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THE SENATE ARMED SERVICES COMMITTEE

STATEMENT OF

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## **Introduction**

Chairman Nelson, Ranking Member Sessions, and Members of the Subcommittee, thank you for the opportunity to testify in support of the Department's Fiscal Year (FY) 2013 budget request for missile defense. As the new defense strategy makes clear, ballistic missile defense is a key capability for the United States with important ramifications in several of the Department's key mission areas.

In February 2010, the Administration completed the statutorily required review of missile defense policies and plans, the Ballistic Missile Defense Review (BMDR). This comprehensive review set out the following key policy priorities:

- **First:** The United States will continue to defend the homeland against the threat of limited ballistic missile attack.
- **Second:** The United States will defend against regional missile threats to U.S. forces, while protecting allies and partners – and enabling them to defend themselves.
- **Third:** Before new capabilities are deployed, they must undergo testing that enables assessment under realistic operational conditions.
- **Fourth:** The commitment to new capabilities must be fiscally sustainable over the long term.
- **Fifth:** BMD capabilities must be flexible enough to adapt as threats change.
- **Sixth:** The United States will seek to lead expanded international efforts for missile defense.

A year ago, we provided you an update on the status of our efforts to implement these policies. That testimony highlighted our progress with our NATO Allies in implementing the European Phased Adaptive Approach (EPAA).

This year I would like to focus on our progress in three key areas: sustaining a strong homeland defense, strengthening regional missile defense, and fostering increased international cooperation.

## **Sustaining a Strong Homeland Defense**

On homeland defense, our policy is informed by the following key judgments:

- The homeland is currently protected against potential limited intercontinental ballistic missile (ICBM) attacks from states like North Korea and Iran. This is a result of the steady progress over the past decade in developing and deploying the Ground-based Midcourse Defense (GMD) system. This system consists of Ground-Based Interceptors (GBIs), early-warning radars, sea-based radar systems, and a sophisticated command and control architecture. With 30 GBIs in place, the United States is in an advantageous

position vis-à-vis the threats from North Korea and Iran. Although both countries have active programs to develop long-range ballistic missiles and space-launch vehicles, most recently evidenced by North Korea's failed attempt to launch a Taepo Dong-2 missile, neither has successfully tested an ICBM or demonstrated an ICBM-class warhead.

- Maintaining this advantageous position is essential. This requires continued improvement to the GMD system, including enhanced performance by the GBIs and the deployment of new sensors. It also requires the development of the Precision Tracking Space System (PTSS) to handle larger raid sizes and the Standard Missile 3 (SM-3) Block IIB as the ICBM threat from states like Iran and North Korea matures. These efforts will help to ensure that the United States possesses the capability to counter the projected threat for the foreseeable future.
- The United States must also be well hedged against the possibility that new threats may emerge so rapidly as to call into question the currently advantageous position. It is also prudent for the United States to have a hedge strategy to address possible delays in the development of our missile defense. Key elements of the hedge strategy were set out in the BMDR two years ago, including completion of the second field of 14 silos at Fort Greely, Alaska. This increases the availability of silos in the event that additional GBI deployments become necessary. Additionally, we continue to develop the two-stage GBI. In addition, the BMDR conveyed the Administration's commitment to pursue additional programs to hedge against future uncertainties.

The commitment to continued improvement of the GMD system is reflected in budget requests to:

- Implement an aggressive GBI reliability improvement program;
- Deploy forward-based AN/TPY-2 radars;
- Develop the Precision Tracking Space System;
- Upgrade the Command, Control, Battle Management, and Communications (C2BMC) system;
- Emplace an additional In-Flight Interceptor Communications System Data Terminal on the U.S. East Coast; and
- Upgrade the Early Warning Radars at Clear, Alaska and Cape Cod, Massachusetts by 2017; and
- Accelerate C2BMC development and discrimination software to handle larger raid sizes.

These improvements in sensor coverage, command and control, and interceptor reliability will have a significant impact on the expected performance of the GMD system. Their net effect will be to reduce the number of GBIs required per intercept, which will increase the number of ICBMs that can be defeated by the GMD system.

The commitment to the SM-3 IIB as part of the longer-term solution is reflected in a request for a renewal of full funding for its development. Due to Congressional actions, the SM-3 IIB program has been delayed by a year. The SM-3 IIB interceptor is now scheduled to be available for deployment in 2021 timeframe. When deployed in Europe, the SM-3 IIB will provide an opportunity for early intercept of potential Iranian ICBMs. This will also provide the United States with an additional type of interceptor for defeating ICBMs.

The commitment to being well hedged is reflected in a request to purchase an additional five GBIs. This will ensure the capability to emplace additional missiles rapidly in Missile Field 2, if necessary. It will also maintain enough GBIs for testing and operational spares. This decision also keeps the GBI production line “warm” in case the purchase of additional GBIs is needed in the future. These decisions follow the Department’s commitment to pursue “additional programs to hedge against future uncertainty,” as stated in the 2010 BMDR Report. To support those decisions, the Department is conducting a comprehensive review of possible future developments in the threat and of how best to ensure timely response to currently unpredicted developments. The Department will provide a classified summary of this work to the Subcommittee.

### **Strengthen Regional Missile Defenses**

On regional missile defense, our policy is informed by the following key judgments:

- After a decade of significant progress in developing and fielding capabilities for protection against short- and medium-range ballistic missiles, the United States is capable now of significantly strengthening protection of its forces abroad and assisting its allies and partners in providing for their own defense.
- The need to strengthen protection significantly is clear, as the threat is rapidly expanding in regions where the United States offers security assurances.
- Fixed architectures lack the flexibility to meet rapid and unexpected developments in the regional missile threat, so a more flexible approach is needed.
- Regional approaches must be tailored to the unique deterrence and defense requirements of each region, which vary considerably in their geography, history, and character of the threat faced, and in the military-to-military relationships on which we seek to build cooperative missile defenses.
- Because the demand for missile defense assets within each region over the next decade will exceed supply, the United States will develop capabilities that are mobile and relocatable.

- Missile defense is an integral part of a comprehensive U.S. effort to strengthen regional deterrence architectures. It plays a central role in the new strategic guidance the Department released in January 2012.
- Regional missile defense architectures are not meant as a substitute for the defense of the homeland. However, over time they can become effective means to that end if threats to the homeland appear in specific regions as states like Iran and North Korea develop and deploy intercontinental-range capabilities.

The BMDR set out this new policy framework and committed the United States to pursue a phased adaptive approach (PAA) to missile defense within each region. The 2010 BMDR Report set out in detail the first regional application—in Europe. It also indicated that the approach would be applied in East Asia and the Middle East. A short summary of our progress on each of these projects follows.

### **PAA Implementation: Europe**

A year ago, we were pleased to be able to report to you substantial progress within NATO in support of missile defense. At the November 2010 NATO Summit in Lisbon, NATO Heads of State and Government had taken the unprecedented step of deciding to put in place full coverage and protection for the Alliance’s European populations, territories, and forces against ballistic missile attacks. NATO also decided at Lisbon to expand its existing missile defense command-and-control backbone — the Active Layered Theater Ballistic Missile Defense (ALTBMD) — to encompass territorial missile defense. ALTBMD’s initial capability is now in place, and will continue to evolve towards full capacity in 2018. EPAA will be the U.S. contribution to NATO missile defense. More than one year ago, the first deployment of EPAA capabilities came when the guided missile cruiser USS MONTEREY, carrying SM-3 interceptors, deployed to Europe in March 2011.

We also have continued to make steady progress in implementing all four phases of the EPAA.

The elements of the first phase of EPAA are now in place. As noted, Phase 1 began with deployment of the first BMD-capable ship in March 2011. We have continued to maintain a sea-based missile defense presence in the region since that time. In August of 2011, Turkey announced that it would host the forward-based radar as part of NATO’s missile defense plan. By the end of 2011, the radar was deployed to the Turkish military base at Kürecik. Additionally, associated command and control capabilities are now operational, such as the U.S. Air Operations Center at Ramstein Air Base, Germany. Also of note, ALTBMD’s interim capability is operational, and will continue to evolve towards full capability in the 2018-2020 timeframe.

In Phase 2, the architecture will be expanded with a land-based SM-3 site, or Aegis Ashore, in Romania, and with SM-3 Block IB interceptors that will be deployed on land and at sea. The

Ballistic Missile Defense Agreement (BMDA) with Romania entered into force in December 2011, so the groundwork has been set for the site to become operational in the 2015 timeframe.

In Phase 3, a second land-based SM-3 site will be deployed in Poland. The more capable SM-3 Block IIA interceptors will be deployed on land and at sea, extending coverage to all NATO European countries. The Polish BMDA entered into force in September 2011.

Finally, with respect to Phase 4, the Department has begun concept development of a more advanced version of the SM-3 interceptor, the Block IIB, for deployment in the 2021 timeframe. This interceptor will be an especially important enhancement to the EPAA because Iran continues to develop ballistic missiles that are capable of threatening all of NATO Europe and the technology needed to field an ICBM that could threaten the U.S. homeland. The SM-3 IIB will be the most capable interceptor for addressing intermediate-range ballistic missile (IRBM) threats to Europe and will enhance the protection of the United States by providing an early shot against an Iranian ICBM headed towards the U.S. homeland.

We have also taken steps to resource the requirement for sea-based BMD capabilities efficiently in all phases of the EPAA. Spain has agreed to host four U.S. Aegis destroyers at the existing naval facility at Rota. These multi-mission ships will support the EPAA, as well as other U.S. European Command and NATO maritime missions. The first two ships are scheduled to arrive in 2014, and two more ships will arrive in 2015.

### **NATO Missile Defense**

As we continue to implement the EPAA, we are also supporting the President's commitment to contribute the EPAA capabilities to NATO missile defense. The U.S. decision to implement the EPAA in a NATO context was instrumental in building a strong consensus among the Allies in support of missile defense.

NATO is now focusing on defining the command and control procedures that will guide how NATO missile defense will operate. At the May 2012 NATO Summit in Chicago, the United States and the Allies plan to declare that NATO has achieved an "Interim BMD Capability."

In essence, this will mean that each nation's missile defense contributions, including the U.S. EPAA assets, will operate under the same "playbook" developed and agreed by Allies. Much of this work has already been completed, and the United States will continue to support and guide these efforts to ensure that NATO missile defense procedures result in the most effective and efficient missile defense protection of NATO European populations, territory, and forces possible.

As the EPAA continues to evolve, so will NATO missile defense. In the coming years, NATO will work towards future milestones for territorial missile defense. NATO is fully engaged in

developing the details necessary to implement fully the Alliance missile defense decisions announced at the Lisbon Summit. Key enhancements of the future NATO missile defense capability will include:

- Engagement coordination among Allies to ensure the most efficient defense;
- Real-time sharing of engagement-quality data to improve the chances of engagement success;
- The ability to coordinate and manage “upper-layer” missile defense capabilities (defense against longer-range threats).

As a result, NATO’s capacity to accommodate and coordinate additional Allied contributions will grow. Meanwhile, the United States will continue to deploy all four phases of the EPAA as a contribution to NATO missile defense.

There are still some complicated issues that must be resolved, as there are with any new capability at NATO, but the work is being driven by the political consensus achieved at Lisbon. The Allies agree that the ballistic missile threat to NATO is growing more urgent, not less. Furthermore, we agree that missile defense is a critical new capability in order to meet this threat and adapt to the evolving 21<sup>st</sup> century security landscape.

### **Phased Adaptive Approaches in Other Regions**

We are also working to implement the principles of the phased adaptive approach in the Asia-Pacific region and the Middle East, building on the existing foundations of U.S. defense cooperation in these regions. These regional approaches must be tailored to the unique mix of threat and geography in each region. In Asia, the security environment is largely maritime in character, with some vast distances. The Middle East is far more compact, and the threat comes from missiles of short and medium range. Moreover, the footprint of U.S. military presence is different in each region, and will evolve in different ways over the coming decade. The potential threat to the U.S. homeland from regional actors varies, and with it requirements for the role that regional defenses play in protection of the United States change as well.

These regional approaches to ballistic missile defense should allow strong partnerships with regional allies and partners in meeting emerging security challenges, and provide opportunities for building partner capacity.

### **Strengthening International Cooperation**

There has been significant progress in the area of international cooperation on missile defense. Let me highlight a few areas of particular note.

#### *Europe*

Within NATO, Allies are stepping up as contributors to the NATO missile defense effort. Germany and the Netherlands currently field Patriot PAC-3, Greece and Spain operate Patriot PAC-2, and France and Italy have the SAMP/T system, which has capabilities similar to those of the Patriot.

Other Allies plan to commit additional capabilities to contribute to NATO missile defense. The Netherlands has approved plans and funding to upgrade the SMART-L radar on four air defense frigates, giving the ships a BMD sensor capability. Additional sensor capabilities can greatly enhance the effectiveness of a BMD architecture. Germany is also exploring airborne sensor concepts that could support NATO BMD. In addition, France has proposed a concept for a shared-early warning satellite, and is developing a transportable midcourse radar for BMD and early warning.

NATO Allies have shown their financial, political, and military support for the implementation of EPAA and NATO missile defense in other ways. The commitment to upgrade the ALTBMD command and control system noted above was backed with an Alliance funding commitment. Turkey, Romania, Poland, and Spain have all agreed to host U.S. assets in support of NATO missile defense. These host governments will bear the costs of providing perimeter defense and security for the U.S. assets and infrastructure.

Looking to the future, the United States will continue to encourage its NATO Allies to do even more to cooperate and invest in missile defense. Several Allies have modern surface combatant ships that could be upgraded with a BMD sensor or shooter capability. A number of NATO Allies also have proposed concepts for a multinational interceptor “pool” concept, whereby Allies collectively purchase interceptors such as the SM-3 to support NATO missile defense. Additionally, some Allies are considering the purchase of Patriot PAC-3.

### *Asia-Pacific*

In the Asia-Pacific region, Japan has acquired its own layered missile defense system, and the United States and Japan regularly train together, learn from each other, and have successfully executed cooperative BMD exercises and operations. The United States and Japan are also partnering in the co-development of an advanced version of the SM-3 interceptor, the SM-3 Block IIA.

The United States and Australia signed a memorandum of understanding on missile defense cooperation in 2004 and partner on ballistic missile defense research and development, most notably in the field of sensors.

The United States also continues to consult with the Republic of Korea regarding its future ballistic missile defense requirements.



The United States engages in a trilateral dialogue with Japan and Australia, and separate trilateral dialogue with Japan and the Republic of Korea. In each, we address a wide range of regional security issues, including missile threats and defenses. These trilateral dialogues support U.S. efforts to deepen missile defense cooperation and strengthen regional security architectures.

### *Middle East*

The United States and Israel cooperate extensively on missile defense issues. We have a long history of cooperation on plans and operations as well as specific missile defense programs. We hold regular consultations, and have conducted joint exercises since 2001 that are aimed at improving interoperability between U.S. and Israeli missile defense systems. In 2008, our countries worked together to deploy a forward-based radar in Israel to enhance U.S. and Israeli missile detection capabilities. U.S. support to the security of Israel remains steadfast. U.S. security assistance to Israel has increased every year since FY 2009. The Administration has requested nearly \$450 million for Israeli rocket and missile defense between FY 2010 and 2013 and secured an additional \$205 million in FY 2011 to procure Iron Dome defense systems.

Separately, the United States is working with a number of Gulf Cooperation Council (GCC) countries on missile defense, including exploring the purchase of U.S. missile defenses through the Foreign Military Sales (FMS) program. For example, the United Arab Emirates (UAE) recently signed an FMS case to purchase Terminal High Altitude Aerial Defense (THAAD) batteries, interceptors, and associated equipment, and had earlier made a decision to purchase Patriot systems from the United States. These systems will greatly enhance the UAE's defense against ballistic missile attack. As our partners acquire greater missile defense capabilities, the United States will work to promote interoperability and information sharing among the GCC states. This will allow for more efficient missile defenses and could lead to greater security cooperation in the region.

A primary purpose of the phased adaptive approaches to regional missile defense is to build upon this solid foundation of cooperation in each of these regions to achieve needed protection improvements over the coming decade.

### *Russia*

The United States has sought cooperation with Russia on missile defense, both bilaterally and with our Allies through the NATO-Russia Council. We are pursuing this cooperation because it would be in the security interests of the United States, NATO, and Russia by strengthening the defensive capabilities of both NATO and Russia. Allies embraced such cooperation with the hope of advancing broader strategic partnership with Russia. The United States has pursued missile defense cooperation with Russia with the clear understanding that we would not accept constraints on missile defense, we would implement all four EPAA phases, and Russia would not

have command and control over the defense of NATO territory. NATO would be responsible for the defense of NATO, and Russia would be responsible for the defense of Russia.

The United States has kept the Congress and our Allies informed about our efforts to reach agreement with Russia to cooperate on missile defense, which have included the proposal of two missile defense cooperation centers in Europe. The United States has been open and transparent with Russia about our plans for missile defenses in Europe, and explained our view that missile defense in Europe does not negate the Russian strategic nuclear deterrent.

Although we have had no breakthroughs, the Administration remains committed to pursuing substantive missile defense cooperation with Russia because it remains in our security interests to do so and, as President Medvedev noted in a statement last fall, Russia indicates that it remains open to further discussions and seeks a mutually acceptable agreement on the way forward.

### **The President's Budget for FY 2013**

The FY 2013 budget requests \$9.7 billion in FY 2013 and \$47.4 billion over the next five years to develop and deploy missile defense capabilities that protect the U.S. homeland and strengthen regional missile defenses. This number is less than last year's request, but it nevertheless demonstrates a continued high-level commitment to developing cost-effective missile defense capabilities while maintaining our commitments to homeland and regional defense. The phased adaptive approach to regional missile defense is fully in line with the main themes of U.S. defense strategy in a period of budget austerity.

This approach puts emphasis on a flexible military toolkit with forces that are mobile and scalable so that they underwrite deterrence in peacetime, but can be surged in crisis to support additional war-fighter requirements.

On homeland defense, the budget takes advantage of savings from the GMD system competition, while continuing to improve the performance of the system and at the same time hedging against uncertainty. With regard to regional missile defenses, the budget request continues to increase the pool of mobile, re-locatable assets for the phased adaptive approaches -- but at a somewhat slower rate. This budget includes the purchase of an additional THAAD battery, an AN/TPY-2 radar, and SM-3 IB interceptors, as well as the conversion of three Aegis ships to bring the total number of BMD-capable ships to 32. The budget also includes \$46.9 million for directed energy research. The budget forced us to make difficult choices that entail some risk. However, the missile defense capabilities we are pursuing enable us to field a force that is flexible and adaptive, and that can surge to meet the requirements of an uncertain future.

The FY 2013 budget request also includes funding for the SM-3 IIB and Precision Tracking Space System (PTSS), two programs that faced congressional reductions in the previous budget

that will cause delays in their deployment timelines. These programs are vital to addressing the long-term threats from regional actors such as Iran and North Korea, so slips in the program schedules due to budget reductions introduce additional risk. The SM-3 IIB will provide improved protection against intermediate-range ballistic missile (IRBM) threats as well as supplement the protection of the homeland provided by the GMD system against ICBM threats with a significantly lower cost interceptor than the GBI. PTSS will also contribute to both homeland and regional missile defense by providing persistent coverage and tracking of ballistic missiles over their entire flights and address larger raid sizes. This will improve the performance of our missile defenses by providing better data to the interceptors and allowing us to allocate terrestrial sensor resources more efficiently.

### **Conclusion**

With your support, we have been able to make significant progress in strengthening the protection of the United States, our forces, and our allies and partners abroad from the threat of coercion and attack by ballistic missiles. We appreciate congressional support for the President's missile defense annual budget requests, and in these more austere budget times, we hope for your continued support. We have had to make some difficult choices in this year's budget, but the result is fully consistent with the policy commitments set out in the BMDR.

Again, thank you for the opportunity to speak here today before the Members of this Subcommittee. I look forward to answering your questions.