

Between the Shield and the Sword

NATO's Overlooked
Missile Defense
Dilemma



June 2017

By Dr. Tytti Erästö

PLOUGHSHARES FUND

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Executive Summary

The expansion of the U.S. anti-missile system in Europe should be paused. This would pose no risk to North Atlantic Treaty Organization (NATO) security, as there is no nuclear missile threat that would warrant the new interceptor site that is now being built in Poland. Rather than the stated security concerns, the project is mainly driven by unstated political motives: Poland wants the site for the purpose of additional reassurance against Russia, even though the planned interceptors do not have the ability to thwart a Russian ballistic missile attack.

The original purpose for the anti-missile system in Europe was to counter the alleged threat of nuclear-armed missiles from Iran, and the system should remain commensurate with that purpose. The guiding principle of the European Phased Adaptive Approach (EPAA)—a plan for NATO missile defense announced by President Barack Obama in 2009—was adaptability. The EPAA system should now adapt to the reality that Iran’s nuclear program has been verifiably limited and the range of its missiles has not increased as expected.

EPAA’s first two phases are already in place. These are designed to cover Southern Europe against missiles from Iran. Given Iran’s existing arsenal of conventionally-armed short and medium-range missiles, these deployments are roughly in line with the stated policy—even though the system was built with *nuclear-armed* missiles in mind, and we now know that Iran does not have a nuclear weapon, nor will it be able to develop one on short notice.

However, there is no need to proceed on schedule with EPAA’s Phase III in Poland, designed to extend NATO’s missile interceptor capability to target intermediate-range missiles by 2018. Tehran does not have intermediate-range missiles, and developing them would take at least 3-5 years.

Nor is there justification for Phase III beyond Iran’s missile capabilities. NATO now argues that the generic threat of missile proliferation is the main rationale for the Alliance’s missile defense policy. But, in reality, this problem has little relevance for Phase III, as the only Middle Eastern states possessing intermediate-range missiles are Israel and Saudi Arabia—two U.S. allies that do not pose a threat to Europe.

Finally, despite a successful test record under scripted conditions, the missile-interceptor technology at the heart of EPAA has never been tested against realistic threats, and there is no basis to assess whether it would be effective against a determined adversary.

Not only is Phase III unnecessary, it is harming European and broader international security by worsening tensions with Russia and undermining prospects for nuclear arms control. Indeed, EPAA has created a new security dilemma in Europe, whose existence and implications are not yet fully understood within the Alliance.

Phase III nevertheless lives on, partly because of inertia, and partly because European support for U.S. missile defense plans had little to do with Iran in the first place. Instead, Europeans have been driven by various rationales, notably the need to bind the United States to the Alliance through permanent U.S. military deployments in Eastern Europe. With the current tensions in Europe, the system has also become a symbol of NATO unity with the United States and against Russia, making it politically difficult to question current policy.

Russian concerns about EPAA are exaggerated but they are not baseless, given the uncertainty about the future development of U.S. missile defense technologies. While EPAA is clearly less relevant for Russian nuclear deterrent capability than the broader picture of U.S. missile defense deployments worldwide, it is highly unlikely that any agreement can be reached with Russia to decrease nuclear arms without limiting missile defenses in Europe.

If not adjusted to current realities, EPAA—which was designed to be limited and tailored to a specific threat—is in danger of turning into the kind of capacity-driven project that it was meant to avoid. A decision to halt the unnecessary expansion of missile defenses in Poland would improve European security and resolve the current inconsistency between NATO’s rhetoric and actions. That inconsistency is contributing not only to Russian suspicions, but also to European misconceptions about the system’s actual potential.

Foreword

President Donald Trump has a chance to make good on a campaign promise he made about the North Atlantic Treaty Organization (NATO). Not the one where he said the Alliance was “obsolete” and the United States should rethink its membership, but the one about saving money. As Trump said in March 2016, when it comes to defending NATO, “we’re paying too much.”

The best way to reduce U.S. spending on NATO is to stop paying for things that the Alliance does not need. For example, the United States is planning to spend millions of dollars to build new missile interceptors in Poland to defend Europe against Iranian nuclear-armed missiles that do not exist. This makes no sense.

Stopping the anti-missile deployment in Poland has a strong precedent and would be consistent with the overall missile defense plan for NATO. The plan, announced by President Barack Obama in 2009, envisions the “phased” deployment of U.S. interceptors of increasing range to keep pace with Iran’s expected development of longer-range missiles armed with nuclear warheads.

But these U.S. expectations were, happily, wrong. Thanks to the historic 2015 nuclear deal, Iran’s nuclear program has been scaled back and frozen, verifiably blocking a potential Iranian nuclear bomb for a decade or more. Meanwhile, Tehran has not developed a missile that can reach central Europe, and would need years of visible testing to do so. The United States can pause the plans for Poland and take a “wait and see” approach.

The U.S. missile interceptor plan has been adjusted to the evolving threat before, as designed. The plan, called the European Phased Adaptive Approach (EPAA), has “adaptive” in the title for a good reason. In 2013, when it realized that Iran’s missile program was not progressing as originally feared, the Obama administration cancelled the fourth phase of the program. As the threat evolves, the defense should adjust.

It is time to adjust EPAA once again by stopping the third phase deployment in Poland. The first two phases, based on ships in the Mediterranean Sea and on land in Romania, aimed at short and medium-range missiles in Iran, are already in place.

Stopping the new missile site in Poland would serve another goal of President Trump’s: improving U.S. relations with Russia. Moscow has long suspected that NATO was using Iran as an excuse for deploying missile interceptors on Russia’s borders that were really aimed at Russia. The fact that plans for Poland are continuing even though the threat from Iran has clearly diminished is confirming all of Moscow’s fears.

Russia is so concerned about NATO’s new missile interceptors that it has threatened to “take out” installations and to target the countries that host interceptor sites. Part of Moscow’s motivation for deploying new ground-launched cruise missiles (in violation of the Intermediate-Range Nuclear Forces Treaty) may be to target these sites.

There is a deal to be made here. The United States wants Russia to comply with INF Treaty. Moscow wants Washington to stop missile defense deployments in Poland. Both issues need to be resolved if there is to be any hope of resuming bilateral talks to reduce U.S. and Russian nuclear weapons.

By pausing unneeded missile interceptor deployments in Poland, the United States can save scarce resources and improve NATO’s security by lowering tensions with Russia. It’s a win-win.

Tom Z. Collina
Director of Policy, Ploughshares Fund

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Introduction

Europe has a growing, self-inflicted security dilemma: while the members of the North Atlantic Treaty Organization (NATO) maintain that the U.S./NATO missile defense system is not targeted at Russia, and is purely defensive, Russia claims that it poses a threat to its nuclear deterrent. The existence and implications of this problem have not yet been fully grasped within the Alliance.

The issue of anti-missile systems has been overshadowed by the crisis in Ukraine and the broader tensions between NATO and Russia. Therefore, apart from occasional news about NATO's missile defense project, or Russian reactions to it, the issue is largely absent from day-to-day political discussions. Missile defense is also rarely discussed in connection with nuclear arms control. When it is, it is primarily viewed as a "plan-B" response to the failure of non-proliferation efforts.

Missile defenses in Europe nevertheless deserve more attention because they are shaping the continent's security in unprecedented ways, and they are likely to have long-term repercussions for nuclear arms control.

Recognizing the link between missile defense and arms control—and seeking to ensure the success of the New Strategic Arms Reduction Treaty (New START) negotiations—the Obama administration sought to alleviate Russian concerns about previous U.S. missile defense plans by assuring Moscow that the only rationale for anti-missile weapons in Europe was Iran. As President Barack Obama said in 2009, "if the threat from Iran's nuclear and ballistic missile program is eliminated, the driving force for missile defense in Europe will be eliminated."¹ This limited mission was also to be reflected in actions: the guiding principle of the new missile defense plan, the European Phased Adaptive Approach (EPAA), was that the system should be adapted to the actual evolution of Iranian capabilities. EPAA was thus meant to proceed gradually, starting from the deployment of interceptors and radars against Iran's existing short and medium-range missiles, and introducing additional capabilities depending on how Iran's nuclear and missile programs developed.

As such, EPAA differed from the Bush administration's plan for strategic defenses in Europe, which had likewise been justified in terms of the Iranian threat, but which assumed that Iran could develop nuclear-tipped, intercontinental missiles by 2015. The disconnect between this assumption and Iran's actual capabilities initially aroused Russian

suspicious about the purpose of the Bush system. The fact that the Obama plan seemed both more credible and limited in nature contributed to the positive momentum leading to the conclusion of New START as well as to U.S.-Russian consultations about missile defense cooperation. It also facilitated the adoption of EPAA as official NATO policy, as one of the main European concerns about the Bush plan had been that it would—in the words of the German Foreign Minister Frank-Walter Steinmeier—end up "reviving old reflexes in Russia."²

Obama's EPAA was more in tune with Iran's existing capabilities than the Bush plan, but it too was based on highly questionable assumptions about Iranian intentions. While the Bush plan assumed that Tehran would be ready to launch its hypothetical strategic nuclear weapons against the United States, EPAA was based on the reasoning that Iran's leadership also viewed Europe as an enemy and was irrational to the point of launching a suicidal nuclear attack against members of a nuclear-armed alliance.

"If the threat from Iran's nuclear and ballistic missile program is eliminated, the driving force for missile defense in Europe will be eliminated."

President Barack Obama July 2009

Such assumptions have always been at odds with the reality of European-Iranian relations, which are not defined by enmity and estrangement like those between the United States and Iran. Even during the nuclear dispute, Iran and European countries have maintained diplomatic relations. Currently both sides are looking for ways to re-establish and expand previous trade and investment cooperation, which was largely interrupted by the nuclear sanctions. This also explains why European allies have as a rule refrained from explicitly mentioning Iran when discussing the rationales of the missile defense system.

Nevertheless, worst-case assumptions about Iran are deeply rooted in U.S. perceptions and continue to weigh heavily on U.S. decisions to invest in missile defenses. Hence, when assessing the security rationales for NATO's anti-missile project, this report focuses mainly on Iranian capabilities. At the same time, there is a need to re-examine the prevailing assumptions regarding Tehran's intentions.

The link between missile defense and nuclear arms control

Amid concerns of potential development of large-scale missile defenses by the Soviet Union in late 1960s, the United States considered responding in kind, but concluded there was no way to defend against a massive nuclear attack. Instead, it would need to expand its own nuclear arsenal to ensure the ability to penetrate Soviet missile defenses.

Based on their shared view that such a new level of arms race would be in neither side's interests, President Richard Nixon and General Secretary Leonid Brezhnev signed the Anti-Ballistic Missile (ABM) Treaty in May 1972, together with the Strategic Arms Limitation Treaty (SALT) I. As stated in the ABM Treaty Preamble, "effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons."

To prevent the development of nationwide missile defenses, the ABM Treaty only allowed limited ABM systems. Each side could deploy them at two sites (reduced

to one in 1974) to protect their capitals or to safeguard CBMs (Intercontinental ballistic missiles). The Soviets decided to keep their system around Moscow, which is still in place. The United States opted for a site around the ICBM silos in North Dakota, but gave it up soon after the signing of the ABM Treaty.

The treaty also prohibited sea, air and space-based ABM systems.⁷

The consensus underlying the treaty began to crumble with a dispute over President Reagan's Strategic Defense Initiative (SDI): while the United States argued that development and testing on space-based ABM systems could be done until the parties reached an agreement on specific limitations, the Soviet Union regarded any testing outside the laboratory as a violation of the treaty.⁸ The dispute prevented nuclear disarmament in the historic Reykjavik talks between Reagan and Gorbachev in October 1986. Ultimately, the Intermediate-Range Nuclear Forces (INF) Treaty was signed eliminating all intermediate and shorter-range ground-based missiles, but continuing dispute over

SDI postponed the signing of the first Strategic Arms Reduction Treaty (START I).⁹

U.S. missile defense efforts have continued to be an obstacle to U.S.-Russian nuclear arms control ever since. In the 1990s, disagreement over the limits of U.S. theater ABM systems contributed to postponement of the ratification of START II, signed in 1993. Because Russia conditioned its ratification on the United States continuing to abide by the ABM Treaty, U.S. withdrawal from the ABM Treaty in 2002 prevented START II from entering into force. New START was concluded despite disagreements over U.S. missile defense deployments in Europe, but its Preamble also recognizes that the importance of "the interrelationship between strategic offensive arms and strategic defensive arms" will increase as nuclear weapons are reduced. When signing the treaty, President Dmitry Medvedev also stated that New START "can operate and be viable only if the United States of America refrains from developing its missile defense capabilities quantitatively or qualitatively."¹⁰

First, by entering into the multi-national nuclear agreement negotiated in July 2015 (the Joint Comprehensive Plan of Action), Iran accepted verifiable limits on its uranium enrichment program. The agreement substantially rolled back Iran's nuclear capabilities and dramatically increased the "break out" window (how long it would take Iran to fabricate the material for one bomb) to at least one year.³

Second, past U.S. assessments about the evolution of Iran's missile capabilities have repeatedly been proven wrong. For a long time, the U.S. intelligence community agreed on its

estimate that Iran would have an intercontinental ballistic missile by 2015. However, for the past decade Iran has focused on improving the accuracy of its arsenal of short and medium-range missiles, with little interest in extending their reach. Even if Tehran would decide to develop longer-range missiles, this would not go unnoticed, as it would require at least 3-5 years of testing.⁴

As the French ambassador to the United States, Gerard Araud, stated in May 2016, "what we have done [on European missile defense] is enough... missile defense is



Groundbreaking ceremony at the Redzikowo missile defense site in Poland, May 13, 2016.

not something we should do... just for itself... and it's just common sense to link it to the re-evaluation of the threat."⁵

Yet, NATO's missile defense system is currently being extended to Poland as part of EPAA's Phase III, with the stated aim of protecting all of Europe from intermediate-range missile attacks. U.S. officials justify this by pointing to Iran's continuing missile tests, despite the fact that none of them have included intermediate-range missiles. In contrast, NATO seems to have completely abandoned the association between missile defense and Iran after the conclusion of the Iran nuclear deal. Instead the Alliance justifies its current missile defense policy in terms of the generic threat of missile proliferation posed by 31 countries with ballistic missile capabilities. However, this alternative rationale for Phase III does not hold up: there is not a single state among the list of 31 countries that would justify the need for the Polish anti-missile site.

The lack of debate on the issue in Europe partly explains why these inconsistent justifications have not been subjected to more serious scrutiny; without a political decision to re-adjust it, EPAA simply proceeds on autopilot. Critical discussion has also been made difficult by the current tensions with Russia, and allies are particularly disinclined to question NATO solidarity. After all, the most important implicit European motivation for supporting U.S. missile defense plans, from the very beginning, has been the desire to strengthen transatlantic ties. The project

offers the rare opportunity for a permanent deployment of U.S. troops in Eastern Europe, a benefit whose value has been highlighted along with heightened anxieties about Russia. The need for alliance cohesion also explains why new countries have recently stepped up to contribute to EPAA, which is otherwise financed almost entirely by the United States.

"What we have done is enough... missile defense is not something we should do... just for itself... and it's just common sense to link it to the re-evaluation of the threat."

French Ambassador Gerard Araud, May 2016

Unfortunately, NATO missile defense is giving Europeans a false sense of security. In addition to being unnecessary from a military perspective, the expansion of the system to Poland is worsening tensions with Russia, whose long-term suspicions about Western intentions are being enforced by the lack of credible justifications for the policy. And despite some calls within the Alliance in recent years to turn missile defenses against Russia,⁶ in reality the system cannot protect Europe from Russian missiles. It is time to reinsert the principle of adaptability into EPAA, not only to help reduce regional tensions and open the way to nuclear arms control, but also to bring much needed clarity about the actual limits of NATO's anti-missile capability.

The European Phased Adaptive Approach

Renewed support for nuclear disarmament and a “reset” of U.S.-Russian relations were two key themes that marked the beginning of the Obama administration. Success in both depended on lowering tensions over missile defense, which had become one of the most contested issues in U.S.-Russian relations. While President George W. Bush’s administration had wanted to deploy long-range interceptors in Europe to protect the United States against potential Iranian nuclear-armed intercontinental missiles, Russia argued that such a threat did not exist and that the system would undermine its nuclear deterrent. Resolving the dispute was particularly crucial for the new administration because Russia viewed the Bush administration’s missile defense plans in Europe as an obstacle to New START.¹¹ President Obama’s new missile defense plan, EPAA, answered this need by postponing the deployment of long-range interceptors in Europe, instead focusing on Iran’s short and medium-range missiles. At the same time, EPAA was the result of a more realistic threat assessment: it reflected Iran’s actual missile capabilities and would adapt to their future development. As such, EPAA created new hopes of missile defense cooperation between the United States and Russia, and contributed to the U.S.-Russian agreement to address nuclear arms reductions and the issue of missile defense on separate negotiation tracks.

The new “phased” and “adaptive” approach

Announcing EPAA on September 17, 2009, President Obama emphasized the need to address Iran’s “ongoing [short and medium-range] ballistic missile program,” and Defense Secretary Robert Gates explained that, “the Iranian long-range missile threat is not as immediate as we previously thought.” At the same time, the president stressed that the Iranian threat remained the key driver for the new plan: “Iran’s ballistic missile program... continues to be our focus and the basis of the program that we’re announcing today.” This was in line with his earlier statement made in Moscow that, “if the threat from Iran’s nuclear and ballistic missile program is eliminated, the driving force for missile defense in Europe will be eliminated”¹²—which had also been a key message of a secret letter sent by Obama to his Russian counterpart in February.¹³ Moreover, the administration stressed the importance of basing the system on “proven and cost-effective” technology.



To ensure the ability to “adjust and enhance our defenses as the threat and technology continue to evolve,” the new approach would be both “phased” and “adaptive.” Instead of large ground-based interceptors that had been key to the Bush plan, the system would rely on a sea and land-based Aegis tracking system and Standard Missile-3 (SM-3) interceptors. According to Gates, Phase I of EPAA had already begun in 2009: it included the deployment of Aegis-equipped ships in the Mediterranean, armed with the Block IA SM-3 interceptor. Although this was not mentioned at the time, it also included the deployment of early-warning and tracking radar in Turkey.

Phase II introduced an upgraded SM-3 interceptor—Block IB—on the first land-based “Aegis Ashore” site in 2015. While these first two phases were to provide protection against Iran’s short and medium-range missiles, Phase III would add a more capable Block IIA interceptor, extending the system’s reach to counter intermediate-range missiles and covering “the entire land mass of Europe.” Phase IV would have come closer to the Bush plan by introducing Block IIB interceptors with a planned capacity against ICBMs (intercontinental ballistic missiles).¹⁴

The European Phased Adaptive Approach

EPAA's phases

Phase I (Complete): X-band radar placed in Kurecik, Turkey; Aegis-equipped ship with SM-3 Block IA interceptors deployed in the Mediterranean Sea in 2011; four U.S. Aegis ships home-ported in Rota, Spain, in 2014-2015

Phase II (Complete): Aegis Ashore site, with Block IB interceptors and radar, built in Deveselu, Romania in 2013-2016; upgraded interceptors also deployed on ships

Phase III (Underway): Aegis Ashore site to be built in Redzikowo, Poland, with Block IIA interceptors (with upgraded capacity against intermediate range missiles) in 2016-2018; new interceptors also deployed on ships and in Romania

Phase IV (Cancelled): Would have deployed Block IIB interceptors in Poland by 2020

Number of interceptors

The planned number of SM-3 interceptors at each of the two Aegis Ashore sites is 24.¹⁷ In addition, each of the four BMD-capable Aegis ships can carry 90-96 interceptors.¹⁸

In March 2013, the Obama administration cancelled Phase IV, based on similar considerations that had prompted the change of strategy in 2009: the technology needed for the Block IIB interceptor was immature,¹⁵ Iranian ICBMs were still not imminent,¹⁶ and Russia remained worried about strategic interceptors (although the latter consideration was not explicitly stated either in 2009 or 2013).

Apart from this change, the above-outlined plan for EPAA still informs NATO's missile defense efforts today. Romania and Poland have been identified as hosts for the land-based missile defense sites. With the first two phases already in place, groundbreaking for Phase III commenced on May 13, 2016, in Redzikowo, Poland—only one day after the site in Deveselu, Romania, was declared operational.

NATO discourse 2009-2011: highlighting the threat from Iran

Between September 2009 and the November 2010 NATO Summit, NATO Secretary-General Anders Fogh Rasmussen actively campaigned for EPAA. In this connection, he referenced the threat from Iran as well as the renewed prospects for missile defense cooperation with Russia.



Although Iran was mostly raised as an example of the generic proliferation threat, no other country was mentioned. Rasmussen argued that missile proliferation presented “a clear and growing menace to our territory and our populations,” and that Iran demonstrated the problem.¹⁹ In March 2010—after implying that Tehran was lying about its nuclear program and noting that the south-eastern part of the Alliance was already within reach of its missiles—Rasmussen suggested that Iran’s space-launch program might lead to longer-range missiles, putting the entire “European continent, as well as all of Russia... in range.”²⁰

Rasmussen also expressed the view—familiar from the American “rogue state” discourse—that nuclear deterrence might not work on unpredictable and irrational leaders.²¹ Hence a missile defense system was seen as a “strategic imperative” for NATO.²² In addition, Rasmussen argued that the system was important for demonstrating European “willingness to contribute to our shared defence,” and for including Russia into the “European security architecture.”²³

Apparently convinced by these arguments, the Alliance endorsed EPAA as official policy at the November 2010 NATO Summit. This marked a shift from the previous concept of limited theater missile defense for deployed troops to a system aimed at providing “full coverage and protection for all NATO European populations, territory and forces.” The summit declaration also argued that EPAA provided “enhanced possibilities” for missile defense cooperation with Russia.²⁴

Initial optimism and proposals for missile defense cooperation

Russia’s January 2009 decision to suspend the deployment of Iskander missiles in Kaliningrad can be seen as the first positive response to President Obama’s early statements of intent to reassess American missile defense policy.²⁵ In the summer, the two sides also began missile defense consultations under the auspices of the NATO-Russia Council and the U.S.-Russia Bilateral Presidential Commission. As for the announcement of EPAA, Prime Minister Vladimir Putin described it as a “right and brave” decision,²⁶ while President Dmitry Medvedev thought this indicated that the United States and Russia were “learning to listen to each other.”²⁷

While Russia initially agreed with the United States and NATO that EPAA opened up new avenues for missile defense cooperation, Moscow stressed that the Alliance would need to maintain an inclusive system of which



Russia would be part. For example, Medvedev stressed that, “only universal missile defence systems offer any real value, and not systems built to protect particular countries only.”²⁸ Russia had also not yet finished assessing the full implications of the new plan at this point. As Medvedev said in October 2009, experts were still evaluating EPAA “from the standpoint of Russia’s national security interests.”²⁹

Both Russia and NATO seemed genuine in their wish to cooperate on missile defense, but held different visions on what this would mean in practice. Russia first proposed a jointly operated system at the 2010 Lisbon Summit—a so-called “sectoral proposal” whereby each side would be responsible for a particular area but make launch decisions jointly.³⁰ The United States and NATO viewed the proposal as unrealistic, as it would have meant outsourcing the protection of Alliance partners to Russia.³¹

Russia subsequently shifted its energies to calling for credible and legally binding guarantees that NATO’s missile defense system would not be directed against Russia.³² However, this seemed impossible because of the U.S. Congress’ well-known opposition to any limits on American missile defenses. As a U.S. National Security Council spokesman said in November 2011, the United States would not “in any way limit or change our [missile defense] deployment plans in Europe.”³³ Instead of explicitly referring

to this problem, NATO officials repeated the argument—which they had made already in connection with the Bush plan³⁴—that Russian concerns were baseless.

In 2011, NATO made a counter-proposal to Russia—namely, “cooperation between two independent missile defence systems” protecting both European and Russian territory and populations and exchanging information.³⁵ The idea was elaborated at NATO’s May 2012 Chicago summit: the systems would be connected through two joint centers, where officers from both sides would sit together. The Chicago summit declaration also provided political assurances to Russia, stating that EPAA was not directed against Russia and would “not undermine Russia’s strategic deterrence capabilities.”³⁶ Moscow turned down the proposal, apparently because it did not meet its criteria for inclusiveness and legal guarantees, and because Russia “was not prepared to simply adhere to the NATO program.”³⁷ NATO’s political assurances ignored the fact that Russia held very different views on strategic stability, and fell short of saying that the system would not be directed against Russia in the future.

Fading hopes regarding a mutually acceptable solution

By November 2011, Russia seemed to have reached a critical point in its frustration with the situation. As President Medvedev explained, “we find ourselves facing a *fait accompli*” regarding NATO’s missile defenses. This time the Russian President also presented an “ultimatum”—that is, a detailed plan on the various steps that his country would take in response to EPAA as it proceeded. As if mirroring the other side’s phased and adaptive approach, some of those steps would be implemented immediately, while others would take place “in accordance with the actual developments.”³⁸

The immediate steps included equipping Russia’s “new strategic ballistic missiles... with advanced missile defence penetration systems.” Later, Russia would “deploy modern offensive weapon systems in the west and south of the country” to ensure the “ability to take out any part of the U.S. missile defence system in Europe.”³⁹ Medvedev also mentioned the potential deployment of Iskander missiles in Kaliningrad. If the situation still continued to worsen, Russia reserved the right to “discontinue further disarmament and arms control measures” and consider “withdrawal from the New START”—which had entered into force only nine months earlier.⁴⁰

At the same time, Medvedev stressed that Russia was still ready to continue dialogue on the issue—provided that the other side would “show an honest and responsible attitude towards taking into account Russia’s legitimate security interests.”⁴¹ However, after Putin assumed the presidency in May 2012, hopefulness was increasingly taken over by frustration.

Russia’s response to the Obama administration’s March 2013 decision to cancel Phase IV of EPAA has been described as “a studied silence,” which lasted almost until the end of the year. During this time, Russian officials privately expressed cautious optimism, but noted that the United States had justified the change on technical grounds, and that Phase IV might reappear later. As the First Secretary of Russia’s Mission to NATO, Sergei Malyugin, explained at the time, “the adaptive approach is a little too adaptive,” meaning that what “from the U.S. side looks like flexibility... seems inconsistent, unpredictable, and therefore destabilizing to Russia.”⁴²

When Putin finally got back to the topic in December 2013, his statement suggested that Russian concerns remained unchanged: “attempts to violate and disturb the strategic balance are ongoing.”⁴³ Soon after this, however, Putin also said that a decision had not yet been made regarding the deployment of Iskander missiles in Kaliningrad.⁴⁴ Since 2007, Russia had argued that it would respond to the U.S. deployment of anti-missile interceptors in Poland by moving Iskanders to Kaliningrad.⁴⁵

The fading association between missile defense and Iran

Regardless of the central role of the Iranian threat in NATO’s case for EPAA, after the 2010 Lisbon Summit NATO officials refrained from explicitly mentioning Iran in connection with missile defense. Reportedly, this was because Turkey—the host of the system’s early warning radar—did not want Iran to be mentioned as this could harm its relationship with Tehran.⁴⁶ The distinctively American discourse about the Iranian threat also did not fit with the general picture of European-Iranian relations, which—despite occasional crises—have largely been marked by uninterrupted diplomatic ties and a reciprocal interest in trade.

Instead, the NATO discourse subsequently focused on the generic threat of missile proliferation posed by unnamed countries with ballistic missile capabilities. For example, in November 2011 Rasmussen referred to “some 30 countries



[which] have or are acquiring missiles that could be used to carry not just conventional, but also nuclear warheads."⁴⁷ The lack of identification did not prevent claims that these countries had malign intentions, and that they were irrational enough to defy NATO's nuclear deterrent. As Rasmussen said in June 2011, "as we sit here discussing missile defence, some people elsewhere in the world are discussing missile attack."⁴⁸

"If one side is more successful in developing its missile defence than the other, it gains an edge and has the temptation to be the first to use these weapons."

President Vladimir Putin June 2017

This generic missile threat is vaguely said to come from "outside the Euro-Atlantic area," but sometimes NATO officials locate it in the Middle East. There are also a few instances outside the NATO context of European officials—such as the German Defense minister Thomas de Maizière in 2012—explicitly mentioning Iran in connection with EPAA.⁴⁹

Although the initial reason for avoiding references to Iran had been allies' sensitivities, by early 2014 the association between missile defence and the Iranian threat seemed to have faded completely. This coincided with the unprecedented optimism regarding the nuclear negotiations between Iran and the P5+1 (the United Nations Security Council Permanent members—China, France, Russia, the United Kingdom, and the United States—and Germany). In response to Russian arguments that the November 2013 interim deal with Iran warranted a reconsideration of EPAA,⁵⁰ NATO Deputy Secretary-General Alexander Vershbow argued,

NATO's missile defence system is not directed against a single country. It is not a defence against nuclear weapons but against delivery means... A workable and verifiable agreement that ensured that Iran could not develop nuclear weapons would, of course, be a great step forward. But the problem of ballistic missile proliferation will remain as pressing as ever. Of course, should international efforts reduce the threats posed by ballistic missile proliferation, our missile defence would adapt accordingly.⁵¹

Thus the original meaning of adaptability in EPAA was diluted to the point of being practically meaningless. Indeed, based on the above explanation it seemed that only a worldwide ban on ballistic missiles would make NATO reconsider its missile defence plans. After the signing of the comprehensive nuclear deal with Iran, this position was re-confirmed in NATO's official website in December 2015,

NATO has repeatedly made clear that missile defence is not about any one country, but about the threat posed by proliferation more generally. In fact, over 30 countries have obtained, or are trying to obtain, ballistic missile technology. The Iran framework agreement does not change those facts.⁵²

Recalling earlier American assurances about the link between EPAA and Iran,⁵³ Putin was particularly irked by the shift from Phase II to Phase III in May 2016. From the Russian perspective, this suggested that, "we were right when we suspected our partners of being insincere, of deceiving us with references to an alleged Iranian nuclear threat."⁵⁴

NATO's argumentation looks even more puzzling given that several high-ranking Americans—including Vershbow and Robert Bell, the former NATO Assistant Secretary General for Defense Investment—have said more recently that EPAA has always been and still continues to be about Iran.⁵⁵



The multi-purpose launch tubes of the MK-41 Vertical Launching System (VLS).

Hardening rhetoric since 2014

The disagreement over the implications of the Iran deal for EPAA coincided with the dramatic deterioration of Russian relations with the West in early 2014. Although Russia had suspended missile defense cooperation at the NATO-Russia Council in October 2013, its annexation of Crimea spelled a definitive end to all civilian and military cooperation with NATO. Subsequently both sides have come to view the missile defense issue through the lens of this broader political conflict.

In spring 2014, the Russian tone became increasingly accusatory and confrontational. Putin recalled that the other side had refused to sign “even a trifling legal document” that would have addressed Russian concerns. He said that Russia was “tired of this kind of discussions where nothing gets discussed.”⁵⁶ Putin also began to retrospectively criticize the U.S. withdrawal from the ABM Treaty and, instead of just focusing on the European context,

increasingly referred to the worldwide deployment of U.S. missile defenses.

For example, Putin argued that the U.S. withdrawal from the ABM Treaty had toppled “the very foundation of the modern international security system”⁵⁷ and that the U.S. pursuit of a “global missile defence system” was leading the world back to “the times when... it is fear and the balance of mutual destruction that prevent nations from engaging in direct conflict.”⁵⁸ In the spring of 2014, Putin argued that “the infamous policy of containment... continues today,”⁵⁹ and even suggested that Russia viewed the missile defense issue as “no less, and probably even more important, than NATO’s eastward expansion.”⁶⁰

In June 2017, Putin laid out the basic dilemma of missile defense: “if one side is more successful in developing its missile defence than the other, it gains an edge and has the temptation to be the first to use these weapons.”⁶¹ Rather than being a remote prospect, Putin suggested that such a

counter-strike scenario was made more likely by other new U.S. military concepts and technologies, such as Prompt Global Strike and high-precision conventional weapons. As Putin said in June 2016, “some high-precision weapons are used to carry out a pre-emptive strike, while others serve as a shield against a retaliatory strike, and still others carry out nuclear strikes.”⁶² As for the other side’s arguments about missile defense being “purely defensive,” Putin said that, apart from serving to discredit Russian concerns⁶³, they made people dangerously unaware of the related risks.⁶⁴

Referring to NATO’s expanding missile defense efforts in May 2016, Putin said, “we cannot and will not tolerate this.”⁶⁵ He also voiced a new concern related to the multi-purpose nature of the launch pads at the Romanian site,

The launch tubes where these missiles are stored... are the same that are used on navy ships to carry Tomahawk missiles. You can replace interceptor missiles with Tomahawks in a matter of hours and these tubes will no longer be used to intercept missiles. How do we know what is inside them? All they need is to change the software. This can be done seamlessly; even the Romanians would not know what is going on.⁶⁶

The Russians viewed this as “a flagrant violation” of the Intermediate-Range Nuclear Forces (INF) Treaty.⁶⁷

Instead of just threatening to take counter-measures, President Putin explained that Russia had “moved a long way on this path” by modernizing its nuclear arsenal.⁶⁸ He also began to present the response in terms of resistance to U.S. attempts at global domination. For example, after explaining the need to counter missile defenses, Putin said in December 2014, “no one will ever attain military superiority over Russia.”⁶⁹ He also stressed that the situation would “not change for the better if we succumb and yield at every step. It will only change for the better if we become stronger.”⁷⁰ Putin even used this line of argumentation to justify Russian actions in Ukraine, suggesting in May 2014 that there had been no guarantee against NATO deploying missile defense elements in Crimea.⁷¹

Moscow also made direct threats against European countries hosting anti-missile system components. In January 2015, the Deputy Prime Minister Dmitry Rogozin issued the following warning for Poland, Norway and Denmark, who had recently announced their voluntary contributions to the system,⁷²

Politicians in Poland and Scandinavia should think very carefully about the decisions they make regarding NATO’s Washington-directed missile defense weapons’ project. Irresponsible decisions will inevitably cause an escalation in military threats in Europe that Russia would be required to respond to in a military way.⁷³

In March 2015, the Russian ambassador to Denmark said that Danish ships carrying missile defense radars “could become targets for nuclear strikes.”⁷⁴ Putin doubled down in May 2016, threatening that, “if yesterday some areas in Romania did not know what it is like to be a target, today we will have to take action to ensure our security.”⁷⁵ Raising the stakes further, Russia reportedly deployed Iskander missiles in Kaliningrad in October 2016.

Mirroring Russian arguments, NATO officials squarely put the blame for the failure to reach an agreement about missile defense on Russia. As Rasmussen explained in May 2014, Russia had “not responded constructively” to NATO proposals and it viewed the Alliance “as an adversary rather than as a partner.”⁷⁶ According to Vershbow, the unchanged Russian attitude after the cancellation of Phase IV showed “that each time we offer to compromise, Russia just moves the goal posts farther.”⁷⁷ Russian engagement in missile defense discussions was also presented in terms of an obligation that the country had failed to honor. As Vershbow said in 2015, “even before the Ukraine crisis, Russia was backing away from the commitment... to develop a true strategic partnership with NATO and to cooperate in potentially important areas such as missile defense.”⁷⁸

NATO officials presented Russian concerns about missile defense as irrational—saying that they ignored “the facts and the laws of physics.”⁷⁹ Russian threats against the allies were condemned as “irresponsible” and “unjustified.” They were also seen as part of a larger aggressive pattern of behavior, to which NATO had to respond. Russian investments in its nuclear forces were also condemned and seen as requiring a NATO response, without any reference to missile defense.

In August 2014, four Eastern European members—Poland, Lithuania, Estonia and Latvia—reportedly called for the rest of the Alliance to adopt language indicating that, in addition to the Middle East, EPAA would also be aimed against Russia. Other allies, especially Germany, were against this, recalling the repeated promises by NATO that this would not happen.⁸⁰ Internal NATO debate on this issue is still ongoing.⁸¹

The Case Against Phase III

NATO's anti-missile policy is driven by two very different security rationales: first, the alleged nuclear missile threat from the Middle East and, second, the implicit rationale based on the system's perceived value as an additional buffer against Russia. Yet neither rationale, explicit or implicit, justifies NATO's current missile defense policy. There is no intermediate-range missile threat from the Middle East that warrants the construction of a new interceptor site in Poland. And the planned SM-3 interceptors provide no protection for Europe against Russian missiles, but their deployment is a significant source of tensions with Russia. As such, the U.S. should immediately put Phase III on pause while it re-evaluates NATO's security needs and its bilateral relationship with Russia.

The explicit rationale: Iran

While short and medium-range missiles in the Middle East can be used to provide a justification for EPAA's first two phases, EPAA's Phase III lacks a strategic rationale. Neither Iran nor any other Middle Eastern country (save for two close U.S. allies, Israel and Saudi Arabia) have missiles of the range that could reach central Europe—nor could they develop such missiles on short notice.

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Iran's nuclear program

International suspicions about the potential military dimensions of Iran's nuclear program emerged in the early 2000s with revelations of undeclared uranium enrichment-related activities in the country. This led to a protracted crisis involving a series of international sanctions against Iran. However, concerns about Iran's nuclear program were significantly reduced by the July 2015 nuclear deal, the Joint Comprehensive Plan of Action (JCPOA). The deal allows for limited uranium enrichment in Iran in return for exceptionally intrusive inspections and strict limits on



U.S. Secretary of State John Kerry and Iranian Foreign Minister Javad Zarif discussing the nuclear deal in Vienna, May 17, 2016.

Iran's nuclear program for the next 15 years. Among other things, Iran agreed to a 98 percent decrease in its stockpile of enriched uranium; to limit its uranium enrichment to the 3.67 percent level; to cut the number of its enrichment centrifuges by two thirds; to reconfigure the Arak heavy water reactor and to ship out excess heavy water; and not to conduct any uranium enrichment or related R&D activities at the underground Fordow facility. Such measures effectively block all paths for potential nuclear weapons development.

So far, Iran has implemented its part of the deal. As Federica Mogherini, the EU High Representative for Foreign Affairs and Security Policy, wrote in January,

The deal, one year after its implementation, is delivering on its main purpose: ensuring the purely peaceful, civilian nature of Iran's nuclear programme... despite criticism that deceitfully stresses the deal's perceived shortcomings and overlooks its proven benefits – it is important to state very clearly: the nuclear agreement with Iran is working.⁸²

Although the future of the JCPOA has seemed uncertain since the election of President Donald Trump—who

repeatedly criticized the deal during his campaign—both the U.S. and Iran have a vested interest in maintaining the agreement.

But even if the deal falls apart, Iran could not produce a nuclear arsenal quickly. The JCPOA was designed with the possibility of a “breakout” in mind; if Iran were to withdraw from the accord and embark on a crash nuclear weapons program, the time for it to produce enough nuclear material for one nuclear bomb is estimated to be one year. There is also a separate breakout time for the manufacturing of a nuclear warhead—estimated by the Obama White House to be “at least a year.”⁸³ In reality, the process of building a bomb is likely to take much longer, as the estimate does not take into account the various technological challenges that can be expected to arise.

According to a RAND report by Dr. Robert J. Reardon, even with considerable prior research, “assembly of a warhead for the first time would be challenging and time consuming, even if the individual steps had been worked out.”⁸⁴ When asked whether the two processes—production of weapons-grade material and warhead manufacturing—could proceed simultaneously, Reardon said that although “some of it could be done simultaneously... you’d still have to convert the HEU... to metal, machine the metal into a pit, and construct the warhead around it.” He concluded, “the odds that Iran could manufacture a nuclear warhead within a year [after breakout] are very low.”⁸⁵

An additional hurdle would be posed by the payload size of Iran’s missiles, which cannot carry warheads exceeding 750 kg; building a bomb that small would be “a major

Iran’s Ballistic Missiles

MISSILE	RANGE (km)	PAYLOAD (kg)	FUEL	STATUS	ORIGIN
SHORT-RANGE MISSILES					
Zelzal-1	125	600	solid	operational	indigenous
Zelzal-2	200	600	solid	operational	indigenous
Fateh-110	200-225	500	solid	operational	indigenous
Khalij Fars	200-225	450	solid	operational	indigenous
Hormuz-1&2	200-225	450	solid	operational	indigenous
Fateh-313	300-325	350 (?)	solid	operational (?)	indigenous
Shahab-1	300	1000	liquid	operational	SCUD B
Shahab-2	500	730	liquid	operational	SCUD C
Qiam	700	700	liquid	operational	SCUD C
MEDIUM-RANGE MISSILES					
Shahab-3	800-1000	1000	liquid	operational	Nodong
Ghadr-1	1600	700	liquid	operational	Nodong
Emad	1600	600	liquid	in development	Nodong
Sajjil-2	2000	700	solid	in development	indigenous
Khorramshahr	?	?	liquid (?)	in development	Nodong (?)

Sources: Saab & Elleman 2016; Elleman 2017; “Missile-Defence Cooperation in the Gulf,” IISS report 2016.

Reach of Iran's Longest-Range Missiles



challenge.”⁸⁶ Finally, the breakout estimates focus on the development of only one nuclear bomb, and it is unlikely that Iran would consider this an adequate nuclear deterrent.⁸⁷

Even so, the key question driving the need for an enhanced anti-missile system in Europe is not how quickly Iran could develop nuclear warheads, but how soon it could develop intermediate-range missiles.

Iran’s missile program

Iran’s longest-range operational missile—a variant of the Shahab family called Ghadr-1—has a range of 1600 km. A more accurate variant with the same range, Emad, is under development. The missile tested on January 29, 2017—named Khorramshahr—is also likely to be a variant of the medium-range Shahab missile.⁸⁸ The development of Sajjil—a solid-fuel missile with a range of 2000 km—seems to have run into technical problems.⁸⁹

Iran’s missile policy has been characterized as “deterrence by punishment as well as denial.”⁹⁰ This policy has its roots in the Iran-Iraq war, when the country’s degraded air force left it practically defenseless against Iraqi attacks. The subsequent acquisition of Scud missiles was seen as a game-changer that “fundamentally altered Saddam’s strategic calculus,” leading to the view that ballistic missiles were “vital to the defense of the Islamic Republic.”⁹¹ The Persian Gulf War taught Iran another lesson about the deterrent value of missiles, as “the only notable response from Iraq during Operation Desert Storm came in the form of ballistic-missile attacks against Israel, Saudi Arabia and other Gulf countries.”⁹²

Lacking a modern air force, Iran essentially views its missiles as a counter to the sophisticated air forces of its regional rivals. In the context of the nuclear crisis in the 2000s, Iran sees its missiles as a way to deter aggression by the United States and Israel. As Michael Eisenstadt at the Washington Institute for Near East Policy writes,

[Iran] has threatened to respond to an American and/or Israeli preventive strike on Iran with a “crushing response,” by destroying the Israeli cities of Tel Aviv and Haifa, and by launching missile strikes against US bases throughout the region. It has vowed that any attack on Iran would result in the defeat of the enemy’s designs.⁹³

The poor accuracy of Iranian missiles, however, undermines their effectiveness as a regional deterrent. As Justin Bronk from Royal United Services Institute (RUSI) notes, poor accuracy combined with a destructive capacity that is roughly equivalent to a Western strike fighter means that

Iran’s missiles “would certainly not turn the tide of any military operation against Iran by the Gulf Cooperation Council, Israel or the U.S.”⁹⁴

It is therefore not surprising that Iran’s missile development centers on increasing the accuracy of its missiles. According to Michael Elleman, an expert on Iran’s missiles at the International Institute for Strategic Studies, for the past decade “Iran has focused on improving the accuracy and reliability of its missiles, with little attention to increasing range.”⁹⁵ Iranian officials have also publicly stated that the country “does not need missiles with a range of greater than 2,000 km.”⁹⁶

If Iran would nevertheless make the decision to develop an operational intermediate-range ballistic missile, this would require at least 3-5 years of testing, which cannot be done in secret. According to Elleman,

The need to flight test missiles before they are made operational provides advanced warning of new capabilities. Flight trials involve a dozen or more test launches, and historically require three to five years to complete, sometimes more.⁹⁷

Finally, while some argue that Iran’s space-launch vehicles could be used to develop long-range missiles, this would be technologically challenging. As Elleman notes, while there are many examples of countries using their long-range ballistic missile programs as a basis for developing satellite launchers, no country has ever done the reverse.⁹⁸

Iran does not have missiles that can reach past the southern edge of Eastern Europe, nor is there any reason to assume that Tehran is planning to attack Europe. And although Tehran has suggested it could respond to aggression by targeting U.S. military bases in the region, Iran has never threatened to attack Europe or the U.S. homeland.

Other countries with ballistic missile capabilities

Despite using the general proliferation of ballistic missiles to justify EPAA, NATO officials have thus far not named any of those countries, except for Iran. A closer look reveals why: there are indeed 31 countries with ballistic missile capabilities, but their relevance to EPAA is questionable, to say the least.

First, about half of the countries on the list are U.S. allies—including seven NATO member states. Second, the list includes all the nuclear weapons states, including the P5—the United States, Russia, China, France and the United Kingdom—as well as the NPT outliers—India, Israel, North Korea and Pakistan.

Countries with Ballistic Missile Capabilities

COUNTRY	MISSILE RANGE				
	SRBM	MRBM	IRBM	ICBM	SLBM
1 Afghanistan	SRBM				
2 Armenia	SRBM				
3 Bahrain	SRBM				
4 Belarus	SRBM				
5 China	SRBM	MRBM	IRBM	ICBM	SLBM
6 Egypt	SRBM				
7 France					SLBM
8 Georgia	SRBM				
9 Greece	SRBM				
10 India	SRBM	MRBM	IRBM		SLBM
11 Iran	SRBM	MRBM			
12 Iraq	SRBM				
13 Israel	SRBM	MRBM	IRBM		
14 Kazakhstan	SRBM				
15 Libya	SRBM				
16 North Korea	SRBM	MRBM	IRBM		
17 Pakistan	SRBM	MRBM			
18 Romania	SRBM				
19 Russia	SRBM			ICBM	SLBM
20 Saudi-Arabia			IRBM		
21 Slovakia	SRBM				
22 South Korea	SRBM				
23 Syria	SRBM				
24 Taiwan	SRBM				
25 Turkey	SRBM				
26 Turkmenistan	SRBM				
27 UAE	SRBM				
28 UK					SLBM
29 USA	SRBM			ICBM	SLBM
30 Vietnam	SRBM				
31 Yemen	SRBM				

BALLISTIC MISSILES: short-range (SRBM) <1000km; medium-range (MRBM) = 1000-3000km; intermediate-range (IRBM) = 3000-5500km, and intercontinental (ICBM) = 5500km; submarine-launched ballistic missile (SLBM). *The Army Tactical Missile System (ATACMS) is included as an SRBM in this chart.

Sources: Nuclear Threat Initiative (NTI) website 2017; "Worldwide Ballistic Missile Inventories" factsheet, Arms Control Association.

Apart from being generally regarded as “detractable,” the nuclear and missile arsenals of these states are clearly beyond the scope of EPAA’s capabilities and mission.

Third, keeping in mind that EPAA is purportedly focused on threats from the Middle East, most of the countries from that region only have short-range missiles, which could at best reach Turkey, and are addressed by EPAA phases I and II. Only Iran and Israel have medium-range missiles, and only Israel and Saudi Arabia have intermediate-range missiles. Apart from Iran and Israel, none of the Middle Eastern countries on the list has advanced domestic missile programs; all have instead bought their missiles from abroad.

Finally, only Israel has nuclear weapons, and no other Middle Eastern country, except for Iran and possibly Saudi Arabia, is currently suspected of having either the capability or intention of acquiring such weapons. The argument about the generic proliferation threat does not fare any better than the Iranian one in providing a logical explanation for NATO’s current missile defense policy.

The implicit rationale behind EPAA: Russia

From the U.S. perspective, it might seem that missile defense in Europe has always been only about Iran. European motivations, however, are more complex; for allies, missile defense serves various purposes, most of which are implicit. As Andrew Futter, of the University of Leicester, notes, “the NATO [ballistic missile defense] commitment is as much about politics, alliance cohesion and ultimately Russia, than it is about Iran.”⁹⁹ Or, according to a group of experts from the German Institute for International and Security Affairs (SWP), while “some NATO states see the purpose of the project primarily in protection against threats from the south,” others view it as “a visible expression of America’s security guarantees for Europe – by which they mean above all protection against Russia.”¹⁰⁰

This complexity discourages any open debate on NATO missile defense, which is now running on autopilot. As the SWP experts note, “NATO’s insistence on pushing ahead with a missile defence system does not necessarily imply agreement over its purpose and goal. The lack of a debate can be explained by Washington’s sustained willingness to fund the programme almost entirely itself. For many, the political costs of changing course also appear higher than those of continuing the programme.”¹⁰¹ Such political costs have been raised by the conflict with Russia, as allies are inclined to avoid any sign of weakness vis-à-vis Moscow.



Aegis Ashore missile defense site in Deveselu, Romania.

The Ukraine crisis has also increased the perceived value of EPAA as an additional safeguard against Russia, particularly in Eastern Europe. Polish President Andrzej Duda was explicit about this rationale at the groundbreaking ceremony at Redzikowo, where he said, “even though Poland has been a NATO member now for several years, we have been waiting for a long time for the Alliance to come to Poland in a permanent, stable sense as well. Indeed this is occurring today.”¹⁰²

There is no guarantee that EPAA would even work against the kind of limited ballistic missile attack it was created to address. Despite a successful test record under scripted conditions, SM-3 interceptor missiles have never been tested against realistic threats.

As for the rest of the Alliance, many seem to view EPAA as boosting alliance cohesion and as a symbol of transatlantic unity, which is likewise seen as increasingly important in the current time of tensions. This also explains why new countries have recently stepped up to contribute to the project: Denmark offered its ships to be used for missile defense radars in 2014, and Norway announced its desire to contribute in a yet unspecified manner in 2015.¹⁰³

Given that European anxiety about Russia plays a central role in EPAA, it is important to ask whether the missile defense project actually increases European security vis-à-vis Russia. While the permanent deployment of U.S. troops in Eastern Europe may have a security value, the overall impact of the anti-missile system is predominantly negative.

First, missile defense is contributing to tensions with Russia, whose suspicions about U.S. and NATO intentions are enforced by the fact that they are not living up to previous assurances that EPAA would be commensurate with the Iranian threat.

Second, missile defense components in Europe are targets for Russian nuclear and conventional strikes. This would likely be the case even without the related political dispute. After all, the United States has also targeted the missile defense radars and interceptors around Moscow with nuclear weapons since the late 1960s.¹⁰⁴ However, Russia's explicit rhetoric and threats against the European hosts of the system have further fueled tensions.

Third, while some allies seem to be under the impression that EPAA could provide physical protection against Russia,¹⁰⁵ in reality the SM-3 interceptors are no match against Russia's vast arsenal of missiles. Although the future development and deployment of SM-3s and Ground-Based Interceptors (GBIs) in and around the U.S. homeland could theoretically create a situation where the Russian nuclear deterrent is undermined, the number

of interceptors planned for EPAA is too small to make a difference against Russia.

Indeed, there is no guarantee that EPAA would even work against the kind of limited ballistic missile attack it was created to address. Despite a successful test record under scripted conditions, SM-3 interceptor missiles have never been tested against realistic threats. Like other tests conducted by the U.S. Missile Defense Agency, SM-3 tests do not take into account the likely possibility that the adversary would deploy simple counter-measures, such as decoys, to evade missile defenses. As Theodore Postol, professor emeritus of Science, Technology, and International Security at the Massachusetts Institute of Technology, and George Lewis, a physicist and a senior research associate at Cornell University, have pointed out, targets used in SM-3 Block I tests were equipped with unusually large and spin-stabilized tail fins, which—together with prior information about the rocket's length—significantly facilitated detection. Even so, the tested interceptors did not hit their targets directly; in the case of nuclear warheads, this might mean that, rather than being destroyed, the warheads would be simply be knocked off course.¹⁰⁶



USS Porter, deployed in the Mediterranean as part of EPAA, conducted Tomahawk cruise missile strikes against Syria on April 7, 2017.

Threat to Russia's nuclear deterrent

Most experts agree that EPAA, which is deployed close to Russia's borders, is no threat to Russia's vast nuclear arsenal. The key problem from the Russian perspective, however, is uncertainty about the potential future development of U.S. missile defense plans and related technology. EPAA represents only a small part of the United States' worldwide missile defense efforts, which—taken together—present a more concrete problem for strategic balance than the limited NATO system.

Capabilities of SM-3 interceptors in Europe

In a 2012 article in *Survival*, a Stanford University physicist Dean A. Wilkening argued that the SM-3 deployments in Europe pose no threat to the Russian nuclear deterrent. According to Wilkening, this was not only due to the fact that Russia's vast missile arsenal could easily saturate NATO missile defense, but also because SM-3 interceptors based in Poland traveling at 5 km/second would not be able to intercept Russian ICBMs.¹⁰⁷ This would apply to the Block IIA variant, typically assumed to have the velocity of 4.5 km/second.¹⁰⁸ Most Russian experts seem to agree with this assessment.

However, if one changes the background assumptions about interceptor speed, the picture looks somewhat different. As Wilkening writes, "Moscow's concern with phases III and IV... lacks technical merit, *unless* the SM-3 Block IIB interceptor has a maximum speed greater than approximately 5.0km/sec."¹⁰⁹ This is why Russia was particularly concerned about EPAA's Phase IV, which would have introduced the Block IIB interceptor, whose planned velocity exceeded 5km/second.¹¹⁰ Although Phase IV was subsequently cancelled, there is nothing to prevent more capable interceptors from being introduced in the future. If a political decision to that effect were made and the related technical challenges overcome, deployment would be fast, as EPAA's basic infrastructure—notably the Vertical Launching System (VLS) launch tubes (into which all SM-3 variants are supposed to fit)—will be in place after the completion of Phase III in 2018.

In addition to interceptor speed, the SM-3's capacity against ICBMs depends on launch location. The four missile-defense capable Aegis ships with a role in EPAA are stationed in the Mediterranean Sea, but they could in principle be moved in a time of crisis—or alternatively, some of the remaining missile defense capable ships could be brought to Europe. Indeed, the USS *Cole*—the first missile-defense capable

Aegis ship deployed in Europe as part of EPAA's Phase I—ventured into the Black Sea in June 2011, prompting immediate Russian reactions.¹¹¹

This explains why some Russian calculations about EPAA assume that missile-defense capable ships would be stationed in Northern Europe. For example, Major General Evgeny Ilyin has argued that an interceptor missile with a velocity of 5 km/second could be able to intercept Russian ICBMs, if located in the Baltic or in the Norwegian Sea. Wilkening concurs, arguing that, if the interceptors would be launched near Stockholm, the result would be that "more trajectories heading toward the U.S. East Coast can now be potentially intercepted." However, this would only apply to Russian ICBMs heading from Western Russia to the U.S. West Coast, leaving ICBMs targeting the East Coast out of reach of European missile defenses.¹¹²

Thus, Russian concerns boil down to uncertainty about the future; while not threatening in themselves, EPAA's three phases provide a platform for potential quantitative and qualitative expansion of NATO's future missile defenses. For example, an independent Moscow-based arms control expert Dr. Timur Kadyshev, noted that,

Missile defense architecture is scalable, and along with qualitative improvements in interceptors and radars (and in command and control), scaling it up can provide new level of capabilities, a breakthrough. Even advancement of radar capabilities alone can provide a new quality of air defense, which Russia would certainly worry about.¹¹³

Kadyshev added that it is the job of military planners to consider worst-case scenarios. He and others also took it for granted that interceptor sites and radars would be nuclear targets; as Lieutenant General Evgeny Buzhinsky at the PIR Center in Moscow said, "logically, of course they should be."¹¹⁴

All Russian interviewees viewed the issue of the multi-purpose VLS tubes in the Aegis Ashore sites as a problem that must be resolved. In short, the issue is that these sites could be used to launch cruise missiles fitted with conventional or nuclear warheads, which would be a violation of the INF Treaty. As Professor Vladimir Kozin at the Russian Institute for Strategic Studies explained, the land-based sites in Europe present "a double-edged threat," which concerned both Russian "ICBMs in flight, if the U.S./NATO BMD launching tubes are loaded by *defensive* interceptors" and land-based ICBM "if the... launching



Joint U.S.-Japanese test of the SM-3 missile in 2010.

tubes are loaded by *offensive* interceptors.”¹¹⁵ Another interviewee said that verifying what really is in the launch tubes would require Russian presence at the sites, which seems unlikely in the current political circumstances.¹¹⁶

Many U.S. experts agree that the problem posed by the VLS launch tubes should be addressed.¹¹⁷ Unlike many Russians, however, they generally do not regard EPAA deployment in Romania as a violation of the INF Treaty, unlike the reported Russian development and deployment of ground-launched cruise missiles.¹¹⁸

Broader context of U.S. world-wide missile defense deployments

EPAA represents only a small part of expanding U.S. missile defenses worldwide. The four SM-3 capable ships that are stationed in the Mediterranean belong to a fleet of 84 Aegis-equipped ships, of which 35 currently have a BMD capability and which operate both in the Atlantic and in the Pacific.¹¹⁹

Due to the elliptical flight path of ballistic missiles and the fact that interception is easiest towards the terminal phase of flight, SM-3 interceptors close to the U.S. mainland present a much more concrete threat to the Russian nuclear deterrent than EPAA based in Europe. For example, George Lewis argues that SM-3 Block IIA missiles could have significant capabilities against Russian ICBMs if located around U.S. coasts, potentially providing continent-wide strategic defense.¹²⁰ Wilkening, too, pointed to this possibility, adding that a potential “future deployment of hundreds of GBI and SM-3 Block IIA/IIB interceptors” could in principle give the United States a first strike capability.¹²¹

In the coming years more Aegis-equipped ships will be upgraded to carry 90-122 SM-3 Block IIA interceptors each. The U.S. Navy has requested such upgrades for 40 Aegis ships by 2026, including the four ships stationed near Europe. Lewis estimates that the total number of Block IIA interceptors might reach 400-600 by 2040. At the same time, the number of GBIs on U.S. homeland might increase from 44 to 100, if the current plans for the construction of a third GMD site in the East Coast go forward.¹²²

Lewis concludes, “by the mid to late-2030s... the number of U.S. strategic-capable interceptors, including ground-based systems, could be roughly comparable to the number of survivable Russian ICBM/SLBM warheads, and larger than the number of Chinese warheads.” This clearly presents a dilemma for future nuclear arms reductions. As Lewis notes, “if the roles were reversed, this would be an absolutely unacceptable situation to the US,” adding that there is no reason to assume that Russia would view the matter differently.¹²³

The fact that this bigger picture is clearly more worrying for Russia than the EPAA alone has been acknowledged by some NATO officials. For example, the chair of the NATO-Russia missile defense working group, Roberto Zadra, said in 2014 that, “in retrospect, Russia’s concerns that missile defence undermines its strategic deterrent were genuine, but the arguments and proposals put forward by Moscow to make its case—focusing on the European segment of missile defence and proposing to establish a joint system—were not.”¹²⁴

Lieutenant General Evgeny Buzhinsky—who was deeply concerned about the above-described developments—argued that the Russian government’s “old position” focusing exclusively on EPAA “is now obsolete and should be modified” so as to include the bigger picture, as well.¹²⁵

Recommendations

At the root of the anti-missile dispute in Europe is a classic security dilemma: attempts by the United States and NATO to maximize their own security by means of missile defenses are viewed as threatening by Russia, whose response is seen as inherently aggressive. While showing little sensitivity to each other's concerns, both sides worry that the other's ostensibly defensive measures disguise offensive intentions. They also see no choice but to raise the stakes—if not purely for the sake of security, then based on the political need not to appear weak: while NATO builds up its missile defenses, Russia increases its threats. These responses are mutually reinforcing, leaving both sides worse off. Tellingly, Iran seems both irrelevant and indifferent to this dynamic.

The current U.S. administration is in a position to put a stop to the negative spiral in Europe by freezing the implementation of EPAA's Phase III. In practice this means suspending the construction of the Aegis Ashore site in Poland and refraining from the deployment of Block IIA interceptors elsewhere in Europe. As former State Department intelligence analyst Greg Thielmann noted in July 2016, "it is high time for another course adjustment in EPAA implementation."¹²⁶

Some may criticize needed adjustments to EPAA as unilateral concessions to Russia, but this is misguided. EPAA's stages were never meant to be bargaining tools, nor a way to "send Putin the right message," as some have recently claimed.¹²⁷ The stated purpose of the U.S./NATO missile defense system has always been to defend against plausible threats from the Middle East. When it comes to Phase III, such threats do not now exist.

As for the implicit rationale of the anti-missile system as an additional guarantee against Russian aggression, this is providing a false sense of security for Europe. Merely focusing on the permanent deployment of U.S. troops in Romania and Poland is short-sighted, and is far outweighed by the fact that the system is feeding tensions with Moscow and inviting nuclear targeting—while not providing protection against Russian missiles. Although Russia would likely object to the deployment of any weapons systems near its borders, missile defenses are particularly problematic due to their perceived implications for strategic balance.

If not adjusted to current realities, EPAA is in danger of turning precisely into the kind of capacity-driven and open-ended project that it was meant to avoid. Instead of weakening NATO's security, a decision to halt the unnecessary and politically toxic expansion of missile defenses in Poland would reduce one of the Alliance's primary points of contention with Russia. Refocusing on adaptability, which was intended to guide EPAA from the beginning, would bring much-needed clarity about the real purpose of missile defenses in Europe.

Assuming that the overall relationship between Russia and the West does not deteriorate further due to other factors, the suspension of Phase III could result in several positive developments. Russia might respond by reversing some of the measures it has taken as a response to NATO's missile defense project. Showing due restraint on missile defense in Europe could also help pave the way for improved relations and progress in nuclear arms control between the United States and Russia.

More specifically, the positive effects of suspending Phase III could include the following:

- **Russia could decide to withdraw Iskander missiles from Kaliningrad.** Moscow's deployment of the Iskander following NATO's shift from Phase II to Phase III of EPAA in 2016 seems consistent with Russia's stated plan to ensure the ability to "take out" NATO missile defense components.
- **Second, the cancellation of Phase III could have a positive impact on future attempts to resolve the INF crisis.** The news of Russia's deployment of prohibited ground-launched cruise missiles in February 2017 has worsened the crisis over the INF Treaty. However, it is possible that Russian violations of the INF Treaty are motivated by the need to counter NATO's missile defense capability.¹²⁸ To the extent that this is the case, the suspension of Phase III could decrease Russia's perceived need for the prohibited missiles. In addition, Russia's concerns about the dual use potential of the VLS launch tubes at the Aegis Ashore sites would be reduced by the decision to suspend Phase III. The decision could also help create a political climate where both the United States and Russia could move away from mutual accusations to addressing each other's concerns about the INF Treaty through verification.



Iskander-M short-range missile was designed to penetrate air and missile defense systems.

- Third, cancellation of Phase III would likely **prevent any future steps that Russia could take as a reaction to the completion of Phase III in 2018**. One such step could be the deployment of Iskanders in Crimea.¹²⁹ Another would be Russian withdrawal from New START, the final step mentioned in Medvedev’s 2011 ultimatum. Such a step would severely undermine U.S. and Russian security.
- Finally, building Russian trust in U.S./NATO missile defense intentions—together with a solution to the INF crisis—could **open the door for a new round of U.S.-Russian nuclear arms reductions**. However, this is unlikely without U.S. readiness to discuss the strategic implications of its worldwide missile defense deployments. As Steven Pifer from the Brookings Institution notes, “a future U.S. administration interested in a treaty providing for further cuts in strategic nuclear forces may find that it can go no further if it is not prepared to negotiate a treaty on missile defense.”¹³⁰

Although opposition by the Congress to any legal limits on national missile defenses would be a major complication to any such efforts, the limited EPAA system is a relatively easy place to start—and might initially be sufficient for Moscow to allow for further nuclear reductions.

The strategic uncertainty caused by U.S. missile defenses is a major challenge to U.S.-Russian relations and nuclear arms reductions. This will become increasingly apparent as the number of U.S. missile interceptors goes up. Relying on unproven anti-missile systems at the cost of progress in nuclear arms control is an unwise strategy to defeat nuclear threats.

The United States should stand by the political assurances it has given to Russia about the limited nature of EPAA in Europe. The Iranian nuclear and missile threat has been dialed back. The scale and reach of U.S. missile defense plans in Europe can and should be adjusted as well.

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