offensive and defensive systems in a first-strike capability, thus eroding Russia’s strategic deterrent.

III. The European Phased Adaptive Approach

In September 2009, the Obama administration announced it would scrap the Bush administration’s plan to which Russia strenuously objected in favor of a phased, adaptive approach. The administration’s European Phased Adaptive Approach consists of four phases:³⁶

- In Phase One (in the 2011 time frame), current and proven missile defense systems available in the following two years, including the sea-based Aegis Weapon Systems, the SM-3 interceptors (Block IA), and sensors such as the forward-based Army Navy/Transportable Radar Surveillance systems (AN/TPY-2), would be deployed to address regional ballistic missile threats to Europe and to deployed personnel and their families;

³⁵ Federal Law N 1-F3 of the Russian Federation of January 28, 2011, on “The Ratification of the Treaty between the Russian Federation and the United States of America on ‘Measures for the Further Reduction and Limitation of Strategic Offensive Arms’” [Federalnyi zakon Rossiiskoi Federatsii ot 28 yanvaria 2011 g. N. 1-F3 “O ratifikatsii Dogovora mezhdu Rossiiskoi Federatsiei i Soedinennymi Shtatami Ameriki ‘o merakh po dalneishemu sokrashcheniu i ogranicheniu strategicheskikh nastupatelnykh vooruzhenii’”], <http://m.rg.ru/2011/02/01/snv-dok.html>.

³⁶ The White House, A “Phased, Adaptive Approach” for Missile Defense in Europe. Fact Sheet on U.S. Missile Defense Policy, 2009, <http://www.whitehouse.gov/the_press_office/FACT-SHEET-US-Missile-Defense-Policy-A-Phased-Adaptive-Approach-for-Missile-Defense-in-Europe/>.

- In Phase Two (in the 2015 time frame), after appropriate testing, a more capable version of the SM-3 interceptor (Block IB) in both sea- and land-based configurations, and more advanced sensors will be deployed to expand the defended area against short- and medium-range missile threats;
- In Phase Three (in the 2018 time frame), after development and testing are complete, the more advanced SM-3 Block IIA variant currently under development will be deployed to counter short-, medium-, and intermediate-range missile threats; and
- In Phase Four (in the 2020 time frame), after development and testing are complete, the SM-3 Block IIB will be deployed to help better cope with medium- and intermediate-range missiles and a potential future ICBM threat to the United States.

All four phases will include upgrades to the missile defense command and control system.

So far, significant progress has been made. The U.S. is deploying a missile defense-capable ship to the Mediterranean, Turkey agreed to host an early warning (AN/TPY-2) radar, which was launched on January 1, 2012,³⁷ and by the end of the fiscal year 2011, the regional missile defense capabilities would consist of 26 THAAD interceptors and 107 SM-3 interceptors.³⁸ The next important step in NATO's missile defense progress came at the Chicago Summit in May 2012, during which NATO announced that it has achieved an interim ballistic missile defense capability, which means that the "Allies will start operating under the same 'playbook.'" ³⁹

For Russia, the issue is not Phase I or II, but Phases III and IV, during which more capable versions of the SM-3 interceptors will be deployed. Russia is particularly concerned about Phase IV, when SM-3 IIB is scheduled to be deployed in order to defend against Intercontinental Ballistic Missiles (ICBMs). Russian concerns are reflected in then-President Medvedev's statements. Following his bilateral meeting with President Obama in Deauville, during a press conference Medvedev said: "This issue [missile defense] will be finally solved in the future, like, for example, in the year 2020, but we, at present, might lay the foundation for other politicians' activities."⁴⁰ In another statement, Medvedev also stated, clearly referring to Phases III and IV of the EPAA, that Russia "will not agree to take part in a program that in a short while, in some 6 to 8 years' time, could weaken our nuclear deterrent capability."⁴¹

Russia's strategic nuclear deterrent is based on the rapid-launch capability of its intercontinental ballistic missiles, which constitute "the key component of the

³⁷ Serkan Demirtas, "NATO radar system up, running," *Hurriyet Daily News*, January 14, 2011, <<http://www.hurriyetdailynews.com/nato-radar-system-in-turkey-up-running.aspx?pageID=238&nID=11474&NewsCatID=338>>.

³⁸ Ellen Tauscher, "Remarks as Prepared for Delivery at the Ninth Annual US Missile Defense Agency Conference, Washington D.C., March 21, 2011," <<http://www.state.gov/t/us/158733.htm>>.

³⁹ Ellen Tauscher, "Ballistic Missile Defense: Progress and Prospects," (Remarks at the Tenth Annual Missile Defense Conference, Washington, D.C., March, 26, 2012), <http://www.state.gov/t/186824.htm>.

⁴⁰ The White House, "Remarks by President Obama and President Medvedev of Russia after Bilateral Meeting in Deauville, France," (May 26, 2011), <<http://www.whitehouse.gov/the-press-office/2011/05/26/remarks-president-obama-and-president-medvedev-russia-after-bilateral-me>>.

⁴¹ Dmitry Medvedev, *Statement in connection with the situation concerning the NATO countries' missile defense system in Europe*, 2011, <<http://eng.kremlin.ru/news/3115>>.

strategic triad.”⁴² Moscow is worried that the NATO missile defense shield would be able to negate Russia’s deterrent because the interceptors could develop speed that would allow them to “kill” Russian ICBM warheads on their flight path to the United States.

The SM-3 interceptors will be located at land-based sites and on vessels. The two land-based BMD systems in Europe will be deployed in Romania and Poland by 2015 and 2018, respectively. Initially, “each of these Aegis Ashore sites, as they are called, would include, among other things, a land-based Aegis SPY-1 radar and 24 SM-3 missiles.”⁴³ By fiscal year 2018, around 500 SM-3 Block II interceptors will be deployed on 32 BMD-capable Aegis ships (not all of which will be stationed in Europe) and the two missile defense interceptor sites.⁴⁴

The SM Block I interceptors “have a 21-inch-diameter booster stage at the bottom but are 13.5 inches in diameter along the remainder of their lengths.” The Block IIA version is to have a 21-inch diameter along its entire length, and this increase in diameter “to a uniform 21 inches provides more room for rocket fuel, permitting the Block IIA version to have a burnout velocity of 3.0 to 3.5 kilometers per second that is 45% to 60% greater than that of the Block IA and IB versions, as well as a larger-diameter kinetic warhead.”⁴⁵

Compared to SM-3 IIA, the more advanced SM-3 Block IIB will have “a higher burnout velocity and greater divert capability,” which will make it possible for the SM-3 Block II to have limited early-intercept capability against ICBMs. Given that “the SM-3 Block I versions have a reported burnout velocity of 3.0 to 3.5 km/sec,” the SM-3 Block II missiles are expected to have a burnout speed that “could reach ~5.5 km/sec.”⁴⁶

Indeed, as Yousaf Butt and Theodore Postol, two prominent experts in the missile defense field and critics of the proposed missile defense system, demonstrate in their recent study,⁴⁷ the system will have some inherent capability to reach or engage Russian ICBMs on their flight path to the U.S. only under certain circumstances. Yet, the SM-3 missiles could only intercept missiles launched from Russian bases closer to Russia’s borders with Europe. To put it in the words of Lieutenant General Patrick O’Reilly, who serves as the director of the Missile Defense Agency (MDA), the planned Standard Missile-3 interceptors “would be ineffective as anti-missile interceptors against a country like Russia, whose strategic deterrent missiles are launched from deep inside its territory.”⁴⁸ As leading Russian security expert Alexei Arbatov notes, regarding the

⁴² Pavel Podvig, “Russia’s Nuclear Forces: Between Disarmament and Modernization,” *IFRI Proliferation Papers*, 2011, p. 9, <www.ifri.org/downloads/pp37podvig.pdf>.

⁴³ Ronald O’Rourke, *Navy Aegis Ballistic Missile Defense (BMD) program: Background and Issues for Congress*, Congressional Research Service, 2011, p. 6, <www.fas.org/sgp/crs/weapons/RL33745.pdf>.

⁴⁴ *Ibid.*, p. 8.

⁴⁵ *Ibid.*, pp. 3-4.

⁴⁶ Yousaf Butt and Theodore Postol, *Upsetting the Reset: The Technical Basis of Russian Concern over NATO Missile Defense*, special report for the Federation of American Scientists, (2011), p.19. <http://www.fas.org/pubs/_docs/2011%20Missile%20Defense%20Report.pdf>.

⁴⁷ *Ibid.*

⁴⁸ Quoted in Susan Cornwell and Jim Wolf, “U.S invites Russia to measure missile defense test,” *Reuters*, October 18, 2011, <<http://www.reuters.com/article/2011/10/18/us-russia-usa-missiles-idUSTRE79H80D20111018>>.

debate over the proximity of the EPAA to Russian borders, “EPAA would theoretically affect a relatively small part of the strategic resources deployed in three Western bases of the Russian Strategic Forces, which are located on European territory, but would not affect the main missile forces deep inside the country’s territory, and beyond the Urals.”⁴⁹

Even more importantly, the fact that these missiles (which do not account for more than 10-15 percent of Russia’s strategic forces) could be engaged doesn’t mean that the interceptors would actually destroy the ICBMs. The SM-3 interceptors are capable of intercepting incoming warheads during the mid-course phase of their flight, in the near vacuum of space before re-entry through the atmosphere. Yet, as Theodore Postol observes:

However, because the trajectories of lightweight decoys as well as heavy warheads are the same in the vacuum of space, it is straightforward for a missile to release dozens of simple, lightweight decoys that will be indistinguishable to infrared sensors on the interceptor or to radars on the ground. Making matters yet more problematic, it would be quite easy to inflate a balloon around the warhead, or hang material from the warhead, that would make it look different from its expected appearance to these sensors. Since the decoys and warheads would all look different from the expected appearance of the warhead, there would fundamentally be no way for the defense to identify warheads from decoys.⁵⁰

In a nutshell, the system would be vulnerable to countermeasures, and as prominent technical expert Vladimir Dvorkin notes, “highly-effective BMD penetration aids ...are installed on Russia’s missiles for use during all vulnerable stages of the trajectory.”⁵¹

What is more, Russia’s State Armaments Program to 2020 (SAP-2020) calls for the development of a new heavy ICBM. Viktor Esin, former Head of Russian strategic forces, was quoted as saying that “the government aims the missile to enter service in 2012.”⁵² The new heavy missile is expected to have a “heavy throw-weight between five and nine metric tons and a length of over 35 meters, capable of delivering a large number of warheads in a single MIRV missile.”⁵³ According to First Deputy Defense Minister Vladimir Popovkin, the new missile will “replace the existing heavy, liquid Voevoda-class missile.”⁵⁴ Pavel Podvig emphasizes that it “would be more effective

⁴⁹ Alexei Arbatov, “Escalation of Antimissile Debates” [“Eskalatsia protivoraketnykh debatov”], *Nezavisimaya Gazeta*, March 30, 2012, <http://www.ng.ru/politics/2012-01-30/3_kartblansh.html>.

⁵⁰ Butt and Postol, *Upsetting the Reset*, p. 7.

⁵¹ Vladimir Dvorkin, “U.S. Strategic and Non-Strategic Missile Defense Capabilities,” in *Nuclear Proliferation: New Technologies, Weapons, Treaties*, ed. Alexei Arbatov and Vladimir Dvorkin, pp. 134-138 (Moscow: Carnegie Moscow Center, 2009).

⁵² Dmitry Litonkin, “The Army Waits for a Fifth Generation Missile” [“Armiya zhdet piatogo pokolenia raket”], *Izvestiya*, May 13, 2011, <<http://www.izvestia.ru/news/374754>>.

⁵³ “Russia to develop new Heavy ICBM by 2020,” *Ria Novosti*, December 20, 2010, <http://en.rian.ru/russia/20101220/161856876.html>.

⁵⁴ “New heavy liquid-fuel ICBM will be developed and created in Russia – Popovkin” [“V Rossii budet razrabotana i sozdana novaya tyazhelaya zhidkostnaya MBR – V. Popovkin”], *ARMS-TASS*, February 24, 2011, <<http://armstass.su/?page=article&aid=93126&cid=25>>.

in penetrating missile defenses than the currently deployed Topol-M, since it could carry a large number of decoys and other penetration aids.”⁵⁵

That said, it is clear that the EPAA would be incapable of defending against a Russian missile threat, let alone weaken Russia’s nuclear deterrent. Indeed, Russia’s retaliatory capabilities in terms of size and technical sophistication are such that they could overwhelm the system.

Moscow is also worried about the future configuration of the system, voicing concerns that there are no guarantees the U.S. will stop fielding improved and expanded missile defenses after 2020. Russian officials claim that the prospective configuration of the U.S. missile defense system will be such that the U.S. will not have to worry about a retaliatory strike on Russia’s part in case of an attack. Strategic planners in Moscow have a specific scenario in mind: if, in the future, the U.S. attacks Russia using its high-precision conventional weapons, then Russia would not be capable of retaliating because the U.S. would have developed a global missile defense system – the Russians’ nemesis. As Dmitri Trenin states, “to demonstrate how seriously the Kremlin views that issue of U.S. missile defense capabilities, look at Russia’s national security strategy, released in May 2009. The document calls a U.S. first-strike capability, which is attainable once the United States builds a seamless global missile defense system, the most serious external military threat to Russia.”⁵⁶

This reliance on Russia’s part on predicting the worst future outcomes prohibits cooperation today. Moscow must take into consideration the limitations of ballistic missile defenses. In particular, Moscow will have to take into account the fact that the SM-3 Block II missiles are not yet at the stage of development. As former Chairman of the Joint Chiefs of Staff Admiral Michael Mullen said, “the missile you’re talking about I know doesn’t exist yet.”⁵⁷ Furthermore, critics of the system point out that the system is tested under orchestrated scenarios. For example, a “successful” intercept test of the Phased Adaptive Approach system, in line with the Obama administration’s policy to test the missiles before they are deployed, did not include countermeasures.⁵⁸ “In combat, the vast majority of ‘successful’ SM-3 experiments would have failed to destroy attacking warheads.”⁵⁹ The completion of the system is also dependent upon budget constraints, and most importantly, on whether or not the next administration will continue the program or shelve it. Even if Obama wins a second term, he will leave office in 2017, that is, before the development of Phase III is scheduled to commence. In summary, “the time-scale and technological challenges of developing and deploying missile defenses are such that there will be ample time for Russia to assess the actual character of U.S. actions.”⁶⁰

⁵⁵ Podvig, “Russia’s Nuclear Forces,” p. 11.

⁵⁶ Dmitri Trenin, “Missile Defense Could be the Silver Bullet,” *Moscow Times*, November 3, 2009, <http://carnegieendowment.org/2009/11/03/missile-defense-could-be-silver-bullet/214x>.

⁵⁷ Quoted in Tom Collina, “Missile Defense Cooperation Stalls,” *Arms Control Today*, 2011, <http://www.armscontrol.org/act/2011_%2007-08/Russia_Missile_Defense_Cooperation_Stalls>.

⁵⁸ Tom Collina, “Missile Defense Test a ‘Success’: Pentagon,” *Arms Control Today*, 2011, <http://www.armscontrol.org/act/2011_05/MissileDefense>.

⁵⁹ George Lewis and Theodore Postol, “A Flawed and Dangerous U.S. Missile Defense Plan,” *Arms Control Today*, 2010, <http://www.armscontrol.org/act/2010_05/Lewis-Postol>.

⁶⁰ Walter Slocombe, “Stability Effects of Limited Missile Defenses: The Case for the Affirmative,” Pugwash Conferences on Science and World Affairs, <<http://www.pugwash.org/reports/nw/nw14b.htm>>.

IV. Factors That Influence Russia's Attitude vis-à-vis NATO's Missile Defense

To understand the reasons behind Russia's opposition to the plans for deploying a missile defense system in Europe, a series of factors that determine Russia's aggressive rhetoric must be taken into consideration:

The "perceptions" factor. The deployment of a missile defense system in Europe is primarily a political issue, which is directly linked to Russia's perceptions about NATO and "the West" in general. Although the Cold War ended more than two decades ago, lingering Cold War stereotypes still influence Russia's assessment of NATO. This is best illustrated in the Russian Federation's latest National Security Concept, which was adopted in 2010. It suggests that "NATO's global functions, which are carried out in violation of the norms of international law, and the development of its member-countries' military infrastructure closer to the borders of the Russian Federation, including via the Bloc's expansion,"⁶¹ constitute the main external military threat to the security of the Russian Federation. This is worrisome, for the document's prioritization of threats reflects "the perceptions of the majority of the Russian political elite and strategic community" and "treats the policies, actions, and military programs of the United States and NATO as the biggest threats to Russia."⁶²

At the same time, for historical and political reasons, Russia is fiercely opposed to the deployment of NATO defense infrastructure close to its borders; Russia perceives this to be part of NATO's policy to encircle Russia. Russians categorically claim that during the negotiations for German reunification, they were assured that NATO would not expand even "one inch to the east." Moscow, hence argues that it was deceived, even up to this day. Vladimir Putin's aggressive speech during the Munich Security Conference in 2007 demonstrates this belief:

It turns out that NATO has put its frontline forces on our borders, and we ...do not react to these actions at all. I think it is obvious that NATO expansion ...represents a serious provocation that reduces the level of mutual trust. And we have the right to ask: against whom is this expansion intended? And what happened to the assurances our western partners made after the dissolution of the Warsaw Pact? Where are those declarations today? No one even remembers them. But I will allow myself to remind this audience what was said. I would like to quote the speech of NATO General Secretary Mr. Woerner in Brussels on 17 May 1990. He said at the time that: "The fact that we are ready not to place a NATO army outside of German territory gives the Soviet Union a firm security guarantee." Where are these guarantees? The stones and concrete blocks of the Berlin Wall have long been distributed as souvenirs. But we should not forget that the fall of the Berlin Wall was possible thanks to a historic choice – one that was also made by our people, the people of Russia – a choice in

⁶¹ President of Russia, *Military Doctrine*, 2010.

⁶² Alexei Arbatov, "Gambit or Endgame. The New State of Arms Control," *The Carnegie Papers* (Carnegie Moscow Center: Carnegie Endowment for International Peace, 2011), p. 5.

favor of democracy, freedom, openness and a sincere partnership with all the members of the big European family.⁶³

Indeed, there is a deep-rooted belief among Russia's political elite that Russia should have been treated better by the Western powers. The country's elites maintain that, although Russia played a crucial role in dismantling the Communist regime, not only was it unwelcomed by "the West," but also the Western powers exploited Russia's weakness during the 1990s. The political memory of what Russia considers an "abject humiliation" in that tumultuous decade combined with distrust toward NATO significantly influence Russia's perception of missile defense. Moscow maintains that, if the system is successful, it will be used as a means to exert political pressure.

Foreign policy goals. The process of establishing a common European security space from Vancouver to Vladivostok started more than two decades ago. Russia supports the idea of this indivisible security space and aims to play a decisive role in European security decision making as exemplified by Medvedev's proposed pan-European Security Treaty. Moscow perceives NATO's idea of having two independent yet coordinated systems as unwillingness on NATO's behalf to allow Russia's participation in the European security process. Furthermore, Moscow argues that its non-participation in such a system's deployment will result in the establishment of divisive lines in Europe at a time when Russia feels increasingly disaffiliated from the West, amid the U.S.-Russia clash over the conflict in Syria, the conflict over the NATO-led campaign in Libya, and the missile defense deadlock.

In this context, Russia is ratcheting up pressure, for example, by flexing its muscles and activating a missile early warning radar system in Kaliningrad in an effort to make its voice heard by its NATO partners. President Medvedev warned that "I expect that this step will be seen by our partners as the first signal of our country's readiness to make an adequate response to the threats that the missile shield poses for our strategic nuclear forces."⁶⁴

Electoral politics. To an extent, electoral politics in Russia might also have influenced Moscow's position regarding the European missile defense architecture. For example, Fedor Lukyanov has written:

The Russian public at large and a big part of its political class are instinctively seeking proof that the 1991 disintegration didn't mean Russia's disappearance from the world stage as an important actor. NATO has been seen as a successful rival and a symbol of Russia's strategic defeat, and this vision underlies the general perception.⁶⁵

It should be remembered that the country's leadership intensified pressure in regard to the missile defense debate in advance of the Russian legislative elections

⁶³ The Permanent Mission of Russia to NATO, "Vladimir Putin's Speech and the Following Discussion at the Munich Conference on International Security," 2007, <<http://www.natoomission.ru/en/print/46/14/>>.

⁶⁴ Konstantin Bogdanov, "Russia activates Radar aimed at Europe," *Ria Novosti*, November 30, 2011, <<http://en.rian.ru/analysis/20111130/169187543.html>>.

⁶⁵ Fyodor Lukyanov, "Time to Abandon Illusions," *NATO Review*, 2011, <http://www.nato.int/docu/review/2011/NATO_Russia/Abandon_Illusion/EN/index.htm>.

in December 2011, with the aim of appealing to the Russian electorate. Medvedev's special statement on missile defense came a couple of weeks before the elections.

Former allies turned foes? Russia is genuinely upset over the fact that countries that it perceives as “friendly states,” and with which Russia shares historical and cultural ties, are going to participate in a system that, as Moscow claims, is targeted against Russia.

The role of the military establishment and Russia's Air-Space Defense. In order to upgrade its armed forces, Russia adopted its State Armament Program to 2020 (SAP-2020). In total, 19 trillion rubles (about \$650 billion) will be allocated to SAP-2020, while about 10 percent of this money – about \$70 billion – will go to the strategic triad.⁶⁶ That said, one could argue that it is in the interest of Russia's military establishment to oppose cooperation with NATO on missile defense: the Russian military establishment can use the planned European missile defense shield as a means to justify such heavy military spending. Recently, First Deputy Defense Minister Alexander Sukhorukov stated that “about 15-20 percent of the SAP-2020 funding (\$97.5- \$130 billion) will be directed toward the development of the VKO (Air-Space Defense) forces.”⁶⁷ As long as NATO's missile defense is portrayed as a threat to Russia's strategic deterrent, the country's military establishment can strongly advocate the need to develop its Air-Space Defense to protect Russia against NATO and the U.S. and subsequently justify the project's costs. For comparison reasons, it should be noted that NATO's territorial missile defense system is estimated to cost less than 200 million euros over 10 years and the cost will be spread among 28 allies.⁶⁸ Additionally, individual member states are responsible for funding national capabilities, “such as sensors and interceptor missiles, expected to be ‘plugged in’ to the NATO command and control system.”⁶⁹ This is an additional investment for expanding the Alliance's Active Layered Theater Ballistic Missile Defense (ALTBMD), which aims to protect deployed NATO troops. The cost of the ALTBMD program is estimated at €800 million (approximately \$1 billion) spread over fourteen years, and shared by all of the allies.⁷⁰

At this point, it is useful to discuss Russia's missile defense program, which “is no less impressive than the U.S. missile defense program,”⁷¹ but has not received as much attention (at least in the public debates) in Europe and the U.S.

Russia's Air-Space Defense was recently instituted by the Russian President. VKO is operated by the Air-Space Defense Operational-Strategic Command, a new branch of the Russian military, which “brings together the country's air defense and missile

⁶⁶ “Russia to spend \$70 billion on Strategic Forces by 2020,” *Russian Strategic Nuclear Forces*, December 3, 2011, <http://russianforces.org/blog/2011/02/russia_to_spend_70_billion_on.shtml>.

⁶⁷ “The Russian Ministry of Defense invests up to 20% of the State Armaments Program to VKO” [“Minoborony Rossii vlozhit v VKO do 20% gosprogrammy vooruzhenii”], *Ria Novosti*, February 14, 2012, <http://ria.ru/defense_safety/20120214/565524649.html>.

⁶⁸ Anders Fogh Rasmussen, Monthly Press Briefing, May 05, 2010, <http://www.nato.int/cps/en/natolive/opinions_63153.htm>.

⁶⁹ Raymond Knops, “Missile Defense: The Way Ahead for NATO,” NATO Parliamentary Assembly, 2011, <<http://www.nato-pa.int/default.asp?SHORTCUT=2591>>.

⁷⁰ Anders Fogh Rasmussen, “NATO Needs a Missile Defense,” *New York Times*, October 10, 2010, <<http://www.nytimes.com/2010/10/13/opinion/13iht-edrasmussen.html>>.

⁷¹ Alexei Arbatov, “The joint missile defense system does not work” [“Sovmestnaya PRO nikak ne poluchaetsya”], *Nezavisimaya Gazeta/Nezavisimoe Voennoe Obozrenie*, June 17, 2011, <<http://carnegie.ru/publications/?fa=44845>>.

defense systems, as well as the early missile warning and space control systems, under a unified command. It is also responsible for launches of spacecraft from the Plesetsk space center in northern Russia.”⁷²

S-400 surface-to-air missile systems and their planned follow-up systems, the S-500, will constitute the basis for Russia’s missile defense. Reportedly, the development of “28 anti-aircraft missile regiments equipped with S-400 ‘Triumph’ (1800 anti-aircraft missiles), and ten battalions (around 400 anti-aircraft missile systems) S-500 is planned for Air-Space Defense.”⁷³ It must be noted that the development of S-500 missiles is scheduled for completion by 2015-2016.⁷⁴ Russia’s chief of the General Staff, General Nikolai Makarov, was quoted as saying that within two years, Almaz-Antey will build two plants that will manufacture new S-500 air defense missile systems in the future.⁷⁵ Regarding its missile capabilities, “the S-500 travels through space at altitudes higher than 200 km. It is equipped with a radar that detects targets at ranges up to 800 km, and its new interceptor missile hits targets flying at speeds about 7 km/sec. If compared to the S-400, the S-500 is more compact and easier to maneuver, and thus can be quickly deployed in any sphere of operations.”⁷⁶

Moscow’s upgraded BMD system (A-135) will also be included in the new command. According to Aleksandr Stukalin, “on January 31, 1991, the Russian Government signed Contract No. 406/1591 for the Samolet M (Aircraft-M) R&D project” with the aim of modernizing and upgrading Moscow’s missile defense system A-135 (ABM-4).⁷⁷ In 2011, 1.5 billion rubles (approximately \$51 million) were allocated for the project.⁷⁸ Stukalin provides a detailed description of the system:

The A-135 consists of two subsystems: the Don 2N multirole radar in Sofrino, and the interceptor launch sites. A smaller and simpler version of the system has been deployed at the Sary-Shagan weapons range in Kazakhstan to test the key elements of the A-135. It consists of the Amur P (5Zh60P) multi-channel firing complex and the field version of the radar, the Don-2NP (5N20P). The Voronezh-DM class radar has a range of 6,000 kilometers (3,700 miles) and can simultaneously track about 500 targets with high accuracy.⁷⁹

Russia is also in the process of modernizing its early warning system. The SAP-2020 “aims at completing deployment of the network of new early-warning radars, which would provide full coverage of the periphery of the country. Construction of radars in

⁷² “Russia’s Air-Space Defense Forces go on duty to stave off missile threats,” *Ria Novosti*, December 01, 2011, <http://en.rian.ru/military_news/20111201/169208932.html>.

⁷³ Arbatov, “The joint missile defense system.”

⁷⁴ “Russia to develop S-500 air-defense system by 2016 – designer,” *Ria Novosti*, April 08, 2011, <http://en.rian.ru/military_news/20110408/163433985.html>.

⁷⁵ “Russia to build 2 plants for S-500 air defense systems,” *Ria Novosti*, November 18, 2011, <http://en.rian.ru/military_news/20111118/168803434.html>.

⁷⁶ “Russia’s Air-Space Defense up to 2020 risks to remain only on paper” [“Vozdushno-kosmicheskaya oborona Rossii do 2020 goda riskuet ostatsya lish na bumage”], *Moskovskii Komsomolets*, February 07, 2012, <<http://www.mk.ru/politics/article/2012/02/06/668357-gonka-voobrazheniy.html>>.

⁷⁷ Aleksandr Stukalin, “‘Samolet M’ and the Future of Moscow Missile Defense,” *Moscow Defense Brief*, p. 26 (2011).

⁷⁸ *Ibid.*, p. 5.

⁷⁹ *Ibid.*

Lekhtusi, Armavir, Irkutsk, and Kaliningrad are clearly part of this effort.”⁸⁰ The new Voronezh type radars, which are currently under construction, will replace the Dnepr and Daryal class radars of the Soviet early warning system “and close all gaps in radar coverage on Russia’s borders.”⁸¹

In any case, it should be stated that many analysts characterize the military modernization plan as ambitious and point out the rather weak prospects for successfully completing the VKO; Russia, they emphasize, must overcome a series of problems that plague the Russian defense industry, including inefficient management, lack of research and development, reliance on Soviet era engineers, and insufficient funding.

China’s significance for Russia’s calculations. Moscow was joined by Beijing in opposing the plans for the deployment of the European missile defense architecture. Then-President Medvedev and his Chinese counterpart, Hu Jintao, issued a joint statement, proclaiming that “China and Russia believe that threats and challenges posed by missiles should first be handled through political and diplomatic means.” Concerning missile defense, “global strategic balance needs to be maintained,”⁸² the statement continues. In addition, the Sino-Russian led Shanghai Cooperation Organization issued a statement condemning missile defenses, which reads as follows: “The member states believe that a unilateral and unlimited build-up of anti-missile defense by a particular country or a narrow group of countries can damage the strategic stability and international security.”⁸³

Referring to U.S. missile defense systems, an expert on Chinese foreign and defense policy writes that “even if such systems are currently unsuccessful or limited in scope, China must plan for the day when these systems will work at full capacity and threaten China’s nuclear deterrent” and underscores that “China’s countermeasures will not wait for BMD to deliver its potential.”⁸⁴ On this basis, there is concern that the U.S. missile defense system will spur China to accelerate the buildup of its nuclear potential and offensive capabilities. If this scenario were to be realized, significant problems would arise for Russia; in particular, given that sparsely populated “Eastern Siberia relies on nuclear weapons, not on any soldiers that Russia could possibly mobilize, if China could negate the threat of Russian nuclear retaliation, the strategic results for Russia could be very severe.”⁸⁵ In this context, in order to avoid infuriating Chinese strategic planners, Russia could not cooperate in the sphere of missile defense. Concurrently, Russia is more than happy to use China as a balance against the U.S. and its plans to build strategic defenses.

⁸⁰ “Russia to spend \$70 billion.”

⁸¹ “Russia’s Air-Space Defense Forces go on duty.”

⁸² Ministry of National Defense of the People’s Republic of China, “China, Russia issue joint statement on major international issues,” June 17, 2011, http://eng.mod.gov.cn/TopNews/2011-06/17/content_4247045.htm.

⁸³ The Shanghai Cooperation Organization, *Astana Declaration of the 10th Anniversary of the Shanghai Cooperation Organization*, 2011, <http://www.sectsc.org/EN/show.asp?id=294>.

⁸⁴ Lora Saalman, “China and the US nuclear posture review,” *The Carnegie Papers*, (Carnegie Tsinghua, 2011), p 24.

⁸⁵ Anatol Lieven, “Missile defense system threatens nuclear balance of power,” *Valdai Discussion Club*, December 02, 2011, <<http://valdaiclub.com/usa/35520.html>>.

V. Prospects for Cooperation and Recommendations

As this paper has already discussed, Russia is worried that following completion of the EPAA in 2020, the U.S. will continue developing its missile defense capabilities, with the aim of deploying a global strategic missile defense system, thus acquiring a first-strike capability. Right now Russia is relying on worst-case hypotheses and is not taking into consideration the actual capabilities and limitations of the system: the SM-3 Block IIB missiles do not exist yet; BMD is a costly endeavor and, therefore, financial constraints should also be taken into account; finally, assuming that Obama wins a second term, he will leave office in 2018, when the development of Phase III is scheduled to start, and there are no guarantees that the next administration will not decide to scrap the plans. Unfortunately, this reliance on worst-case scenarios accounts for Russia's heated rhetoric and serves as an impediment to cooperation with NATO and the U.S. in the field of missile defense.

This paper argues that, despite the current deadlock in negotiations between the two sides, there is potential for cooperation in the field of missile defense. In particular, the paper suggests that a pragmatic, step-by-step approach should be implemented. If the two sides are to cooperate on missile defense in the future, incremental steps laying the foundations for deeper coordination of the two systems, VKO and EPAA, are needed. It bears remembering, for example, that during the Soviet Union years, the USSR and the U.S. jointly participated in a space mission, Apollo-Soyuz; this joint undertaking of the two former adversaries in a field of critical importance laid the foundations for future cooperation between the USSR and the U.S., which eventually produced the International Space Station.

In order to move forward with cooperation in the field of missile defense, the following steps should be taken:

First, Russia and NATO allies should discuss the potential for cooperation between Russia's Air-Space Defense and the European Phased Adaptive Approach. Russia's VKO is designed to "repel air and space attacks,"⁸⁶ and although it is not explicitly stated in official documents, VKO aims to protect against an attack from NATO, given that, at present, only NATO countries have the capabilities to launch such an attack against Russia. Needless to say, Russia cannot cooperate with NATO on missile defense, while simultaneously building its own defenses, which are targeting NATO. That said, the two sides need to address the topic of the two systems' compatibility and discuss whether in technical terms cooperation can take place if a decision toward this direction is made in the future.

Second, it should be noted that although Moscow claims that Washington's blueprint for missile defense in Europe will have a negative impact on strategic stability, it doesn't think that its own Air-Space Defense will undermine strategic stability. Russia should clearly articulate on which criteria it bases its argument about the European missile shield, as well as why its system is not expected to affect strategic stability. The two parties should reach an agreement on the criteria that determine when a missile defense system is stabilizing or destabilizing to strategic stability. What is more, it is

⁸⁶ President of Russia, *Military Doctrine*, 2010.

crucial for both sides to understand that the doctrine of strategic stability will start being slowly transformed as the balance between offensive and defensive weapons will be altered; even small steps of cooperation in the field of missile defense will signal the moving away from the principle of Mutual Assured Destruction.

Third, the missile defense debate should include discussion of a series of interwoven issues, including reductions of tactical nuclear weapons and future discussions in pursuit of the Conventional Forces in Europe Treaty (CFE Treaty).

Definitely, a joint missile threat assessment is a stumbling block in cooperation on missile defense. During the Lisbon NATO-Russia Council, Russia and NATO agreed to conduct a joint ballistic missile threat assessment. It is expected that the two parties will not come to full agreement regarding the threats, yet this a crucial first step for strengthening cooperation in the field. In his statements, Medvedev mentioned a window of “six to eight years,” a clear reference to phases III and IV of EPAA, which are of particular concern to Russia, and the deployment of which will not start until 2018. The two parties should capitalize on this “interim period” and decide on measures to develop and strengthen mutual confidence.

In the context of confidence building measures, the two sides should revive the Joint Data Exchange Center (JDEC), the creation of which was agreed upon in 1998 between then-Presidents Clinton and Yeltsin. Already, in 2009, presidents Medvedev and Obama announced that they will start to “cooperate on monitoring the development of missile programs around the world,” and additionally, intensify dialogue on establishing the JDEC,⁸⁷ which is to become the basis for a multilateral missile-launch notification regime. Russia’s radars in Azerbaijan and Armavir are well positioned to detect launches from Iran and could thus be used to monitor the Iranian missile threat. A jointly manned data exchange center is of crucial importance in that it will contribute to alleviating what Russian analysts refer to as “language deficit” or insufficient communication between the two sides. At the same time, the two sides should start joint exercises in the sphere of missile defense to intensify military-to-military cooperation and cooperation between the technical experts of both sides. Russia should also accept the U.S. invitation to observe a U.S. missile interceptor test.⁸⁸ A similar proposal was made in October 2011, but Russia decided to dismiss it.⁸⁹ The aforementioned measures will advance mutual understanding and will provide for greater transparency regarding the system’s capabilities, thus easing suspicions voiced by Moscow.

What is more, “in 2004, under the Bush administration, the United States began seeking a Defense Technical Cooperation Agreement (DTCA) with Russia.”⁹⁰

⁸⁷ The White House, *Joint Statement by Dmitry A. Medvedev, President of the Russian Federation, and Barack Obama, President of the United States of America, on Missile Defense Issues*, 2009, <http://www.whitehouse.gov/the_press_office/Joint-Statement-by-Dmitry-A-Medvedev-President-of-the-Russian-Federation-and-Barack-Obama-President-of-the-United-States-of-America-on-Missile-Defense-Issues>.

⁸⁸ Titus Ledbetter III, “U.S. Invites Russia to Monitor Aegis Missile Intercept Test,” *Space News*, March 30, 2012, <<http://www.spacenews.com/military/120330-russia-monitor-aegis-test.html>>.

⁸⁹ “Russia dismisses U.S. Antimissile Test Proposal as Propaganda,” *NTI Global Security Newswire*, November 9, 2011, <<http://www.nti.org/gsn/article/russia-dismisses-us-antimissile-test-proposal-as-propaganda/>>.

⁹⁰ U.S. Department of State, Bureau of Arms Control, Verification, and Compliance, *Missile Defense Cooperation with the Russian Federation*, 2010, <<http://www.state.gov/t/avc/rls/152164.htm>>.

Discussions on concluding the DTCA should resume, since such an agreement should serve as a starting point for strengthening technology exchange. Yet, at this point, given that the two parties have not managed to build the necessary level of trust, sensitive information should remain classified. It is worth remembering that within the framework of the Russian-American Observation Satellite (RAMOS) program, the U.S. and Russia were jointly working on missile defense-related technologies. In this regard, partnerships between the industries of the two countries should be promoted; the constituencies that would then be created would serve as strong proponents of cooperation on missile defense and would counterbalance political pressure that impedes cooperation.

Finally, Russia should reconcile itself to accepting political rather than legal guarantees. At present, it is highly unlikely that the Obama administration will agree to give legal guarantees to Russia amid criticism by the Republican Party over missile defense cooperation with Russia and during the election campaign period. Regarding NATO, it is by definition really difficult to get all member states to ratify such an agreement in their national parliaments. More importantly, what Russia needs to understand is that even legal agreements can be canceled. This happened in the past with the ABM Treaty, and Medvedev himself threatened that Russia might abrogate the New START Treaty.

VI. Conclusions

In 2011, NATO and Russia agreed in principle to cooperate on missile defense. More than a year after the NATO-Russia Lisbon summit took place, the two sides have reached a critical impasse over missile defense. The paper's starting point is that a joint missile defense system is a nonstarter, given the low level of trust between the two parties. The paper's thesis contends that the future of missile defense cooperation between Russia and the U.S.-NATO is not totally bleak; it argued in favor of a step-by-step approach – measures that will lay the groundwork for deeper cooperation in the future provided that political will exists on both sides of the Atlantic Ocean.

The main reason that missile defense is a “sticking point” between Russia on the one hand, and NATO and the U.S. on the other, is that missile defense is a highly politicized issue. Unfortunately, political considerations influence the debate in Russia to the detriment of rational decision making. Politics contributes to viewing the planned missile defense shield as more threatening to strategic stability and Russia's deterrent than it really is. Moscow remains tremulous at the prospect of future upgrades to the planned missile defense architecture and argues that the ultimate goal of the U.S. is to construct a global missile defense architecture, which is complete anathema for Russia. The country's leadership should take into consideration the political, technological, and technical constraints of such a system and tone down its rhetoric. Working side-by-side with NATO and U.S. experts and learning more about the system's capabilities could assuage Russia's fears.

Failure to reach an agreement or to cooperate will result in nuclear arsenals on high alert status, poison the bilateral relations between Russia and NATO and the U.S.,

and serve as an impediment to the future agenda of U.S.-Russia arms control negotiations. Conversely, if agreement is reached, missile defense will serve as a “game changer,” that is, as a means to move away from the outdated doctrines of strategic stability and Mutual Assured Destruction. Ultimately, an agreement could be the first step toward genuine strategic cooperation, a much needed approach in the present security landscape.

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