# STATEMENT OF

# DR. BRAD ROBERTS DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR NUCLEAR AND MISSILE DEFENSE POLICY BEFORE THE SENATE ARMED SERVICES COMMITTEE APRIL 13, 2011

Chairman Nelson, Ranking Member Sessions, and members of the subcommittee, thank you for the opportunity to testify on the Department's ballistic missile defense programs. Ballistic missile defense is a key strategic issue for the United States and I look forward to testifying and answering your questions about our policies and plans.

### The 2010 Ballistic Missile Defense Review

A year has passed since the Obama administration released its review of ballistic missile defense policy. It is important to recall that this was the first ever comprehensive review of ballistic missile defense policy and that it was undertaken with congressional direction in order to inform our national debate about policies, strategies, plans, and programs. As we continue to work within the framework set out in that report, it is useful here to recall its main elements.

The review began with an assessment of the ballistic missile threat. Among its key findings were the following:

- The threat is increasing both quantitatively and qualitatively and is likely to continue to do so over the coming decade.
- Several states are developing nuclear, chemical, and/or biological warheads for their
  missiles and may attempt to use the resulting capabilities for military advantage in
  conflict but also to coerce states near and far.
- Regional actors such as North Korea and Iran continue to develop long-range missiles
  that will be threatening to the United States. There is some uncertainty about when and
  how this type of ICBM threat to the U.S. homeland will mature.
- But there is no uncertainty about the existence of regional missile threats. They are clear and present and increasing at a particularly rapid pace.
- Although confident predictions about the future of the threat are difficult to make, there
  are some clear trends. These include the progress from short- to longer-range missiles
  and an increasingly open market in technologies, materials, and expertise. There is also
  the troubling possibility that non-state actors might acquire weapons of mass destruction
  and the means to deliver them.

We drew two key conclusions from this threat analysis. First, U.S. defense investments must be balanced in a way that enables the effective defense of the U.S. homeland and of U.S. forces, allies, and partners overseas in both the near and long term. Second, our defensive capabilities must be adaptable to unexpected threat developments. Threats may mature more rapidly or more slowly than predicted, may appear in unexpected locations, or may involve novel technologies or concepts of operations. It is essential that the United States be well hedged and has a strong posture against unpredicted threat developments.

The Review identified the administration's main policy priorities.

- 1. The United States will continue to defend the homeland from limited ballistic missile attack. These efforts are focused on protecting the homeland from a ballistic missile attack by a regional actor such as North Korea or Iran. The U.S. homeland is currently protected against limited threats and possesses a capacity to counter the projected threats from these states. But the United States must maintain this advantageous position as the threat matures. Through our continued commitment to maintain and develop the ground-based mid-course defense (GMD) system, the United States seeks to dissuade such states from developing an ICBM, deter them from using an ICBM if they develop or acquire such a capability, and defeat an ICBM attack by states if deterrence fails.
- 2. The United States will defend against regional missile threats to U.S. forces, while protecting allies and partners and enabling them to defend themselves. Regional approaches must be tailored to the unique deterrence and defense requirements of each region, which vary considerably in their geography, in the history and character of the threat, and in the military-to-military relationships on which to build cooperative missile defenses. The review reflected our commitment to strengthen regional deterrence architectures with missile defense. It also set out the phased adaptive approach to regional missile defense. It is phased in that it will incorporate improving U.S. capabilities as they become available. It is adaptive in that it is tailored to unique regional requirements and opportunities. Because the demand for missile defense assets within each region over the next decade will exceed supply, we must focus on developing capabilities that are mobile and relocatable.

- 3. Before new capabilities are deployed, they must undergo testing that enables assessment under realistic operational conditions. This commitment reflected our assessment that it is no longer necessary to pursue a high-risk acquisition strategy that simultaneously develops and deploys new systems. The Integrated Master Test Plan announced in June 2009, and updated every six months since, reflects the Missile Defense Agency's new approach.
- 4. New capabilities must be fiscally sustainable over the long term. This commitment reflects our leadership's assessment that tough decisions must be made to ensure the long term viability of the investment program. As such, we are pursuing lower-cost interceptors and enabling early intercepts to minimize the inventory required to negate a missile launch. The more constrained fiscal environment has only reinforced our sense of resolve on this matter.
- 5. *BMD capabilities must be flexible enough to adapt as threats change*. This conclusion derives from the threat assessment described above.
- 6. The United States will seek to lead expanded international efforts for missile defense.

  This is essential to the implementation of the phased, adaptive approach to regional missile defense. More broadly, it supports the objective of creating an environment in which the development, acquisition, deployment, and use of ballistic missiles by regional adversaries can be deterred.

### **BMDR Implementation**

Over the last year, our focus has shifted from policy formulation to policy implementation. In the continuing executive-legislative discussion of implementation, four key issues have emerged, and I will address each in turn.

- 1. Monitoring the threat: the BMDR expressed a commitment to maintain a strong focus on threat developments and to rigorously assess defense planning in light of new information. What have we learned?
- 2. Protecting the Homeland: the BMDR expressed a commitment to continue to improve the GMD system in order to maintain the currently advantageous offense-defense balance

- against limited strikes, and to be well hedged against threat developments. What additional steps are needed at this time?
- 3. Pursuing phased adaptive regional missile defense: the BMDR expressed a commitment to deploy the phased adaptive approach in Europe and apply the approach in East Asia and the Middle East. How much progress has been made?
- 4. Seeking expanded international cooperation: the BMDR expressed a commitment to lead expanded international efforts for missile defense. This includes a commitment to work to establish a cooperative BMD relationship with Russia. What opportunities and challenges have emerged?

### **Monitoring the Threat**

The last year has brought abundant confirmation that the threat is continuing to grow quantitatively and qualitatively. A central focus remains on Iran and North Korea as sources of potential threat to the United States and to our allies. In addition, a number of states are developing or acquiring Anti-Access/Area Denial capabilities such as anti-ship cruise missiles or anti-ship ballistic missiles. These capabilities are intended to deny our forces access to key regions, and to blunt the operations of forces that do deploy forward.

Iran already possesses the largest inventory of ballistic missiles in the Middle East, and is developing more of them. In addition to its growing missile and rocket inventories, Iran is boosting the lethality and effectiveness of those stockpiles, through accuracy improvements, new submunitions, and salvo launch capabilities. Furthermore, Iran's Simorgh space-launch vehicle shows that Iran is making the technological progress needed for the development of an intercontinental ballistic missile.

Iran also shows continued interest in pursuing its nuclear-related programs, though the Obama administration's economic sanctions program has clearly begun to bite more deeply than the present regime might have expected. Although we do not know if Iran will eventually decide to build nuclear weapons, the prospect of a nuclear-armed Iran is deeply concerning to the United

States and the global community, and there is a risk that Iran's continued efforts along these lines may prompt neighboring states to pursue national nuclear programs.

North Korea is modernizing every aspect of its deployed missile forces – including short-, medium-, and intermediate-range systems. It has reinforced its long-range artillery forces near the DMZ with a substantial number of mobile ballistic missiles that could strike targets in South Korea, Japan, and U.S. bases in the Pacific. North Korea has not successfully tested an ICBM, but we expect it to continue to test-launch missiles, including the Taepo Dong-2 (TD-2). With further TD-2 tests, North Korea may develop an intercontinental ballistic missile capable of reaching the United States. In addition, Pyongyang has a long history of ballistic-missile proliferation, and likely will continue to market and potentially export missile technologies to a number of countries – including Iran and Syria.

North Korea's nuclear-weapons program only increases our concerns about that nation's missile capability. According to the Director of the Defense Intelligence Agency, "The North may now have several plutonium-based nuclear warheads that it can deliver by ballistic missiles and aircraft as well as by unconventional means."

The ballistic-missile threat from North Korea is especially relevant in light of recent provocative behavior by the regime. A multinational Joint Civilian-Military Investigation Team concluded that a North Korean midget submarine sank South Korea's naval corvette Cheonan on March 26, 2010 near the contentious Northern Limit Line in the West Sea, causing the loss of 46 South Korean sailors. Then, in the first attack against a civilian-inhabited area since the Korean War, North Korea shelled Yonpyong Island on November 23, killing two South Korean marines and two civilians.

These assessments reinforce the administration's commitment to a balanced approach that continues to improve the defense of the homeland while also accelerating protection against regional threats.

# **Defending the Homeland**

As noted above, the BMDR expressed a commitment to continue to improve the GMD system in order to maintain the currently advantageous offense-defense balance against limited strikes, and to be well hedged against threat developments. What additional steps are needed at this time?

The assessment that the United States is currently protected against limited strikes derives from the strength of the current posture against the current threat to the homeland. Today, the United States is protected against limited ICBM attacks as a result of investments made over the past decade in the ground-based midcourse defense (GMD) system. Thirty Ground-Based Interceptors (GBIs) are now deployed to defend the homeland. To enable successful intercepts by these missiles, radars are now in place in Alaska, California, Greenland, and the United Kingdom. They are also deployed at sea aboard Aegis destroyers and cruisers, at Shariki, Japan, and in the form of the Sea-based X-band radar. These capabilities are enabled by a sophisticated command and control infrastructure. Looking to the future, this posture will provide continued protection against initial ICBM deployments.

The commitment to continue to improve the GMD system is reflected in a number of on-going activities and in the associated FY2012 budget. We continue to:

- Test and upgrade the system to increase reliability and survivability
- Develop and upgrade Ballistic Missile Defense System (BMDS) sensors
- Procure GBIs (in FY12, we will procure five more)
- Implement GBI refurbishment and reliability sustainment programs (in order to sustain the fleet for another two decades)
- Upgrade GMD Fire Control ground system software
- Enhance the Command, Control, Battle Management and Communications system to handle larger raid sizes
- Develop and deploy new sensors in a variety of settings including forward bases in Europe, unmanned vehicles in the skies, and platforms in space
- Develop early-intercept concepts to help defeat countermeasures and reduce the inventory required to negate missile launches

Additionally, we are developing the Standard Missile 3 (SM-3) Block IIB for deployment against future IRBM and ICBM threats in the regional defense architectures (as discussed further below), which is an important part of the long-term defense against future ICBM threats to the homeland.

The performance of the GMD system will also be strengthened with new investments that will result in better sensor information reaching the GBI during its flight. The FY2012 budget includes new funding for an In Flight Interceptor Communications System (IFICS) Data Terminal (IDT) on the East Coast and for upgrades to the Early Warning Radars at Clear, Alaska, and Cape Cod, Massachusetts. Looking to the longer term, the administration is also investing to develop next generation missile defense capabilities. This includes continued work to research the potential of directed energy systems for missile defense.

We are sustaining these commitments even as the Department has identified efficiencies and cuts as a result of government-wide budget limitations.

These capability enhancements will contribute significantly to preservation of the currently advantageous posture of the United States against limited strikes if or as ICBM threats develop from Iran and North Korea, or other regional threats. But they may not be enough. The United States must also be well hedged against the possibility that threats might evolve more rapidly than planned capability enhancements. It must also be well hedged against the possibility that those capability enhancements may be delayed for technical reasons. After all, development programs involve inherent technical risk.

To strengthen the U.S. hedge posture, the administration has taken the following steps:

- Construction of Missile Field 2 at Ft. Greely, Alaska is being completed in a 14-silo configuration to accommodate a contingency deployment of eight additional GBIs if needed.
- Six GBI silos at Missile Field 1 at Ft. Greely are being mothballed instead of decommissioned, allowing their return to service within two years if necessary; and

• Testing and assessment of a two-stage Ground-Based Interceptor is continuing in order to preserve future deployment options.

The administration is considering additional steps to strengthen the U.S. hedge posture. We have been studying threat developments, future capabilities, and deployment options for a range of scenarios. We have been evaluating the deployment timelines associated with fielding additional capabilities with an eye to enabling rapid responses to triggering events. Our objective is to enable aggregate improvements that increase probability of kill, raid capacity, and battle space. This work involves a significant amount of classified information from both the intelligence community and the system developers. We have committed to brief this subcommittee on the results in a classified setting in the next several weeks.

A key issue of continuing congressional interest is the role of the two-stage GBI in the hedge strategy. The BMDR explicitly recognized this role. The classified analysis addresses this matter directly, as well as the continued role of GBIs more generally. DoD will ensure that it preserves the capacity to provide additional GBIs to missile field two and possibly missile field one should such decisions be taken in the future. As General O'Reilly said in his testimony before the HASC on March 31, several of the assumptions we used to arrive at a total purchase of 52 GBIs are no longer valid, primarily due to test failures and the need for additional testing. We must conclude the investigation of the most recent test failure before we can make a determination about the number of additional GBIs that will be required. The decision to procure five additional GBIs, together with the ongoing refurbishment program, will keep GBI production lines warm for several years. This in effect provides us with additional decision time to procure additional GBIs without letting the production lines go cold.

### **Pursuing Phased Adaptive Regional Missile Defense**

The BMDR expressed a commitment to deploy the phased adaptive approach (PAA) in Europe and apply the approach in East Asia and the Middle East. How much progress has been made? In brief, the progress has been significant.

# Required Capabilities

To support PAA implementation, we are procuring a pool of missile defense assets that will allow us to address current regional threats and surge missile defenses into troubled regions in a time of political-military crisis. To date, MDA has delivered two THAAD batteries and seven AN/TPY-2 radars. By the end of FY2012, a total of 29 Aegis ships will have BMD capability and there will be a total of 15 U.S. PAC-3 battalions. The FY2012 budget continues the procurement of additional THAAD batteries, forward-based radars, as well as the conversion of additional Aegis ships, and SM-3 interceptors. This commitment to additional regional capabilities will allow for increasingly robust regional architectures over the decade.

### Europe

The BMDR set out the main elements of the application of the phased adaptive approach in Europe. The European Phased Adaptive Approach (EPAA) is phased to incorporate improving U.S. capabilities and adaptive to the particular geopolitical landscape of Europe. The Obama administration is committed to the deployment of all four phases. Toward that end, it has begun to deploy initial capabilities. It has also developed a diplomatic strategy with allies and partners in Europe.

The first deployment of EPAA capabilities came on March 7 when the guided missile cruiser USS Monterey, carrying SM-3 Block IA interceptors, deployed to Europe. This deployment is supported by other decisions within a comprehensive force management process, led by the Joint Staff, that adjudicates competing requirements from the combatant commands.

We are currently in discussions with potential host nations for the deployment of an AN/TPY-2 forward-based radar to southeastern Europe. While no decision has been made, we expect to meet our 2011 deployment timeline. Looking ahead to Phase 2 in 2015 and the deployment of land-based SM-3 interceptors in southeastern Europe, Romania has agreed to host the site. Looking further ahead to Phase 3 in 2018, Poland has agreed to host the second land-based SM-3 site.

Within NATO, considerable progress has also been achieved. This past November at the Lisbon Summit, NATO's leaders took the unprecedented step of deciding to pursue full coverage and protection for the Alliance's populations, territories, and forces in Europe 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 — to encompass territorial missile defense, which will make current and future Alliance missile-defense assets interoperable. These decisions send a strong signal that NATO will not allow itself to be defenseless against ballistic missile coercion or attack.

### Other Regions

The same basic approach is being pursued in East Asia and the Middle East, but in a way that is tailored to the existing foundations of cooperation and unique regional requirements.

Capabilities will be phased in as they become available for deployment, but in a manner adapted to specific regional circumstances.

In East Asia, a strong foundation of missile defense capabilities and cooperation already exists. The U.S. deploys Aegis BMD-capable ships in the region. Japan has a layered missile defense system that includes Aegis BMD ships with SM-3 interceptors, PAC-3 fire units, early-warning radars, and a command-and-control system. Japan also hosts an AN/TPY-2 radar. U.S. and Japanese forces regularly train together and have successfully executed simulated cooperative BMD operations. We are also engaged in cooperative development of the next generation SM-3 Block IIA interceptor, which is projected to enter service in 2018.

Australia participates in our Trilateral Missile Defense Forum with Japan, and takes part in the Nimble Titan missile-defense exercise series hosted by U.S. Strategic Command. Australia is also acquiring ships that would be compatible with U.S. Aegis BMD systems, should they choose to pursue that capability.

With South Korea, we have engaged in bilateral missile-defense cooperation discussions and have recently signed a Terms of Reference and an agreement that will enable our two nations to carry out a requirements analysis so that South Korea can make informed decisions about the utility of any future BMD program.

One of the key differences between East Asia and Europe is the absence of a multilateral alliance framework based on collective defense. Thus our plans to strengthen the regional missile defense architecture have had to be built on the foundations of bilateral cooperation and a variety of security interests and perceptions.

The administration has also sought dialogue with China on ballistic missile defense, with little success. We have sought to explain U.S. intentions and capabilities and also to better understand China's concerns that such defenses might negate China's strategic deterrent. We have also sought to convey long-standing U.S. concerns about the pace and scope of China's current military modernization efforts, which encompass a wide range of advanced air, air-defense, naval, missile, space and cyberspace capabilities. We believe that such a dialogue could help to reduce mistrust, enhance mutual understanding, and broaden cooperation. China deploys a limited but growing number of conventionally armed, medium-range ballistic missiles, and it likely is nearing deployment of a medium-range anti-ship ballistic missile. It has more than 1,000 conventional short-range ballistic missiles opposite Taiwan for a variety of precision-strike missions. China is also forming more missile units, upgrading some older missile systems, and developing methods to penetrate missile defenses.

In the Middle East as in East Asia, the absence of a multilateral security framework means that the regional approach must be built on the foundation of bilateral relationships.

In the Persian Gulf, the United States maintains a robust mix of missile-defense assets to protect our troops and facilities in the region. We have built a series of bilateral missile defense agreements with the nations of the Gulf Cooperation Council (GCC) to address the regional ballistic missile threat from Iran. U.S. Central Command continues to work on establishing air defense and missile defense architectures for the GCC nations. In addition, the United States has

approved the sale of PATRIOT and THAAD systems to the United Arab Emirates. We are also working with Saudi Arabia to refurbish its PATRIOT systems and recertify the interceptors for those systems.

We have also taken steps to ensure that Israel will remain capable of countering the full range of Iranian ballistic missile threats that may emerge. In doing so, we have built on a long-standing relationship with Israel on BMD. In addition to conducting major missile-defense exercises over the last several years, the United States and Israel meet regularly and coordinate extensively on a range of missile-defense programs, including the Arrow weapon system and a new program for defeating short-range ballistic missiles, known as David's Sling, as well as various other shared plans and operations.

In both East Asia and the Middle East, new capabilities will be phased in as appropriate to address regional threats, and as they become available through the comprehensive joint force management process identified above. This will help to ensure that the requirements of the different combatant commands are met in a responsible manner as additional asserts become available.

### **Seeking Expanded International Cooperation**

The BMDR expressed a commitment to lead expanded international efforts for missile defense. The intent here is global—to work with allies and partners generally to strengthen cooperation. A key priority is to establish a cooperative BMD relationship with Russia. Significant opportunities have emerged, along with some challenges.

Our pursuit of missile defense cooperation with Russia occurs against the backdrop of broader changes in U.S.-Russian relations. Over the past year, there has been important progress in these relations such as ratification and entry into force of the New START Treaty, the joint pressure applied to Iran's nuclear program, and new steps to strengthen the NATO-Russia Council. Russia's leaders have accepted proposals from the United States and NATO to pursue

cooperation on missile defense to enhance our common security against common threats and as part of the broader re-set of U.S.-Russia relations.

Cooperation with Russia on missile defense would be significant for a number of reasons.

Cooperation could offer tangible security benefits to Europe, Russia, and the United States in the form of stronger protection against missile threats than would be possible if pursued separately. Most significantly, by beginning missile defense cooperation now, Russia, the United States and NATO will gain information, experience, and confidence that will strengthen strategic stability and help to shape and bring closer together our security strategies.

Officials from the Department of Defense and Russian Ministry of Defense have been working to initiate a joint analysis of opportunities for enhanced missile defense cooperation. In addition to our bilateral efforts, NATO and Russia agreed to resume missile defense cooperation, and to study ways in which we might cooperate on territorial missile defense in Europe.

As President Obama has stated, we are pursuing ballistic missile defense cooperation "even as we have made clear that the system we intend to pursue with Russia will not be a joint system, and it will not in any way limit United States' or NATO's missile defense capabilities." NATO alone will be responsible for defense of NATO territory, just as Russia should be responsible for defense of Russian territory. We would operate our respective systems independently but cooperatively, in a way that reinforces their performance without putting them at risk.

A requirement for the safeguarding of sensitive information in support of cooperation is a Defense Technology Cooperation (DTC) Agreement, which will provide the legal framework for undertaking cooperative efforts. The proposed DTC Agreement (which we began to negotiate in 2004) contains an annex that addresses the sharing of classified information. But this on its own will not constitute authorization to provide classified information to Russia. Exchange of classified information with Russia would still be subject to U.S. National Disclosure Policy and the associated careful review, just as it is with other partners.

Expectations for cooperation with Russia are running high, but it is important to be realistic about both the opportunities and challenges ahead. That said, I do believe we have an opportunity for meaningful cooperation that will enhance the security of the United States, our NATO Allies, and Russia.

### Conclusion

A year after release of the Ballistic Missile Defense Review, implementation is well launched. Capabilities are in place to protect the homeland from limited attack, and steps are being taken to continue to improve those capabilities. Capabilities are also in place to protect U.S. forces, their families, and our allies from regional attacks, and the first steps have been taken to implement the phased adaptive approach. We have put in place investment programs aligned with our policy priorities.

We have also tried to put in place the political foundations for a long-term commitment by the United States in this area, building on the important work of our predecessors. Missile defense is a long-term challenge that requires sustained support from a succession of administrations and Congresses. As Secretary Gates has argued, "The protection of the United States from the threat of ballistic missile attack is a critical national security priority. The threat to our deployed military forces and to our allies and partners is growing rapidly. This threat has significant implications for our ability to project power abroad, to prevent future conflicts, and to prevail should deterrence fail."

I am grateful for the opportunity to be here today to make our case for your support and I look forward to your questions.