

# Background

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## Sixteen Steps to Comprehensive Missile Defense: What the FY 2012 Budget Should Fund

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**Abstract:** *The U.S. missile defenses are not keeping pace with the proliferation of threats. The Obama Administration has made massive cuts in the missile defense programs, cancelled promising programs, disappointed allies by pulling out of joint programs, and negotiated an arms reduction treaty with Russia that imposes sweeping restrictions on U.S. missile defense options. These changes in policy and programs indicate that the Obama Administration is seriously misreading the situation, both domestically and internationally, and trying to use Cold War–style deterrence to counter modern threats. Congress needs to put the U.S. missile defense program back on track and enact into law a U.S. “protect and defend strategy” to replace the outdated Cold War deterrence strategy.*

The Obama Administration made large-scale cuts to the missile defense program in fiscal year (FY) 2010, and its proposed budgets for FY 2011 and FY 2012 will not make up the lost ground. Similarly, the Administration has cancelled or sharply curtailed promising missile defense programs and joint projects with U.S. allies, including the Airborne Laser (ABL) and the “third site” missile defense system in Poland and the Czech Republic. Furthermore, the President signed and the Senate consented to ratification of the New Strategic Arms Reduction Treaty (New START) with Russia, which imposes sweeping restrictions on U.S. missile defense options. These changes in policy and programs indicate that the Obama Administration is seriously misreading the situation, both domestically and internationally. It is attempting to rely on Cold

### Talking Points

- After the Bush Administration had put the U.S. missile defense program on a track to catch up with the threat, the Obama Administration derailed this effort in 2009 by cutting \$1.6 billion from the missile defense budget in FY 2010 and canceling or scaling back a host of missile defense programs.
- The Obama Administration’s proposed missile defense budget and program for FY 2012 fails to make up for the momentum lost in FY 2010.
- Congress should add some \$850 million to the Obama Administration’s requested missile defense budget for FY 2012, in part to fund the Navy’s Aegis-based missile defense program, the ground-based mid-course defense program, and boost-phase missile defense systems.
- Congress also needs to ensure that the Obama Administration’s arms control agenda does not impose further restrictions on U.S. missile defense options.

This paper, in its entirety, can be found at:  
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War deterrence, which is inadequate in a world of proliferation of missile technology and weapons of mass destruction.

Congress needs to put the overall missile defense program back on track and enact into law a U.S. “protect and defend strategy” to replace the outdated Cold War strategy of strategic deterrence. To these ends, Congress should increase overall funding for missile defense, restore a number of missile defense programs, and make significant changes to missile defense policy in the National Defense Authorization Act for FY 2012. Indeed, the policy changes may be more important than the programmatic and budgetary changes because the policy changes justify and rationalize the programmatic and budgetary changes.

Like other major Department of Defense (DOD) weapons programs, missile defense will ultimately depend on resources. A robust missile defense program, based on strong policies, will require more resources. Congress should begin by adding \$850 million to the President’s proposed missile defense budget for FY 2012 to fund the programmatic changes that are described later in this paper.

### Budget Cuts and Cancelled Programs

In 2009, the Obama Administration ordered large-scale cuts to the missile defense program for FY 2010.<sup>1</sup> Specifically, President Barack Obama proposed \$1.6 billion in cuts compared to the prior year’s budget estimate. In 2010, the Administration proposed a modest increase in the missile defense budget for FY 2011, but only in comparison to the

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reduced level for FY 2010.<sup>2</sup> That the Obama Administration was off base regarding the modest increase for FY 2011 has been demonstrated by the fact that Congress increased Missile Defense Agency funding in the recently enacted defense appropriations legislation by almost \$108 million when it reduced the overall defense budget from the requested level. On February 14, 2011, the Administration released its proposed missile defense budget and program for FY 2012, which includes \$8.6 billion for the MDA and \$2.1 billion for elements of the missile defense program outside the MDA.<sup>3</sup>

This total \$10.7 billion request is roughly \$450 million more than the Administration’s FY 2011 request, a 4.4 percent increase in current dollars and less than 3 percent increase in real (inflation-adjusted) dollars. Yet this is almost 2 percent in real dollars below what the Bush Administration requested for FY 2009.<sup>4</sup> In budgetary terms, the missile defense program is clearly not making up the ground it lost because of the FY 2010 cuts.

However, the budget numbers tell only half of the story. Obama Administration policy toward the development and fielding of U.S. missile defense capabilities has exacerbated the problems stemming from the budget reductions. Some critical programs have been canceled outright, including

1. Baker Spring, “Obama Missile Defense Plan Puts America at Risk,” Heritage Foundation *Backgrounder* No. 2292, June 29, 2009, at <http://www.heritage.org/Research/Reports/2009/06/Obama-Missile-Defense-Plan-Puts-America-at-Risk>.
2. Baker Spring, “The Obama Administration’s Ballistic Missile Defense Program: Treading Water in Shark-Infested Seas,” Heritage Foundation *Backgrounder* No. 2396, April 8, 2010, at <http://www.heritage.org/Research/Reports/2010/04/The-Obama-Administrations-Ballistic-Missile-Defense-Program-Treading-Water-in-Shark-Infested-Seas>.
3. U.S. Department of Defense, “Fiscal Year 2012 Budget Request: Program Acquisition Costs by Weapon System,” February 2011, pp. 4-1–4-11, at [http://comptroller.defense.gov/defbudget/fy2012/FY2012\\_Weapons.pdf](http://comptroller.defense.gov/defbudget/fy2012/FY2012_Weapons.pdf) (March 18, 2011), and U.S. Department of Defense, Missile Defense Agency, “MDA Fiscal Year 2012 Budget Outline,” February 2011, at <http://www.mda.mil/global/documents/pdf/budgetfy12.pdf> (March 18, 2011).
4. The Bush Administration requested \$10.5 billion for missile defense in FY 2009, including more than \$9.3 billion for the MDA. U.S. Department of Defense, Missile Defense Agency, “Historical Funding for MDA FY85–10,” at <http://www.mda.mil/global/documents/pdf/histfunds.pdf> (March 18, 2011), and news release, “Fiscal Year 2009 Department of Defense Budget Released,” U.S. Department of Defense, February 4, 2008, at <http://www.defense.gov/releases/release.aspx?releaseid=11663> (March 18, 2011).

the Multiple Kill Vehicle (MKV) and the “third site” missile defense plan to place missile defense interceptors in Poland and a radar in the Czech Republic. The Administration has also curtailed the Airborne Laser and the ground-based midcourse defense (GMD) interceptors deployed in Alaska. Even worse, the Administration agreed to language in the preamble to the New Strategic Arms Reduction Treaty with Russia that imposes sweeping, although poorly defined, restrictions on U.S. missile defense options.<sup>5</sup> New START entered into force on February 5, 2011.

The Administration’s backsliding comes at a time when ballistic missile capabilities are expanding worldwide and are expected to continue expanding. For example, China has an estimated 170 to 180 nuclear-armed ballistic missiles and has deployed roughly 1,100 conventionally armed missiles opposite Taiwan.<sup>6</sup> These include the DF-21D, a missile that can hit large U.S. surface ships and has recently reached an “initial operational capability.”<sup>7</sup> Iran has missiles with a range of 1,200 miles, which can reach targets anywhere in the greater Middle East.<sup>8</sup> North Korea has roughly 1,000 ballistic missiles of varying ranges.<sup>9</sup> Russia is planning to buy 36 new intercontinental ballistic missiles (ICBMs) and two new missile submarines this year.<sup>10</sup>

### The Obama Administration’s Missile Defense Policies

Both the policies and programs for missile defense proposed by the Obama Administration are dangerously weak. Some elements are obviously

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better than others, but the ground lost in FY 2010 is not being recovered. Initially, Congress needs to understand both the good and bad aspects of the Administration’s missile defense policy. Its most important components are:

- **No clear commitment to the protect and defend strategy.** Because proliferation of weapons of mass destruction and missile delivery systems is worsening, the U.S. needs to revise its strategy for deterrence and defense from its Cold War strategy based on massive nuclear retaliation to a strategy designed to protect and defend the U.S. and its allies against strategic attack.<sup>11</sup> Senator Jim DeMint (R–SC) sponsored an amendment to the resolution to ratify New START that includes a general description of this revised strategy.<sup>12</sup> While the Obama Administration ultimately accepted a modified version of the DeMint amendment, it has not clearly committed to revising U.S. strategy accordingly.
- **No clear commitment to a robust layered missile defense architecture.** The Obama Administration policies toward the development and deployment of missile defense systems appear to deemphasize the U.S. commitment to a layered missile defense concept, which is designed to

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5. New START Working Group, “An Independent Assessment of New START,” Heritage Foundation *Backgrounder* No. 2410, April 30, 2010, at <http://www.heritage.org/Research/Reports/2010/04/An-Independent-Assessment-of-New-START-Treaty>.
  6. Bruce Klingner, “The Case for Comprehensive Missile Defense in Asia,” Heritage Foundation *Backgrounder* No. 2506, January 7, 2011, at <http://www.heritage.org/Research/Reports/2011/01/The-Case-for-Comprehensive-Missile-Defense-in-Asia>.
  7. *Ibid.*
  8. Theodore R. Bromund and James Phillips, “Containing a Nuclear Iran: Difficult, Costly, and Dangerous,” Heritage Foundation *Backgrounder* No. 2517, February 14, 2011, at <http://www.heritage.org/Research/Reports/2011/02/Containing-a-Nuclear-Iran-Difficult-Costly-and-Dangerous>.
  9. Klingner, “The Case for Comprehensive Missile Defense in Asia.”
  10. Mikhail Formichev, “Russian Military to Buy 36 ICBMs, 2 Missile Subs in 2011,” RIA Novosti, March 18, 2011, at [http://en.rian.ru/military\\_news/20110318/163075432.html](http://en.rian.ru/military_news/20110318/163075432.html) (April 11, 2011).
  11. Baker Spring and Peter Brookes, “What Nuclear Gaming Tells Us About New START,” Heritage Foundation *Special Report*, September 28, 2010, at <http://www.heritage.org/Research/Reports/2010/09/What-Nuclear-Gaming-Tells-Us-About-New-START>.
  12. *Congressional Record*, December 22, 2010, pp. S10984–S10985.

counter ballistic missiles in the boost and ascent, midcourse, and terminal phases of flight. A commitment to boost-phase capabilities is particularly lacking. The Administration backed away from boost-phase defenses by downgrading the Airborne Laser program and terminating the Kinetic Energy Interceptor (KEI) program in FY 2010. It has yet to propose a program for pursuing space-based interceptors, the most effective option for a boost-phase missile defense.

- **Subordination of the U.S. missile defense program to the arms control agenda with Russia.** Administration officials constantly asserted during the Senate debate over New START that the treaty did not limit U.S. missile defense options.<sup>13</sup> Not only was this factually incorrect because the treaty limits the U.S. option to convert strategic offensive missile launchers into defensive interceptors, but the treaty also restricts the handling of certain types of target missiles in ballistic missile tests, and its preamble imposes general restrictions on U.S. missile defense options.<sup>14</sup>
- **Restrictions on military operations in space, which could be expanded to prohibit deployment of missile defense interceptors in space.** The Administration is actively looking at joining a European proposal for a “code of conduct” for space operations. While the current text does not specifically restrict missile defense operations in space, its proponents are asserting that this agreement—and by extension, future agreements of this kind—does not require Senate consent. Clearly, the Obama Administration wants a free hand to impose ever more severe restrictions on U.S. mili-

tary space operations, which cannot avoid limiting missile defense operations in space.<sup>15</sup>

- **Virtual silence on the threat of electromagnetic pulse (EMP) attacks.** The 2004 report of the Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack clearly showed that the EMP threat is extremely serious and the U.S. is vulnerable to an EMP attack.<sup>16</sup> Nevertheless, the Obama Administration has not paid sufficient attention to the EMP capabilities of potential enemies. Thus, it has not designed effective missile defense capabilities, and its missile defense policies and plans do not establish specific mission requirements for responding to potential EMP attacks.

### The Administration’s Missile Defense Programs for FY 2012

Given the Administration’s weak missile defense policy, the Administration’s missile defense proposal for FY 2012 and beyond suffers from a number of serious shortfalls:

- **Insufficient numbers of ground-based mid-course interceptors.** In FY 2010, the Obama Administration reduced the planned number of GMD interceptors in Alaska and California from 44 to 30. While the FY 2012 proposal would complete the integration of 14 silos at Missile Field-2 in Alaska, the number of missiles deployed there and in California would remain at 30.<sup>17</sup> The proposal includes a provision to acquire six more GMD interceptors in FY 2012, primarily for testing purposes.<sup>18</sup>
- **Failure to exploit the full potential of the Aegis-based missile defense system and the**

13. U.S. Department of State, Bureau of Verification, Compliance, and Implementation, “Ballistic Missile Defense and New START Treaty,” April 21, 2010, at <http://www.state.gov/t/avc/rls/140624.htm> (April 11, 2011).

14. Treaty proponents in the Senate fought very hard to defeat an amendment to strike sweeping language in the preamble. For example, see the floor statements of Senators John Kerry (D-MA) and Richard Lugar (R-IN). *Congressional Record*, December 17, 2010, pp. S10469–S10470.

15. Frank A. Rose, remarks at National Space Symposium, Colorado Springs, Colorado, April 14, 2011, at <http://www.state.gov/t/avc/rls/160816.htm> (April 19, 2011).

16. Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, “Executive Report,” 2004, at [http://empcommission.org/docs/empc\\_exec\\_rpt.pdf](http://empcommission.org/docs/empc_exec_rpt.pdf) (April 11, 2011).

17. U.S. Department of Defense, “Fiscal Year 2012 Budget Request,” p. 4-9.

18. U.S. Department of Defense, “MDA Fiscal Year 2012 Budget Outline.”

**Standard Missile-3 (SM-3) interceptors.** The Obama Administration's missile defense program puts the Aegis missile defense system at the center of its Phased Adaptive Approach (PAA) to missile defense. Under the Administration's proposed FY 2012 budget, the Aegis system would receive a total of \$2.128 billion from two sources, \$1.5 billion from its own budget line and \$628 million from a PAA line.<sup>19</sup> The Administration has proposed buying 46 SM-3 interceptors in FY 2012.<sup>20</sup> Nevertheless, the Administration is not pursuing the development of the Aegis system aggressively enough in developing and ultimately deploying SM-3 interceptors capable of countering long-range missiles.

- **No program to establish a space test bed for developing space-based interceptors.** The Obama Administration has yet to recognize that missile defense interceptors in space would provide the best possible protection to both the U.S. and its allies against missile attack. Given that the Ballistic Missile Defense Review Report states that it is not the purpose of the U.S. missile defense program to deploy a system that could counter Chinese and Russian long-range missiles,<sup>21</sup> it is reasonable to conclude that the Obama Administration erroneously believes that space-based interceptors would be destabilizing.
- **Termination of cooperation on the Medium Extended Air Defense System (MEADS) with Germany and Italy.** The Obama Administration has pledged to cooperate with U.S. allies in developing and fielding ballistic missile defense (BMD) capabilities. At best, its record in this area has been spotty. The latest casualty is the MEADS

program. On February 11, 2011, the DOD announced that the U.S. intends to walk away from the MEADS program and leave its international partners, Germany and Italy, hanging.<sup>22</sup> The DOD claims that it plans to exit the program by 2014 for budgetary reasons, programmatic shortcomings, and the existence of alternatives. In the interim, the U.S. will continue participating in the program because termination costs would outweigh the costs of participating.

- **Limited programs for countering ballistic missiles in the boost phase.** Since the Obama Administration downgraded the ABL program and cancelled the KEI program in FY 2010, the boost-phase missile defense elements of the layered missile defense concept have lagged, and the Administration has done nothing to advance space-based interceptor development. Indeed, the MDA budget no longer includes a boost-phase line item. The Administration is continuing to use the ABL as a test bed, but far less aggressively than is possible. It appears to have no plan to make the ABL available as an asset in select circumstances. However, the MDA and Air Force have agreed to develop jointly the Airborne Weapon Layer, an airborne missile that could shoot down missiles in this early stage of flight.<sup>23</sup> It is based on the Network Centric Airborne Defense Element (NCADE), an earlier program that conducted a successful interception in 2009.<sup>24</sup>
- **Reduced funding for missile defense cooperation with Israel.** The MDA request was projected to spend \$121.7 million on missile defense cooperation with Israel in this fiscal year.<sup>25</sup> The request for next year is \$106.1 million, a 13 per-

19. U.S. Department of Defense, "Fiscal Year 2012 Budget Request," pp. 4-4 and 4-11.

20. *Ibid.*

21. U.S. Department of Defense, "Ballistic Missile Defense Review Report," February 2010, p. 13, at [http://www.defense.gov/bmdr/docs/BMDR%20as%20of%2026JAN10%200630\\_for%20web.pdf](http://www.defense.gov/bmdr/docs/BMDR%20as%20of%2026JAN10%200630_for%20web.pdf) (April 27, 2011).

22. U.S. Department of Defense, Office of the Secretary of Defense, "Medium Extended Air Defense System (MEADS) Fact Sheet," at [http://www.acq.osd.mil/docs/U%20S%20\\_MEADS\\_Decision\\_Fact\\_Sheet\\_Feb\\_11\\_2011.pdf?transcriptid=4648](http://www.acq.osd.mil/docs/U%20S%20_MEADS_Decision_Fact_Sheet_Feb_11_2011.pdf?transcriptid=4648) (February 16, 2011).

23. Carlo Munoz, "Air Force, MDA Ink Agreement on New Ballistic Missile Program," Defense Daily Network, March 28, 2011, at <http://www.defensedaily.com/publications/smr/13046.html> (April 11, 2011; subscription required).

24. *Ibid.*

25. U.S. Department of Defense, "MDA Fiscal Year 2012 Budget Outline."

cent reduction. Further, the projected funding levels for this cooperative effort are lower through FY 2016, not even reaching the proposed level for FY 2012. It is unclear why the Administration would cut funding for U.S.–Israeli missile defense cooperation, especially after Israel successfully used the Iron Dome system to protect itself against rocket attacks from the Gaza Strip.<sup>26</sup>

### Fixing What Is Broken

Congress can reverse the specific Administration policies that have derailed the overall missile defense program since 2009 by adding a series of specific policy changes to the National Defense Authorization Act for FY 2012. These recommendations do not require additional funding.

#### Policy Change #1: Enact into law the policy guidance on “defending the United States and allies against strategic attack.”

This language, which was added to the New START resolution of ratification sought to establish a protect and defend strategy to replace the Cold War strategy of maintaining strategic deterrence by threatening retaliation with nuclear weapons. Moving toward a fundamentally defensive strategic posture, which seeks to hold at risk the means of strategic attack against the U.S. and its allies, is the most important and urgent requirement in positioning the U.S. to effectively meet the challenges of the post–Cold War world. This language needs to be given statutory authority.

#### Policy Change #2: Revise the National Missile Defense Act of 1999 to require the deployment of a multilayered missile defense system.

Given that the U.S. has deployed a rudimentary missile defense “against limited ballistic missile attack” as required by law,<sup>27</sup> Congress should

#### ***What the Administration is calling missile defense cooperation with Russia is in reality cooperation in curtailing missile defenses.***

update the law with a new prescription for the United States to deploy a global multilayered missile defense system as soon as technologically possible. This should require that the overall missile defense system protect the U.S. and its allies against missile attacks launched from anywhere in the world and be as robust as technology permits by including strong capabilities to counter ballistic missiles in all three phases of flight.

#### **Policy Change #3: Enact into law policy guidance that warns the Obama Administration against agreeing to any restrictions on U.S. missile defense options in arms control agreements and missile defense cooperation agreements.**

The process of negotiating and ratifying New START revealed that Russia seeks to limit U.S. missile defense options and that the Administration will agree to such restrictions if it believes it can get away with it. Indeed, the pressure on the U.S. to accept such restrictions will grow as it pursues the next arms control treaty with Russia, which the Administration may see as an opportunity to adopt a “minimal deterrence posture.”

Perhaps the Administration’s most disingenuous step is pursuing ongoing discussions with Russia on missile defense cooperation.<sup>28</sup> While the Administration is not admitting to it in public, what the Administration is calling missile defense cooperation with Russia is in reality cooperation in curtailing missile defenses.

Given the recent experience with New START, Congress cannot afford to permit the Administra-

26. Israeli Defense Forces, “Iron Dome Intercepts Rocket from Gaza,” April 7, 2011, at <http://idfspokesperson.com/2011/04/07/iron-dome-intercepts-rocket-from-gaza> (April 11, 2011).

27. “It is the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against limited ballistic missile attack (whether accidental, unauthorized or deliberate) with funding subject to the annual authorization of appropriations and the annual appropriation of funds for National Missile Defense.” National Missile Defense Act of 1999, Public Law 106–38, § 2.

28. Baker Spring, “Russian Control of U.S. Missile Defenses? Just Say No,” The Foundry, April 11, 2011, at <http://blog.heritage.org/2011/04/11/russian-control-of-u-s-missile-defenses-just-say-no> (April 11, 2011).

tion to gain the initiative on agreements with Russia that may apply to missile defense. Congress needs to use its legislative authority preemptively to foreclose Administration options to restrict U.S. missile defense capabilities through treaties or other agreements with Russia.

**Policy Change #4: Foreclose Obama Administration options to use non-treaty agreements or arrangements to limit U.S. missile defense capabilities.**

Section 2573 of Title 22 of the U.S. Code clearly states that international agreements that limit U.S. armed forces and armaments must be drafted as treaties. Nevertheless, the Obama Administration appears to be ignoring this legal requirement as it considers signing the Code of Conduct for Outer Space Activities proposed by the European Union.<sup>29</sup> By joining the Code of Conduct, the Obama Administration would establish a precedent for limiting, if not prohibiting outright, U.S. space-based missile defenses through non-treaty agreements or arrangements.

The Code of Conduct is not a treaty agreement. Indeed, the Administration could even argue that it is nonbinding, but such an assertion would be pure subterfuge. The Code of Conduct would impose obligations on the U.S., which will certainly limit how the U.S. military can operate missile defense systems in order to avoid generating space debris.

Congress, and the Senate in particular, should insist that the Code of Conduct be redrafted as a treaty. Section 2573 should provide Congress with the authority to demand such a revision. If the Obama Administration chooses to ignore this demand, Congress should amend Section 2573 to remove any doubt that it applies to the Code of Conduct for Space by explicitly defining the treaty requirement to cover informal arrangements.

**Policy Change #5: Increase awareness about the dangers from an EMP attack.**

Technical experts are well aware of the dangers posed by an EMP attack and have described them in considerable detail in the public reports of the congressionally appointed Commission to Assess the Threat to the United States from Electromagnetic Pulse Attack.<sup>30</sup> This is an important issue for missile defense because a ballistic missile is the most effective means of delivering an EMP weapon to a position in space where it can cause maximum damage to the U.S. electrical grid and other elements of the infrastructure.

General public awareness of this threat appears to be low. Accordingly, the House Armed Services Committee should describe the nature of the EMP threat by dedicating a portion of its report on the National Defense Authorization Act for Fiscal Year 2012 to the threat of EMP attacks. It can augment this language in the committee report by holding hearings on the subject at various locations around the country.

**Moving Ahead**

Just making up lost ground will not keep the U.S. missile defense programs ahead of America's adversaries. That would require decisively reversing the Obama Administration's course of "just barely enough" missile defense and putting the nation on the path to more robust defenses that would protect and defend the U.S. and its friends and allies and that would dissuade potential enemies from investing in offensive missile capabilities.<sup>31</sup> To that end, the Independent Working Group's 2009 report is an excellent resource for Congress as it considers missile defense legislation as part of the National Defense Authorization Act for FY 2012.

Implementing all of the following programmatic recommendations will require Congress to increase

29. Baker Spring, "The Senate's Letter to Prevent the Space Code of Conduct: Issues Remain," *The Foundry*, February 10, 2011, at <http://blog.heritage.org/?p=52031> (April 11, 2011).

30. Commission to Assess the Threat to the United States from Electromagnetic Pulse (EMP) Attack, "Executive Report," and *Critical National Infrastructures*, April 2008, at [http://empcommission.org/docs/A2473-EMP\\_Commission-7MB.pdf](http://empcommission.org/docs/A2473-EMP_Commission-7MB.pdf) (April 5, 2011).

31. Institute for Foreign Policy Analysis, Independent Working Group, "Missile Defense, the Space Relationship, & the Twenty-First Century," January 2009, p. xii, at <http://www.ifpa.org/pdf/IWG2009.pdf> (April 7, 2011).

the FY 2012 missile defense budget by \$850 million above the Administration's request. This means that the missile defense budget should exceed \$11.5 billion in FY 2012. Specifically, Congress should:

- 1. Augment the GMD program.** The Administration's commitment to the GMD program is clearly inadequate. Not only does it recommend reducing funding for the program by \$185 million from the requested level for the current fiscal year, but it continues to assume that the U.S. needs only 30 interceptors in Alaska and California, compared to the 44 interceptors that were originally planned. Congress should insist on procuring the 44 interceptors originally planned and enough interceptors for testing. This would require roughly \$200 million in increased funding for the GMD program above the Administration's requested level for FY 2012. Congress should also include language in the report accompanying the National Defense Authorization Act stating that it intends to increase GMD program funding after FY 2012, in contrast to the Obama Administration's projections.
- 2. Exploit the SM-3's capability to counter long-range missiles by requiring testing against long-range target missiles as soon as technically feasible.** With software modifications, new command and control arrangements, and access to off-board sensor data, the existing SM-3 Block IA interceptor could intercept long-range ballistic missiles in the late midcourse phase.<sup>32</sup> The successful interception of an out-of-control U.S. satellite in early 2008 demonstrated this capability. Developing this capability may require additional resources, but the Aegis ballistic missile defense program will receive \$960 million in research and development funding in FY 2012 and the PAA will receive almost \$360 million in research and development funding, which is largely focused on Aegis. Additionally, the roughly \$1.3 billion that may be available for developing the Aegis BMD system could provide the resources to test the Block IA missile against a long-range target ballistic missile. Either way, Congress should insist that the Navy attempt an intercept test of the Block IA missile against a long-range target missile as soon as technically feasible.
- 3. Increase SM-3 procurement to 436 by FY 2016.** The Administration's current plan to procure 341 SM-3 missiles through FY 2016 falls short. The goal should be to have 436 SM-3 missiles in the inventory by FY 2016. As a step toward meeting this higher goal, the missile defense program will need to procure 51 SM-3 Block IB missiles in FY 2012, as opposed to the requested 46, which will cost an additional \$60 million. While Congress should exercise its oversight authority to keep the procurement and delivery of the Block IB missiles on track, component-level decisions—such as whether to include the next generation divert and attitude control system (DACs) in the initial Block IB missiles—are best left to the program managers and the contractors unless compelling evidence indicates that Congress needs to intervene to keep the overall acquisition moving forward.
- 4. Direct that the SM-3 be evolved to increase its speed by reviving Advanced Technology Kill Vehicle (ATKV) technology.** To counter long-range missiles in the ascent-phase of flight, the SM-3 needs to increase its velocity. This is best achieved by arming the missile with a smaller and lighter kill vehicle based on ATKV technology developed in the 1990s.<sup>33</sup>
- 5. Give the Navy greater authority over the Aegis-based missile defense program.** The Aegis missile defense capability, particularly the portion deployed on ships, will be placed on multiple-mission platforms. Procuring cruisers and destroyers solely for the missile defense mission would be both too expensive and unwise. Accordingly, the Navy needs to take the lead in

32. Vice Admiral J. D. Williams, USN (Ret.), "Improving Aegis Ballistic Missile Defense Command and Control," Heritage Foundation *Special Report* No. 89, May 2, 2011, pp. 10–11, at <http://www.heritage.org/Research/Reports/2011/05/Improving-Aegis-Ballistic-Missile-Defense-Command-and-Control>.

33. Institute for Foreign Policy Analysis, "Missile Defense, the Space Relationship, & the Twenty-First Century," p. xii.



creating the organizational structures to manage the missile defense mission in conjunction with its other responsibilities. This includes the critical area of missile defense command and control.<sup>34</sup> Thus, some missile defense funding will need to be shifted from the MDA to the Navy, as has already happened with Army programs. However, the MDA should still be directed to cooperate with the Navy in enabling the Aegis missile defense system to be as capable as possible. Specifically, the MDA should be directed to cooperate with the Navy to ensure that the Aegis system has access to sensor data from systems not colocated with SM-3 interceptors in as seamless a fashion as possible. All unnecessary layers in the overall command and control structure should be removed.

- 6. Establish a missile defense test range on the East Coast and locate an Aegis Ashore site along the Gulf Coast.** Existing DOD and NASA facilities should be extended to provide missile defense testing and deployment options for U.S. Aegis ships along the East Coast and an Aegis Ashore site along the Gulf Coast. This overall capability would also provide the foundation for countering the threat of short-range ballistic missiles launched from ships off the coast. This threat includes missiles that could carry EMP warheads. The Independent Working Group proposed an East Coast test range in its January 2009 report.<sup>35</sup> In January, NASA's Wallops Island launch facility on Virginia's Eastern Shore and three East Coast Navy ships participated in a missile defense tracking exercise.<sup>36</sup> This is a step in the right direction toward establishing a broader missile defense testing and exercise facility on the East Coast. Since then, Independent Working Group members have concluded

that the Gulf Coast also needs protection, which could be provided by locating an Aegis Ashore site in this area.

- 7. Establish a space test bed.** The most effective missile defense system will include space-based interceptors because a long-range ballistic missile must pass through space on the way to its target. Accordingly, the Independent Working Group has made development and deployment of a space-based interceptor network the centerpiece of its recommendations for obtaining a truly effective missile defense capability for the U.S. and its allies.<sup>37</sup> The group has proposed establishing a test bed in space for missile defense interceptors in three years at an estimated cost of \$3 billion to \$5 billion. The proposal would assign this mission to the Defense Advanced Research Projects Agency and could begin with a \$200 million budget in FY 2012.
- 8. Restore the Medium Extended Air Defense System program.** The DOD's criticisms of the MEADS program do not stand up to scrutiny.<sup>38</sup> The U.S. has already invested \$1.5 billion in the system to date, most of which the U.S. would lose if it withdraws. Furthermore, two important U.S. allies have been sharing the cost of development from the outset. The cost of short-term participation just to avoid termination costs are difficult to justify. The program completed its design review in August 2010 and initial fabrication has begun. The alternative to MEADS is the existing Patriot missile defense system. While the Patriot may be upgraded, MEADS will have capabilities not present in the Patriot. Continued U.S. participation in MEADS would require about \$150 million in additional funding in FY 2012.

34. Williams, "Improving Aegis Ballistic Missile Defense Command and Control."

35. Institute for Foreign Policy Analysis, "Missile Defense, the Space Relationship, & the Twenty-First Century," p. 130.

36. GlobalSecurity.org, "Aegis Ballistic Missile Defense System Completes Tracking Exercise," January 28, 2011, at <http://www.globalsecurity.org/space/library/news/2011/space-110128-lockheed-martin02.htm> (April 7, 2011).

37. Institute for Foreign Policy Analysis, "Missile Defense, the Space Relationship, & the Twenty-First Century," p. 129.

38. Baker Spring and Michaela Bendikova, "Medium Extended Air Defense System: Continued Funding Needed," Heritage Foundation *WebMemo* No. 3167, February 22, 2011, at <http://www.heritage.org/Research/Reports/2011/02/Medium-Extended-Air-Defense-System-Continued-Funding-Needed>.

### Why Is the Administration Abandoning MEADS?

The circumstances surrounding the decision to leave the MEADS program lead to the question of whether an additional reason is driving this decision. The Obama Administration is committed to concluding an arms control treaty with Russia to reduce the number of short-range nuclear weapons. Russia has a tremendous advantage over the U.S. in these systems, and the Obama Administration is likely tempted to use U.S. defense systems against short-range missiles as bargaining chips in negotiations with Russia. From this perspective, the decision to withdraw from MEADS can

be seen as a preliminary U.S. commitment to Russia to limit its defenses against short-range missiles. If this is true, the Patriot, the Terminal High Altitude Area Defense (THAAD), and certain models of the SM-3 could also be on the arms control auction block.

Given the implications of the Administration's decision to withdraw from MEADS for both missile defense cooperation with U.S. allies and to limit missile defense options for reasons of arms control, Congress should insist on continued U.S. participation in MEADS.

**9. Strengthen the boost-phase element of the BMD program.** The Obama Administration has been very weak in pursuing the capabilities to intercept ballistic missiles in the boost and ascent phases. Beyond improving the Aegis system to give the SM-3 an ascent-phase capability against long-range missiles and starting to develop a network of space-based interceptors, Congress should strengthen the Airborne Laser and Airborne Weapon Layer (AWL) programs. ABL testing should be intensified, and it should be given a role as a backup operational system while in development. This would require \$200 million in FY 2012. The AWL should move forward as a joint Air Force and MDA development program under their recent agreement. This will require an additional \$23 million in FY 2012.

**10. Maintain missile defense cooperation with Israel.** The U.S. has a long history of cooperating with Israel on missile defense. Given the threats that Israel faces, as demonstrated by the successful use of the Iron Dome anti-rocket system in recent days, this should continue. This circumstance led Congress to provide a special appropriation of \$205 million to assist

the Israelis with the Iron Dome program. At a minimum, Congress should increase FY 2012 funding to match FY 2011 requested funding as part of a broader plan to maintain this level of effort through FY 2016. This would require a \$15 million increase for FY 2012. Further, Congress should reserve the option of increasing funding for this assistance through future special appropriations by much greater sums as circumstances warrant it.

**11. Take steps to protect the nation's electronic infrastructure against EMP attack.** As the Independent Working Group noted in a recent study, missile defense will play a critical role in protecting the U.S. against EMP attacks because ballistic missiles are the best delivery means for EMP warheads.<sup>39</sup> Upgrading the Aegis-based BMD system and establishing an East Coast test bed for missile defense would provide substantive capability to address the EMP threat, but this requires establishing clear mission requirements. Congress can ensure that the Department of Defense assigns these mission requirements appropriately.

39. Henry F. Cooper and Robert L. Pfaltzgraff, Jr., "Countering the EMP Threat: The Role of Missile Defense," Institute for Foreign Policy Analysis *White Paper*, 2010, at <http://www.ifpa.org/pdf/IWGWhitePaper.pdf> (April 11, 2011).

## Time to Act

Establishing a robust ballistic missile defense is the most effective means of addressing the future threats to the U.S. and its allies resulting from the proliferation of missile technology and weapons of mass destruction. As long as U.S. missile defense capabilities remain limited, ballistic missiles will be the most effective means of delivering such weapons. This policy shift toward a robust missile defense would move the U.S. away from the retaliation-based deterrence policies of the Cold War and toward a protect and defend strategy that seeks to deter attacks on the U.S. and its allies by dramatically reducing the likelihood that such attacks will achieve their political and military aims.

The Obama Administration's missile defense policy and programs demonstrate its reluctance to make this necessary policy shift, indicating that the Obama Administration is misreading the situation, both domestically and internationally. Domestically,

the American people clearly want to be protected and expect the federal government to fulfill its constitutional responsibility to the best of its ability.

Internationally, proliferation has put weapons of mass destruction and missile delivery systems into the hands of both states and terrorist organizations that are much less concerned about the threat of U.S. retaliation than the Soviet Union was during the Cold War. On this basis, Congress has the responsibility to push the Obama Administration in the right direction. It can start by incorporating a robust missile defense policy and matching set of programs into the National Defense Authorization Act.

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