

Not for Public Release until Approved by the
Senate Armed Services Committee

STATEMENT OF
BRIAN P. MCKEON
PRINCIPAL DEPUTY UNDER SECRETARY OF DEFENSE
FOR POLICY

BEFORE THE SENATE
ARMED SERVICES
SUBCOMMITTEE ON STRATEGIC FORCES
APRIL 13, 2016

Chairman Sessions, Ranking Member Donnelly, members of the Subcommittee, thank you for the opportunity to testify on the Fiscal Year (FY) 2017 budget request for ballistic missile defense and the Defense Department's continuing efforts to sustain and modernize our homeland missile defense capability so that we remain ahead of the threat while providing effective, integrated, and interoperable regional ballistic missile defense (BMD) capability. I am grateful for your consistent attention to, and continuing support of, the critical mission of defending the homeland, our allies and partners, and our deployed forces from a growing ballistic missile threat.

I will begin with a discussion of ballistic missile threats and trends, and then focus on several key policy priorities: defending the United States against limited long-range ballistic missile attacks, strengthening defense against regional missile threats, fostering defense cooperation with allies and partners, and examining how to advance the missile defense technology base in a cost-effective manner. I will also briefly address issues associated with other non-BMD tools the Department is examining to assist in the broader effort to defeat ballistic missiles.

Ballistic Missile Threats

Ballistic missiles continue to pose a significant security challenge as nations pursue efforts to make them more survivable, reliable, mobile, and accurate at greater ranges.

North Korea

North Korea's weapons and missile programs pose a growing threat to the United States and to our allies in East Asia. North Korea has conducted four nuclear tests. It is also seeking to develop longer-range ballistic missiles capable of delivering nuclear weapons to the United States, and continues efforts to bring its KN08 road-mobile ICBM to operational capacity. Although the reliability of an untested North Korean ICBM is likely to be very low, North Korea has used its Taepo-Dong-2 launch vehicle to put a satellite in orbit, thus successfully demonstrating technologies applicable to a long-range missile.

Iran

The Joint Comprehensive Plan of Action reached by the P5+1, the EU and Iran last summer effectively cuts off all of Iran's potential pathways to developing a nuclear warhead, thereby removing the greatest danger previously posed by Iran's ballistic missile program. At the same time, Iran already has the largest inventory of ballistic missiles in the Middle East and today can potentially reach targets throughout the region and into southeastern Europe. Iran is seeking to enhance the lethality and effectiveness of existing systems with improvements in accuracy and warhead designs. Iran also has an anti-ship ballistic missile that can potentially threaten maritime activity in the Persian Gulf and the Strait of Hormuz. Although Iran does not yet possess an intercontinental ballistic missile (ICBM), its progress on space launch vehicles (SLV) – along with its desire to deter the United States and its allies and partners – provides Iran with the potential means and potential motivation to develop longer-range missiles, including an ICBM. Iran has stated publicly that it intends to launch the Simorgh SLV this year, which would be capable of ICBM ranges if Iran chose to configure it as a ballistic missile.

Syria

Although Syria does not pose a ballistic missile threat to the U.S. homeland, the Assad regime does possess short-range ballistic missiles, and has shown a willingness to use them repeatedly against its own people. Syria has several hundred short-range ballistic missiles, all of which are mobile and can reach much of Israel and large portions of Iraq, Jordan, and Turkey from launch sites well within Syria.

Other Trends, including Cruise Missiles

As Secretary Carter noted in his posture hearing before this committee, the Department confronts evolving challenges – China, Russia, North Korea, Iran, and countering terrorism – that are now driving the focus of the Department’s planning and budgeting. The first two of these challenges reflect a return to great power competition, and both China and Russia are investing in anti-access/area denial capabilities. China is introducing qualitative advances into its nuclear and conventional military capabilities as it continues its rise in the Asia-Pacific region, and is making significant investments in anti-ship ballistic and cruise missiles, which will improve China's ability to strike regional targets at greater ranges.

Russia is making significant investments in cruise missiles, including a cruise missile that violates the Intermediate-Range Nuclear Forces (INF) Treaty, which eliminated an entire class of U.S. and Russian missiles nearly three decades ago. In light of Russia’s INF Treaty violation and overall aggressive behavior, we are developing and implementing a strategy to address Russian military actions that includes modifying and expanding air defense systems to deny Russia offensive capabilities; placing an increased emphasis on working with allies and partners to improve our collective capability to counter complex cruise missile threats; working with other departments and agencies to encourage and facilitate allied acquisition of advanced capabilities by those most concerned with Russian behavior; and investing in the technologies that are most relevant to Russia’s provocations.

Homeland Missile Defense

The U.S. homeland is currently protected against potential ICBM attacks from States like North Korea and Iran if it was to develop an ICBM in the future. To ensure that we stay ahead of the threat, we are continuing to strengthen our homeland defense posture and invest in technologies to enable us to address emerging threats more effectively in the next decade. This requires continued improvement to the Ground-based Midcourse Defense (GMD) system, including enhanced performance of the Ground-Based Interceptor (GBI) and the deployment of new sensors.

We remain on track to deploy 14 additional interceptors in Alaska by the end of 2017. These interceptors, along with the 30 that are currently deployed, will provide protection against both North Korean and potential Iranian ICBM threats as they emerge and evolve. This year’s budget request also reflects Department of Defense’s (DoD’s) commitment to modernizing the GMD system. It will move us towards a more reliable and effective defense of the United States. It includes funding for development of a new Long-Range Discrimination Radar (LRDR) being installed in Alaska. The LRDR will provide persistent sensor coverage and improve discrimination capabilities against North Korea. It also continues funding for the redesign of the kill vehicle known as Redesigned Kill Vehicles (RKV) for the GBI. Although we have

addressed the causes of past failures in the GBI related to the Exoatmospheric Kill Vehicle, the RKV will have greater performance and discrimination capability.

As directed by statute, the Missile Defense Agency (MDA) is also preparing environmental impact statements (EIS) for sites in the eastern United States that could host an additional GBI missile field. The EISs will be completed later this year. No decision has been made to deploy an additional missile field in the United States. The highest priorities for the protection of the homeland are improving the reliability and effectiveness of the GBI and improving the GMD sensor architecture, which yield the greatest benefit against existing threats. The current GMD system provides coverage of the entire United States from North Korean and potential Iranian ICBMs. If an ICBM threat were to emerge in numbers that necessitated the deployment of additional interceptors, the steps being taken now, including conducting EISs, will shorten the construction timelines associated with deployment of a new missile defense site.

Regional Defense

The Department's FY 2017 budget request also continues to deploy missile defenses that are tailored to the security circumstances in Europe, the Middle East, and the Asia-Pacific region. Our focus is on developing and fielding missile defense capabilities that are mobile and relocatable, which allows us to address crises as they emerge. Systems such as Patriot, Terminal High-Altitude Air Defense (THAAD), and our Aegis BMD ships allow us to have flexible, layered missile defense capabilities tailored to specific regional threats. We are also encouraging our allies and partners to acquire missile defense capabilities, and to strengthen operational missile defense cooperation. In a regional context, we know that we will not be able to purchase enough interceptors to rely purely on missile defense for the duration of a conflict. In such a situation, we must protect our most valuable assets while also drawing on our other capabilities to provide a comprehensive military approach to defeating the threat from ballistic missiles.

Europe

We are continuing to implement the European Phased Adaptive Approach (EPAA), and we are working in close collaboration with our North Atlantic Treaty Organization (NATO) Allies to develop an advanced network of sensors and interceptors – on land and at sea – to protect NATO European territory and our military forces and facilities.

Technical capability of EPAA Phase II, which includes the Aegis Ashore site in Romania, was declared in December 2015. The site is undergoing operational readiness testing for integration into the NATO BMD architecture. The President's budget request also supports the Aegis Ashore site that will be deployed in Poland in the 2018 timeframe and the development of the SM-3 Block IIA interceptor that will be deployed on land and at sea later this decade. As these capabilities become operationally available, they will increase BMD coverage of NATO European territory.

The United States conducts exercises designed to hone our Alliance missile defense capabilities and integration. U.S. European Command is engaged with NATO in the

development of a biennial NATO-led BMD exercise event that serves to reinforce and expand upon other, routine BMD training evolutions that take place on a quarterly and semi-annual basis.

Many NATO Allies also participate in the NIMBLE TITAN exercise, an unclassified, two-year, multinational, BMD campaign. The overarching purpose of NIMBLE TITAN is to serve as a venue for collaboration, exchange of views, and coordination of BMD policy and operational development among participating nations and organizations, along with U.S. Government departments, agencies, and military organizations. NIMBLE TITAN has 25 participating nations and organizations, including NATO.

Since 2011, the United States has operated a forward-based radar in Turkey and maintained a sea-based missile defense presence in Europe. And we now have a total of four U.S. Aegis BMD capable destroyers forward-deployed to the naval facility at Rota, Spain. These multi-mission ships support the missile defense mission, as well as other maritime missions.

Spain and Germany have committed Patriot PAC-3 systems to NATO missile defense as demonstrated through the ongoing NATO deployment in defense of Turkey. Spain recently replaced the Netherlands in the defense of Turkey mission through its deployment of a Patriot system, and is strengthening its air and missile defense capabilities by acquiring additional Patriot systems from Germany.

France is planning to provide its Spirale satellite detection system and a long-range radar for NATO territorial missile defense and has offered the SAMP/T air and missile defense system, which was fielded in 2013, to NATO BMD.

Several Allies have modern surface combatant ships that could be equipped with BMD sensor or interceptor capability upgrades. The Netherlands and Denmark have committed to upgrading the SMART-L radars on their frigates to contribute to NATO BMD.

Beyond hosting the second Aegis Ashore site in Europe, Poland has also announced its intention to spend up to \$8 billion to acquire advanced air and missile defense capabilities.

The United States will continue to encourage its NATO Allies to do more to cooperate and invest in missile defenses that will contribute to Alliance security.

Asia-Pacific

In the Asia-Pacific region, our force posture includes Aegis BMD-capable ships, along with Patriot batteries deployed in Japan and South Korea. We have also maintained the THAAD battery deployment to Guam in response to North Korean provocations.

The cornerstone of our security and diplomacy in the region has been our strong bilateral alliances, including with South Korea, Japan, and Australia. All three of these nations play an important role in our regional efforts to achieve effective missile defense.

South Korea has an immediate, proximate stake in preventing missile strikes from North Korea. We have worked closely with South Korea to ensure that our alliance maintains the capacity to do just that. The United States deploys Patriot PAC-3 batteries in South Korea to

defend U.S. and South Korean forces. In addition, South Korea is taking steps to enhance its own air and missile defense systems, which include sea- and land-based sensors and Patriot PAC-2 batteries. DoD has been consulting with South Korea about how it can upgrade its missile defense capabilities as part of an Alliance response to the growing North Korean missile threat. On February 7, 2016, in response to the evolving threat posed by North Korea, the United States and South Korea made an Alliance decision to begin formal consultations regarding improvements to the alliance missile defense posture, specifically exploring the viability of deploying to South Korea a THAAD system to be operated by U.S. Forces Korea.

Japan has its own layered missile defense system, which includes Aegis BMD ships with Standard Missile-3 interceptors, PAC-3 batteries, early-warning radars, and sophisticated command-and-control systems. Japan is upgrading two ATAGO-class Aegis destroyers to BMD capability with certification scheduled for Japan FY 2018 and Japan FY 2019, and plans to build two additional Aegis BMD ships, which would increase its inventory to a total of eight BMD-capable ships. Japan also hosts two U.S. missile defense radars.

Additionally, Japan is a critical international partner for BMD development. One of our most significant cooperative efforts is the co-development of an advanced version of the SM-3 interceptor, the SM-3 Block IIA.

The United States and Australia have forged a longstanding partnership on missile defense research and development – most notably with regard to sensors. In addition, Australia is involved in a trilateral discussion on missile defense in the Pacific involving the United States, Australia, and Japan.

We will continue to emphasize the importance of developing a regional ballistic missile defense system that includes the sharing of sensor data among allies to take full advantage of the benefits of system interoperability and integration.

Middle East

We also maintain a robust missile defense presence in the Middle East, including land- and sea-based assets deployed in defense of our forward-deployed forces, and our allies and partners. This is in addition to our efforts to build the capacity of those allies and partners that will ultimately contribute to their ability to defend themselves.

The United States maintains a strong defense relationship with Israel, and our cooperation on missile defense has resulted in one of the most sophisticated missile defense systems in the world. Since 2009, the United States has provided more than \$3 billion in missile defense assistance to Israel, which has supported the joint development and production of David's Sling and the Arrow Weapon System as well as joint production of Iron Dome. This support, in conjunction with operational cooperation, gives Israel the ability to respond to simultaneous missile and rocket attacks from Hamas or Hezbollah, and from the longer-range ballistic missiles being developed by Iran. During the summer conflict in 2014, Iron Dome had a 90 percent success rate and saved countless Israeli lives. Missile defense was also the central focus of the JUNIPER COBRA exercise conducted in Israel last month – which is an important U.S.-Israeli military exercise that allows us to work through key interoperability challenges in responding to a potential missile crisis with Israel.

The United States is also working with a number of Gulf Cooperation Council (GCC) countries on missile defense, including supporting the purchase of missile defense systems through the Foreign Military Sales program. The United Arab Emirates (UAE) is procuring the THAAD system. This is in addition to the UAE's earlier purchase of Patriot systems. Saudi Arabia is in the process of upgrading its existing Patriot PAC-2 batteries to the PAC-3 configuration. Kuwait is also purchasing Patriot PAC-3 batteries. Qatar also joined the group of U.S. Patriot partners late last year, a group that includes Kuwait.

U.S. Air Forces Central Command maintains a series of regular exchanges between U.S. and GCC air defense officers at the Combined Air Operations Center located at Al Udeid Air Base in Qatar. These exchanges provide an opportunity for increased situational awareness of missile threats in the region as well as the potential for future BMD planning and operational cooperation.

As the GCC States begin to field more capable systems, the United States and its Gulf partners must work toward greater integration of those capabilities across the region. Following the Camp David Summit in 2015, the United States and GCC States agreed to study Ballistic Missile Early Warning System (BMEWS) requirements, including sensor and command and control architectures. The study will inform potential GCC-wide BMEWS acquisition plans. MDA has been working on the BMEWS architecture study since September – and is in the process of presenting results of the study to the GCC. The desired end-state is a regional missile defense architecture in which GCC Member States participate and contribute to the extent practical, leading to a networked, layered defense of key strategic centers that strengthens deterrence and increases our collective ability to defeat a ballistic missile attack.

Technology Development

We must continue to look ahead. This means ensuring that our investment strategy and priorities balance the needs of addressing the most dangerous threats we confront today while positioning us to respond to threat developments in the next decade. Areas for priority technology investment include persistent discrimination in the current and future Ballistic Missile Defense System sensor architecture; high-power lasers for multiple BMD applications; common kill vehicle technology leading to a multi-object kill vehicle; advanced technology for high-risk/high-pay-off breakthroughs; and a rail gun to lower the cost per kill.

Additionally, we are looking to invest in our cruise missile defense architecture—especially as it relates to the National Capital Region. Given the threat facing the U.S. homeland, we require persistent surveillance and detection of cruise missiles. To that end, we are working with North American Aerospace Defense Command and others to identify technologies that give us this persistent surveillance and detection. We are also working closely with our Canadian partners to examine future technologies to cover the northern approaches.

As we confront the growing complexity and size of ballistic and cruise missile threats in the next decade, the Department will continue to fund investments in new technologies as well as adapting current technologies to new purposes. As Secretary Carter stated in his testimony in February on the President's Budget request for FY 2017, the Department remains committed to continued investments directly supporting efforts to defeat missiles by using innovative technologies and operational concepts to lower the cost-per-round. This includes investments in

directed energy/high-powered lasers, rail and powder guns, and enhanced munitions as well as employing systems like the Navy's SM-6 interceptor that can operate not only against a range of tactical missiles (air and ballistic), but can support anti-surface ship capacity as well.

This leads to a larger point the Secretary has made – that today's security environment is dramatically different than the one in which we have been engaged over the last 25 years. It requires new ways of thinking and acting. It also requires new ways of acquiring and employing capabilities. Given this new security environment, we must also look at new ways to support our U.S. defense strategy. In the case of defeating ballistic missiles, we need to develop a wider range of tools and that includes the efforts underway to address such threats before they are launched, or "left of launch." The development of left-of-launch capabilities will provide U.S. decision-makers additional tools and opportunities to defeat missiles. This will in turn reduce the burden on our "right-of-launch" ballistic missile defense capabilities. Taken together, left-of-launch and right-of-launch will lead to more effective and resilient capabilities to defeat adversary ballistic missile threats.

CONCLUSION

The President's FY 2017 Budget Request supports our strategies for protecting vital U.S. interests. It continues funding missile defense capabilities to ensure we remain well ahead of adversary ballistic and cruise missile defense developments and lays the foundation for investment in innovative programs to lower the cost-per-intercept and defeat emerging ballistic and cruise missile threats.

We request the Committee's support for this budget.

Thank you for the opportunity to appear before you today. I look forward to your questions.