

U.S. Missile Defense and European Security

Mary Kaszynski and Daniel Painter

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IN BRIEF

- The European Phased Adaptive Approach is designed to be flexible, adaptable, and cost-effective.
- While both the U.S. and Russia have an interest in a missile defense cooperation agreement, negotiations have stalled, partly due to the U.S. political environment and partly due to Russia's insistence that a cooperation agreement take the form of a legal document.
- Making progress on the missile defense issue will be key to future U.S.-Russian nuclear negotiations.

Introduction

From President Ronald Reagan's "Star Wars" speech in 1983 to President George W. Bush's withdrawal from the Anti-Ballistic Missile Treaty in 2002, U.S. missile defense plans have always been a contentious issue. Of particular debate is the U.S. proposal for a missile defense shield in Europe.

President Barack Obama's plan for the European Phased Adaptive Approach, announced in September 2009, has encountered both criticism and support domestically, and considerable opposition from Russia.

Achieving missile defense cooperation with Russia, a goal of both the current and previous administrations, will require overcoming domestic political divisions and the stalemate with Russia.

Background

Bush and the Third Site

In 2002, the Bush administration withdrew from the Anti-Ballistic Missile Treaty and embarked on a limited missile defense program to protect the United States from missile threats, such as from North Korea.



Beginning in late 2004, ground-based midcourse missile defense (GMD) interceptors were deployed at two sites on the U.S. West Coast.

Currently, a total of 30 Ground-Based Interceptors (GBIs) are deployed at the two sites - Fort Greely, Alaska, and Vandenberg Air Force Base in California. The Missile Defense Agency's current procurement plans call for a total of 57 GBIs.¹

In 2007, as the "next step...[in defending] America and our NATO allies from attacks emanating from the Middle East," President Bush announced plans for missile defense elements at a third site - Europe.²

The Third Site would consist of 10 ground-based midcourse interceptors in Poland, a fixed X-band radar in the Czech Republic, and a mobile radar deployed in an unidentified country closer to Iran.³

Obama and EPAA

"To put it simply, our new missile defense architecture in Europe will provide stronger, smarter, and swifter defenses of American forces and America's Allies. It is more comprehensive than the previous program; it deploys capabilities that are proven and cost-effective; and it sustains and builds upon our commitment to protect the U.S. homeland against long-range ballistic missile threats; and it ensures and enhances the protection of all our NATO Allies."

President Obama, September 17, 2009⁴

In September 2009, the Obama administration unveiled a new plan for European missile defense, based on consultations with allies and a comprehensive review of U.S. ballistic missile defense.⁴

The European Phased Adaptive Approach (EPAA) abandoned the ground-based midcourse missile interceptors of Bush's Third Site plan in favor of the Standard Missile 3 (SM-3) interceptors.

Under the current plan, the SM-3 interceptor will be upgraded in four phases and deployed initially on Aegis ships, then later on land (the "Aegis- Ashore" sites) in Romania and Poland.

The Aegis elements are to be integrated with a system of sensors and radars.

This system includes:

- a forward based X-Band radar site in Turkey,
- mobile Aegis SPY -1D radars on Aegis ships, fixed SPY-1D radars in Romania and Poland,
- an Airborne Infrared (ABIR) sensor platform, and
- the satellite- based Precision Tracking Space System (PTSS).



The Administration attributed the new plan to two developments: first, an intelligence assessment that the Iranian missile threat to the Middle East and Europe had increased, and second, to improved capabilities of the SM-3 interceptor that make the EPAA more effective and efficient than the previous system.⁵

While EPAA is the centerpiece of European missile defense plans, it is not the only component of the overall

European missile defense shield. In 2005, the North Atlantic Council established the Active Layered Theater Ballistic Missile Defense (ALTBMD) system.⁶

The goal of the system was to integrate the existing capabilities of NATO member states into a centralized command and control for the purposes of protecting deployed NATO troops.

The addition of the EPAA allows the ALTBMD to move beyond theater defense and employ a territorial defense for all of Europe.

Policy and Politics

European Missile Defense in Congress

For many years, missile defense was a partisan issue. Republicans, following in the footsteps of President Ronald Reagan, tended to be strong supporters, while Democrats decried missile defense efforts as wasteful and unnecessary.

To some extent, this division holds true today. Conservative thinkers support expanding the missile defense system and view efforts to cooperate with Russia with alarm.⁷

Those on the other side of the political spectrum tend to emphasize the costs of the program, technical difficulties, and more skeptical assessments of the Iranian and North Korean missile programs.⁸

However, recent fiscal constraints, coupled with the Obama administration's embrace of European missile defense, have made missile defense politics even more complicated.

Cost

The United States has spent \$150 billion to date on developing missile defense systems. The Pentagon has requested a 29 percent increase for missile defense spending over the next five years, for a total of \$44 billion.⁹

Year-to-year costs for European missile defense may represent only a fraction of this total. In fiscal year 2013, for example, the Missile Defense Agency requested \$2.3 billion for procurement and R&D funding for Aegis ballistic missile programs.¹⁰

However, the total costs of the EPAA remain unknown.

The White House Office of Management and Budget has requested a comprehensive report on the European missile defense program twice since the announcement of the program two years ago.¹¹ The Department of Defense missed the January 2012 deadline but according to DOD officials, the cost estimate will be ready "fairly soon...sometime this summer is the hope."¹²

Concerns about escalating costs have officials questioning the U.S.'s financial commitment to European missile defense.¹³ In the 2013 National Defense Authorization Act, Congress called for reports on sharing the missile defense costs with NATO members.¹⁴

Technical Questions

The capability of the SM-3 missile is a key question in the missile defense debate. Since 2002, the Aegis BMD system using the SM-3 missile has achieved 19 successful exoatmospheric intercepts in 24 attempts.¹⁵

However, two technical issues remain.

The first matter relates to the system's ability to discriminate between a warhead and a decoy. The Defense Science Board in a 2011 report stated that discrimination "is still not a completely solved problem."¹⁶

The report also highlighted the second issue, questioning whether the "early intercept" planned under Phase IV, in which the missile interception occurs following boost phase and prior to payload release, is achievable.

Information sharing with Russia

The George W. Bush administration began efforts to secure a missile defense cooperation agreement with Russia in 2004. The Obama administration has continued those efforts, recently considering sharing classified technical information on the SM interceptors, such as velocity at burnout.¹⁷

The administration views data sharing as a way to allay Russian fears regarding European missile defense, paving the way for a comprehensive cooperation agreement.

Members of Congress, however, have expressed concerns about sharing classified information - or don't like the idea of sharing any missile defense information with Russia.¹⁸

International Dynamics

NATO - In the 2010 Strategic Concept, NATO members committed to "develop the capability to defend our populations and territories against ballistic missile attack as a core element of our collective defence."¹⁹

At the 2012 summit, NATO leaders reaffirmed that commitment and declared the interim operational capability of the shield, meaning a capability that, "although limited in its initial phase, can provide real protection against ballistic missile attack."²⁰



Russia - Plans for European missile defense are naturally of great interest to Russia.

At the 2010 NATO Summit in Lisbon, NATO and Russia agreed to cooperate on missile defense, leaving the technical and logistical issues to be decided later. However, the current stalemate revolves around characterizing and implementing the technical and logistical terms of cooperation.

The issue of legal guarantees is a key aspect of the current debate.

Russia, fearing that the later EPAA phases (particularly III and IV) could undermine its strategic deterrent, insists on legal guarantees that the missile defense shield is not targeted at Russia's forces.²¹

The Obama administration, like the Bush administration, maintains that the European missile defense shield is not targeted at Russia. The administration has offered to provide political assurances, but not a legal guarantee, which could limit the U.S.' development of future missile defenses.²²

Both the United States and Russia have consistently expressed an interest in reaching an agreement on missile defense cooperation.²³

However, the political environment of the U.S. presidential elections makes overcoming these obstacles very difficult, at least in the near term.

Options

Moving Forward on Missile Defense

Given the domestic political context, few expect progress on the missile defense issue in the short-term. However, several practical recommendations, both intermediate steps and long-term visions, have been made.

These recommendations would address fiscal and strategic concerns, as well as confidence-building with Russia and NATO allies.

Cooperation with Russia and confidence-building

An agreement on missile defense cooperation has proved elusive, but is certainly not inconceivable. Many experts have laid out what such a deal would look like.²⁴

Recommendations for a comprehensive deal include the following elements:

- Missile defense system and planning information exchange
- Joint computer modeling and simulation exercises
- NATO-Russia missile defense exercises
- Joint Data Exchange and Response Centers

A comprehensive deal seems unlikely in the near term, given the dynamics of the U.S. presidential election.

After 2012, an agreement on missile defense cooperation may be possible, but progress will depend largely on the new nuclear policy of the next administration.

There are a number of steps both sides could take in the short-term to increase transparency and pave the way for a comprehensive agreement, including information sharing and joint exercises.²⁵

Such cooperation, experts and officials have indicated, would yield benefits beyond the missile defense issue - providing the basis for future U.S.-Russia nuclear reductions negotiations.²⁶

Technical recommendations for EPAA

Experts have recommended technical changes to current European missile defense plans. Some of these changes are intended to build confidence with Russia; others are to improve the effectiveness and cost-effectiveness of the EPAA system.

For example, these recommendations include:

- **Eliminating or delaying Phase IV**

Phase IV of the EPAA, in which SM-3 interceptors would be upgraded to address ICBM threats, could be delayed or canceled.

The National Academy of Sciences recently recommended cancellation, arguing that “Phase IV as currently defined is not necessary for theater defense and is at best less than optimal for homeland defense.

If Phases I-III are fully implemented, the additional interceptor capability of Phase IV is not required for European (or other theater) defense.”²⁷

- **Modifying Phases III/IV**

Modifications of the EPAA Phase III and IV could entail, for example, substituting the SM-3 Block II series with a boost-phase drone-based defense.

Proponents of this course argue that a defense based on stealthy drones could shoot down ballistic missiles during their powered flight phase.

Moreover, a drone-based defense would pose little threat to either Russian or Chinese long-range strategic missiles.²⁸

- **Aegis restriction**

Geographical restrictions on Aegis ship patrols that would limit the possibility of their impact on the Russian strategic deterrent would be welcomed by Moscow.

However, the White House presently refuses to consider any limitation on Aegis ship patrols.²⁹

Conclusion

From the Third Site to EPAA...and Beyond

The Obama administration's European missile defense plans have encountered criticism, particularly from political opponents, on both technical and strategic grounds.

Critics point to the decision to abandon the Third Site plan, as well as the cancellation of other missile defense programs like the Kinetic Energy Interceptor, the Multiple Kill Vehicle, and the Airborne Laser, as evidence of the Obama administration's lack of commitment to missile defense.³⁰

However, others have argued that, while questions about the EPAA remain, it is still more viable than the Third Site plan for political and technical reasons.

On the political side, as Secretary Gates noted in testimony before the Senate in 2011, *"The third site in Europe was not going to happen, because the Czech government wouldn't approve the radar... and we still hadn't negotiated the required agreements with the Poles in terms of the interceptors."*³¹

Despite the many technical concerns in current missile defense plans, experts say the shield is still feasible.

A 2011 report from the Defense Science Board concluded, *"Pursuit of the current plans for regional ballistic missile defense, such as envisioned in the PAA [phased adaptive approach], if pursued to completion, will provide an effective regional defense capability – those plans are technically feasible, are making good progress, and enjoy broad political support."*³²

Despite the Defense Science Board's seal of approval, the EPAA will undoubtedly encounter a number of issues, both technical and political, as plans move forward.

Some of these may be resolved after the elections; others may not.

In the long-term, overcoming the missile defense stalemate and achieving a cooperation agreement with Russia will be critical to U.S. security interests.



Mary Kaszynski is a Policy Analyst at the American Security Project specializing in nuclear security and arms control issues.

Daniel Painter is a Policy Analyst and Research Intern specializing in nonproliferation, terrorism, and Russia.

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Building a New American Arsenal

The American Security Project (ASP) is a nonpartisan initiative to educate the American public about the changing nature of national security in the 21st century.

Gone are the days when a nation's strength could be measured by bombers and battleships. Security in this new era requires a New American Arsenal harnessing all of America's strengths: the force of our diplomacy; the might of our military; the vigor of our economy; and the power of our ideals.

We believe that America must lead other nations in the pursuit of our common goals and shared security. We must confront international challenges with all the tools at our disposal. We must address emerging problems before they become security crises. And to do this, we must forge a new bipartisan consensus at home.

ASP brings together prominent American leaders, current and former members of Congress, retired military officers, and former government officials. Staff direct research on a broad range of issues and engages and empowers the American public by taking its findings directly to them.

We live in a time when the threats to our security are as complex and diverse as terrorism, the spread of weapons of mass destruction, climate change, failed and failing states, disease, and pandemics. The same-old solutions and partisan bickering won't do. America needs an honest dialogue about security that is as robust as it is realistic.

ASP exists to promote that dialogue, to forge consensus, and to spur constructive action so that America meets the challenges to its security while seizing the opportunities the new century offers.



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