

Moving Forward with Ballistic Missile Defense

A Memo to President-elect Obama

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The 21st century will be a dangerous place if America fails to protect itself and its allies.



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In a world with nuclear weapons, America must continue efforts to defend against the mass destruction of its citizens and our allies.

—Barack Obama, “Barack Obama and Joe Biden on Defense Issues,” from *barackobama.com*

PRESIDENT-ELECT OBAMA, during the campaign you said you were committed to protecting the United States and its allies against attacks that employ weapons of mass destruction (WMD). This commitment extends to fielding defenses against such attacks that are delivered by ballistic missile systems. Your pledge is in keeping with the Bush Administration’s policy, moving the U.S. away from the Cold War strategy of relying almost exclusively on large-scale retaliatory threats, including nuclear weapons, to deter attacks. The American people should welcome this continuity because, first and foremost, they want to be protected.¹

On the other hand, your “Blueprint for Change” states that your Administration will support missile defense that is “pragmatic and cost-effective” and “does not divert resources from other national security priorities until we are positive the technology will protect the American public.”² These statements imply that ballistic missile defense programs are not a top priority and that missile defense technology is not proven.³ Neither is true. Further, you have made broad statements regarding the “weaponization” of space.⁴ The fact is that an effective and affordable ballistic missile defense system will require both robust funding and space-based elements.⁵



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It is important, therefore, that you clear up ambiguities in your position on missile defense. Allies like Poland are watching and will need to be certain of your commitment to them. At the same time, Russia surely will try to take advantage of any uncertainty. It is critical that you move ahead quickly on your promise to “spare no effort to protect Americans from the threats posed by nuclear weapons and ballistic missiles.”⁶

In order to fulfill your fundamental commitment to protect and defend the people, territory, institutions, and infrastructure of the U.S. and its allies, you will need to propose a defense program that includes a dedicated and robust ballistic missile defense enterprise. Such an enterprise should include the following elements:

- **A commitment to spend between 2 percent and 3 percent of the defense budget on ballistic missile defense.** Appropriately, you have stated that ballistic missile defenses must be effective and that this will require rigorous testing.⁷ A rigorous testing program, by definition, will require robust funding. You cannot at the same time demand a greater volume and array of testing activities and cut the budget for these activities.

1. According to an August 2008 public survey, 87 percent of Americans think the U.S. should have a missile defense system that is capable of protecting America against missiles that may contain weapons of mass destruction (WMD) warheads. See Opinion Research Corporation, “National Missile Defense Study,” Conducted for Missile Defense Advocacy Alliance, July 2008, at http://www.missiledefenseadvocacy.org/data/files/polls/2008%20national_missile_defense_study.ppt#886,1, Slide 1 (November 12, 2008).

2. “Blueprint for Change: Defense,” at <http://www.barackobama.com/issues/defense/> (November 20, 2008).

3. “Barack Obama and Joe Biden on Defense Issues,” at <http://www.barackobama.com> (November 12, 2008).

4. Barack Obama on YouTube video at <http://www.youtube.com/watch?v=7o84PE871BE> (November 6, 2008).

5. Robert L. Pfaltzgraff, Jr., Ph.D., “The Cost of Missile Defense,” and Baker Spring, “Weapons in Space,” in *33 Minutes: Protecting America in the New Missile Age* (Washington, D.C.: The Heritage Foundation, 2008), pp. 15–19 and 63–66. See also Independent Working Group, *Missile Defense, the Space Relationship, & the Twenty-First Century: 2007 Report* (Cambridge, Mass.: Institute for Foreign Policy Analysis, 2007). As of this writing, an updated version of this report is scheduled for publication in late 2008.

6. “Barack Obama and Joe Biden: A Stronger Partnership with Europe for a Safer America,” at http://metaexistence.org/Fact_Sheet_Europe_FINAL.pdf (November 20, 2008).

7. “Barack Obama and Joe Biden on Defense Issues.”

Clearly, avoiding the catastrophic effects of a ballistic missile attack with WMD is worth a portion of the overall defense budget that runs between 2 percent and 3 percent of the total. This commitment should come in the context of a broader defense plan that commits 4 percent of gross domestic product (GDP) to defense.

- **A consistent program of development and testing.** The rigorous testing program you have called for cannot follow traditional acquisition procedures because ballistic missile defenses constitute a complex system of systems. Traditional Department of Defense acquisition procedures require operational testing prior to procurement, but this is impossible for ballistic missile defense and a limited number of other weapons systems because the system of systems has to be built in order to permit testing for operational effectiveness. For example, the Department of Defense did not require operational testing of the Global Positioning System (GPS) satellite constellation as a comprehensive network before procurement of the first satellite. It would have been impossible to field this very valuable defense system on that basis.

The same is true for ballistic missile defense. It must proceed by incremental fielding and testing steps that take place concurrently. Further, any attempt to use the testing regime to demonstrate a perfect defense will give potential enemies more time to exploit current U.S. vulnerabilities.

- **A layered missile defense concept.** You have questioned the effectiveness of the missile defense program.⁸ The fact is that the basic hit-to-kill technology has been very successful. From 2001 through 2007, successful intercepts were achieved 34 times out of 42 attempts. Your skepticism, however, may stem from a perspective that views individual elements of the missile defense program apart from one another. If you examined the midcourse defense element alone, for example, you might conclude that it could be defeated by countermeasures designed to confuse or overwhelm the midcourse interceptors or that it would provide

8. *Ibid.*

inadequate protection against a missile carrying an electromagnetic pulse (EMP) warhead.

The boost-phase and terminal-phase elements of the missile defense program, however, render these countermeasures ineffective, and its boost-phase elements are much more effective than midcourse and terminal defenses against an EMP attack. A layered defense that includes boost-phase, midcourse-phase, and terminal-phase elements will constitute an effective defense. You should preserve the layered concept in the development, testing, and deployment plan for ballistic missile defense and judge its overall effectiveness accordingly.⁹

- **A plan to expand the role of the services in ballistic missile defense.** You have been silent regarding the proper role of the services in ballistic missile defense. As missile defense systems mature, they should be put into the hands of the military services that will operate them. This includes the transfer of procurement funding for these systems. This has already happened in great measure with the transfer of the Patriot PAC-3 terminal interceptor system from the Missile Defense Agency (MDA) to the Army. A similar effort to do the same with the transfer of the AEGIS-based midcourse and terminal defense systems to the Navy should be accelerated.

On the other hand, the MDA should retain responsibility for the development and testing of new systems and for ensuring that the disparate elements of the broader missile system, including sensors and interceptors, can be tied together into an integrated whole through the command-and-control network that will cut across service lines.

- **The development and fielding of space-based elements.** You have stated that you will not “weaponize” space, but the ballistic missiles you have pledged to counter are space weapons. Since they fly through space, it should not surprise you that the most effective and cost-effective defenses against them will be space-based. Missile defense needs to go to space because that is where the missiles are during their flights.

According to an authoritative report from the Independent Working Group, a constellation of 1,000 space-based hit-to-kill interceptors, along with replacements, would cost less than \$20 billion to build, launch, operate, and maintain over a 20-year period. This constellation alone would constitute a global, layered missile defense capability, although it should be augmented with land-based, sea-based, and air-based elements. In fact, this broader approach is consistent with an acquisition strategy that properly balances near-term and longer-term technologies for missile defense.¹⁰

- **A program for cooperation with U.S. allies.** The missile defense program is designed to defend U.S. troops stationed abroad and U.S. allies as well as America’s population and territory. You have confirmed the wisdom of the allied approach to missile defense. The existing missile defense program involves allied participation in Asia, Europe, and the Middle East, and this should continue. Key among the various cooperative efforts are the agreements with the Czech Republic and Poland, both NATO allies, to field a missile defense radar and 10 Ground-based Midcourse Defense interceptors on their territories to counter longer-range missiles.

If you want to send a signal that the U.S. intends to use missile defense cooperation to reinforce its alliance relationships, you should make it clear that the U.S. will move to implement these agreements. What you should not do is adopt the position of French President Nicolas Sarkozy, who urged a moratorium on the fielding of missile defenses in Europe. President Sarkozy’s statement serves to undermine NATO solidarity in favor of the program, which was adopted by NATO leaders in Bucharest, Romania, in the spring.

- **Recognition that ballistic missile defense has been the least developed component of the forces necessary to protect and defend the U.S. and its allies.** Appropriately, you have stated that you seek a variety of forces to defend the U.S. and its allies against

9. Independent Working Group, *Missile Defense, the Space Relationship, & the Twenty-First Century*.

10. For an explanation of this balanced acquisition strategy, see Ambassador J. D. Crouch *et al.*, “Missile Defense & National Security: The Need to Sustain a Balanced Approach,” National Institute for Public Policy *Information Series Report* No. 0087, October 20, 2008.

attacks with WMD.¹¹ Clearly, counterterrorism, air, cruise missile, and civil defenses have a role to play.

You must also recognize, however, that the ballistic missile defense force has started from a weakened position because—unique among the various defense forces—the development, testing, and deployment of ballistic missile defenses were sharply curtailed by treaty during a roughly 30-year period (1972–2002). This treaty was the Anti-Ballistic Missile (ABM) Treaty with the former Soviet Union. As a result, until recently, U.S. ballistic missile defense forces were losing ground to the development of ballistic missile delivery systems by potential enemies. While the U.S. has started to gain ground against foreign ballistic missile capabilities since President Bush withdrew the U.S. from the ABM Treaty, the program still lags behind the projected threat. You must recognize that the momentum needed to catch up

with the projected growth in ballistic missile capabilities and threats has to be sustained.

Conclusion

If the U.S. or its allies were attacked with ballistic missiles carrying WMD warheads, the world would be forever transformed. The American people would be rather unforgiving of a President who failed to demonstrate that he had done his utmost to field a defense against such an attack, and a successful attack on an ally would almost certainly undermine the credibility of U.S. security commitments and the overall alliance system led by the United States.

The requirements of today's world demand a strategy to protect and defend the U.S. and its allies. The Cold War strategy of retaliation-based deterrence is insufficient. Ballistic missile defenses are therefore an essential component of a protect-and-defend strategy for the 21st century.

11. "Barack Obama and Joe Biden on Defense Issues."

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