NOT FOR PUBLICATION UNTIL RELEASED
BY THE SUBCOMMITTEE ON STRATEGIC FORCES
COMMITTEE ON ARMED FORCES
UNITED STATES SENATE

Statement of Ms. Leonor Tomero
Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy
Before the
House Armed Services Committee Strategic Forces Subcommittee (HASC-SF)
On Missile Defense
June 15, 2021

Introduction

Chairman Cooper, Ranking Member Turner, and distinguished Members of the Sub-Committee, thank you for the opportunity to testify before you today on the missile threat environment and the Department's missile defense policy vision and priorities. It is an honor to appear beside General VanHerck, Lt Gen Shaw, LTG Karbler, and VADM Hill. I look forward to answering your questions.

This Committee's support for missile defense has been vital to the progress that U.S. and allied and partner missile defenses have made to address current and emerging missile threats from potential adversaries; and it will remain essential to support the Department's security commitments, as this Administration begins to formulate its defense policy.

The Consolidated Appropriations Act, 2021 demonstrated Congress's bi-partisan support for missile defense. Congress also supported key initiatives such as the integrated air and missile defense programs (IAMD) within the Military Departments and Services by continuing to fund enabling programs including the Army's integrated air and missile defense battle command system (IBCS), and the Navy's advanced IAMD-capable flight III destroyers. The resources requested maintain and extend the service lives of our current missile defense assets, promote readiness, increase capacity, reinforce deterrence and assurance missions, and enable us to invest in critical technologies needed to counter the growing spectrum of future missile threats.

Threat Environment

As missile technology matures and proliferates, the threat to the United States, allies, partners, and our deployed forces steadily grows. Potential adversaries continue to expand their

inventories and add new and increasingly sophisticated systems, often for the purpose of creating political instruments of regional or global coercion.

The Democratic People's Republic of Korea (DPRK) continues development and deployment of more capable intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs). The Office of the Director of National Intelligence (ODNI) suggests that the DPRK may resume ICBM testing to destabilize the security environment in East Asia, while seeking to drive a wedge between the Unites States and its allies.

Iran is extending the range, reliability, and accuracy of its missile forces at a concerning rate. Although Iran is not currently developing nuclear weapons, it has increased the size and enrichment level of its uranium stockpile, and has ignored restrictions on advanced centrifuge research and development. Even though it does not currently possess the capability to launch nuclear payloads at intercontinental ranges, Space Launch Vehicle (SLV) programs, such as the one that successfully placed a satellite in orbit in April 2020, develop similar technologies required for an ICBM capability, should they choose to pursue one.

The regional missile threat is also concerning as potential adversaries continue to field more accurate and lethal offensive missile systems capable of threatening the United States, allies, partners, and deployed forces.

The DPRK will pose an increasing threat to the United States, South Korea, and Japan as it continues to improve its missile force. During its January 2021 military parade, the DPRK unveiled a growing and more diverse ballistic missile force. Furthermore, recent testing demonstrates that Pyongyang continues its efforts to field more advanced and reliable short- and medium-range systems.

Iran's short- and medium-range ballistic missiles comprise the largest missile force in the Middle East, which it wields to threaten regional stability. The Office of the Director of National Intelligence (ODNI) assesses that Iran will take risks that could escalate tensions and threaten U.S. and allied interests in the coming year, using its missile forces as part of a range of tools to threaten military action and advance its goals.

Russia maintains one of the most numerous and sophisticated missile inventories in the world. Its regional anti-access area denial (A2/AD) strategies undergird broader strategic goals. The 2021 Annual Threat Assessment notes that Russia will continue to use its missile forces to undermine U.S. influence, reshape international norms, and divide our network of international alliances and partnerships.

In 2019, China launched more ballistic missiles than the rest of the world combined while also placing a heavy emphasis on testing hypersonic glide vehicles (HGV). Missile systems form the backbone of the PRC's anti access/area denial (A2/AD) strategy to inhibit U.S. power projection capabilities, coerce our allies and partners, and reshape the balance of power in the Indo-Pacific region.

Potential adversaries seek to defeat U.S. missile defenses not just through advances in offensive missile technology, but also through coercive diplomatic campaigns. We have repeatedly seen Russian and Chinese efforts to sow disinformation regarding U.S. missile defenses to threaten the strength of U.S. partnerships and of U.S. and allied forces; while simultaneously increasing their own homeland and regional missile defenses.

This evolving missile environment informs our missile defense efforts moving forward, which are part of a larger strategic framework to leverage all elements of national power to prevent and deter conflict, and to prevail should conflict occur.

Policy Framework for Upcoming Strategic Review

To address the evolving challenges to our security and the security of our allies and partners, the Department will review its missile defense policies, strategies, and capabilities to ensure they align with broader U.S. national security and national defense strategies. This review will be informed by several principles.

First, we will work to ensure we have an effective and affordable defense to address the rogue state ICBM threat to the United States. Missile defenses will provide protection of the United Sates from a limited attack from rogue actors. This protection will also contribute to diminishing the coercive potential of these states who may seek to constrain the ability of the

United States to provide credible security assurances to our allies and partners during a crisis or conflict.

Second, we will examine means to enhance our regional posture to support our allies and partners and to defend deployed forces abroad. Our regional missile defenses will continue to contribute to the United States' ability to operate throughout the world. They will enable regional and trans-regional military operations and exercises, providing force protection in contested environments.

Third, missile defense will remain an important component of our strategy to assure U.S. allies and partners that we stand firm in our security commitments. Not only will missile defense partnerships reinforce the indivisibility of U.S. and allied joint security interests, these relationships will also provide opportunities for allied and partner cooperation, co-development, and burden sharing.

Lastly, as Secretary Austin stated, the Department must maintain credible deterrence against advanced threats, and right-size our missions around the world in a transparent and principled manner. Therefore, we must carefully align the scope of our missile defense programs with operational requirements, and clearly communicate their intent to help avoid miscalculation.

In this context, the Department will examine the appropriate mix of capabilities and tools to protect our forces, deter our adversaries, and address future uncertainty while strengthening strategic stability, and reducing risks of miscalculation.

Homeland Defense

The United States is strengthening its homeland defenses and is pursuing more advanced capabilities over the long term. As Secretary Austin has noted, defending the Nation is a key priority for DoD, and missile defense against rogue state threats is a central component of this mission.

The United States is currently defended from rogue state ICBM threats by the Ground-Based Midcourse Defense (GMD) system with Ground Based Interceptors located at Fort Greely, Alaska, and Vandenberg Air Force base, California. The threat is not static and neither is our commitment to improving the defense of the nation. To that end, the Department recently

initiated the development of the Next Generation Interceptor (NGI) in order to augment and potentially replace the current GMD interceptors and increase the overall reliability and capability of the GMD system when it begins deployment in late FY2028. The FY 2022 budget includes $926 million to support NGI development and program risk reduction. As this program moves forward, it will do so in a manner that aligns with the Administration's defense goals and priorities. The Department is also executing the Ground-Based Interceptor (GBI) Service Life Extension Program, which will ensure reliable defense from rogue state threats while we develop NGI to improve current GMD capabilities.

Any future decision to augment the missile defense of the United States, will ensure the overall homeland missile defense posture is sized to provide effective protection of the United States against a limited rogue state ballistic missile attack. As part of our upcoming strategic reviews and consistent with direction in National Defense Authorization Act for Fiscal Year 2020 Congressional direction, the Department will examine potential options and concepts for strengthening the defense of the United States. It is important to note that the U.S. continues to rely on nuclear deterrence to protect against the more sophisticated and numerically large Russian and Chinese intercontinental missile threats.

Additionally, DoD will continue to look across our ballistic missile defense capabilities in order to seek synergies with the cruise missile defense (CMD) mission, and maximize investment. Policy and NORTHCOM/NORAD are working across the Department to ensure the United States is appropriately examining potential approaches to our CMD posture and capabilities.

Another vital component of effective U.S. and regional defense, which Secretary Austin has noted, will be to enhance our global network of integrated sensors. Space-based and land-based sensors enable a variety of capabilities such as detection, tracking, and targeting through all phases of flight for an incoming missile. As the rogue threat evolves in capability, discrimination remains key to enhancing the performance of the GMD system. For this reason the Department is requesting an additional $133 million to support the initial fielding of the Long Range Discrimination Radar in Clear, Alaska later this year; with operational acceptance in FY 2023. As we look to space, integrating the Space-based Kill Assessment capability into our missile defense architecture and exploring advanced proliferated low earth orbit space sensor

development, in particular, will be critical for the future of homeland and regional missile defeat and defense programs.

Regional Defense

This Administration's Interim National Security Strategic Guidance affirms that "Regional actors … continue to pursue game-changing capabilities and technologies, while threatening U.S. allies and partners and challenging regional stability." It is critical that we maintain support for regional missile defense systems to address missile threats and the A2/AD strategies of potential adversaries. The Interim Strategy goes on to say that "despite these steep challenges, the United States' enduring advantages—across all forms and dimensions of our power—enable us to shape the future of international politics to advance our interests and values, and create a freer, safer, and more prosperous world." Missile defenses will remain central to maintaining the U.S. enduring advantage to flow forces into a militarily contested regional environment, and to safeguard those forces should a conflict arise.

Over the past decade, the United States has made progress in developing capabilities for protection against regional missile threats. The Department plans to explore new regional capabilities and upgrade current regional systems such as Patriot, Terminal High Altitude Area Defense (THAAD), and the SM-3 interceptors to maximize their interoperability and the defended battlespace. It is also important to increase the capacity of our regional systems to maintain credible and capable war-fighting capabilities. For this reason, the Department supports: $295 million for SM-3 Block IIA procurement, $352 million for SM-3 Block IB interceptors, procuring additional SM-6 interceptors, the continued development and eventual procurement of Patriot Missile Segment Enhancement (MSE) interceptors, and increasing the capacity of regionally deployed THAAD systems.

The Department will continue to ensure that we bring a more integrated approach to air and missile defense (IAMD) that not only assists with defense against various types of ballistic missile threats but also enables other regional missions, such as defense against cruise missiles and unmanned aerial systems. Thus, U.S. geographic Combatant Commands, are developing IAMD initiatives that will inform future missile defense operational architectures and cooperation strategies with allies and partners. The objective of these efforts is to field

interoperable and integrated missile defense sensors, interceptors, and command and control - capable against a range of threats and tailored to their unique operating environments.

A testbed for our IAMD development path will be the missile defense of Guam. China's A2/AD capabilities increasingly threaten to erode the U.S. ability to ensure its presence in the Western Pacific and reinforce allies and partners in the region. The Department is examining the ways in which it can ensure the effective defense of Guam from various missile threats. Survivable, scalable, and affordable IAMD, in combination with offensive capabilities and passive defense measures, provide the means to strengthen deterrence and, if deterrence fails, limit disruption to U.S. regional military operations. Lastly, as Secretary Austin stated regarding capable regional threats, "we will… guarantee freedom of action in contested, complex operating environments… while using all of our tools to lower the risk of escalation with our adversaries."

Advanced Technology

In addition to improving today's operational systems, we are examining advanced concepts and technologies. Our investment strategy and priorities will focus on how best to address more advanced adversary missile threats, especially those being designed to complicate our current regional missile defense architectures.

For example, in FY22 we will continue to develop the prototype Hypersonic and Ballistic Tracking Space Sensor (HBTSS). This is a priority for the Department to be able eventually to assist with fire control for regional defense, and also for hypersonic missile warning and attribution, in general. This demonstration will be an important step towards building the capability and resiliency of our space sensor architecture.

As part of our future hypersonic defense architecture, the Department will also request funds to support a future regional Glide Phase Intercept demonstration capability. Our approach for regional hypersonic defense is to initially focus on terminal phase defense.

Another concept being explored for its utility to the IAMD terminal defense mission is directed energy. The Department is analyzing various directed energy concepts and their application as a complement to existing missile defense systems.

Central to any future battlefield will be information superiority to enable rapid planning and employment in a joint operating environment. To that end, the Department is developing various cyber-hardened, advanced all domain awareness command and control architectures that will enable timely and accurate decision-making to address emergent threats and coordinate responses. These developmental systems will greatly enable the "any sensor, best shooter" concept that is foundational to effective IAMD.

Cooperation with Allies and Partners

Working closely with key allies and partners in Europe, the Middle East, and the Indo-Pacific region to enhance our collective security is key priority for this Administration. To that end, engaging and working with our allies and partners to enhance our collective missile defense efforts is a core focus area for the Department. The Indo-Pacific is one of the most important regions of the world, and is a model for cooperative missile defense efforts with strong allies such as Japan, the Republic of Korea, and Australia. The Department will continue to work with Japan to enhance its fleet of missile defense assets as Japan works towards its next generation of maritime defense. The United States has recently completed upgrading the Republic of Korea's (ROK) Patriot batteries and looks forward to shared analysis for enhancing the ROK's and Korean-based U.S. forces' layered defenses against threats from DPRK. Our working groups, interoperability initiatives, and hosting of U.S. missile defense systems help to maintain our regional security presence.

NATO continues to form the backbone of European joint and combined operations. A few highlights for missile defense include Aegis Ashore Poland, which will soon join Romania in providing defense against the potential Iranian missile threat; and the procurement of Patriot units and the European-produced SAMP-T (Surface-to-Air Missile Platform/Terrain), by several countries. Allies such as Germany and the United Kingdom are developing their own organic systems, while the U.S., through MDA, continues to execute a range of research and development initiatives with our NATO partners. The Department is also pursuing the advancement of IAMD interoperability through the Formidable Shield exercise series. These efforts will provide important tools and capabilities in dealing with regional missile challenges intended to undermine or weaken the NATO Alliances ability to respond to aggression.

In the Middle East, U.S.-Israeli missile defense collaboration is at the cutting edge of missile defense technology and serves as evidence of the mutual benefits of technology sharing with our allies and partners. Our annual contribution to Israel of $500 million continues our longstanding bilateral cooperation on missile defense. We will continue to explore applications for the very capable Israeli missile defense systems across the region and beyond. With our other allies and partners in the region, the Department's efforts center on bilateral cooperation with key Gulf Cooperation Council (GCC) countries. For example, the United Arab Emirates, Qatar, and Saudi Arabia have purchased a mix of U.S. THAAD and/or Patriot batteries and radars. Multilaterally, the Department will continue to work with our GCC partners to foster a more integrated approach to regional missile defense cooperation.

Additionally, DoD participates in a series of bilateral, trilateral, quadrilateral, and multilateral dialogues that share information on regional and global missile threats, exchange operational IAMD visions, discuss modernization efforts and future capability development, and seek new opportunities for joint research, training, and co-production/co-development. From a strategic standpoint, and as Deputy Secretary Hicks testified, cooperation in this area strengthens our common protection, enhances deterrence, and provides assurances essential to the cohesion of our alliances in the face of growing regional missile threats, coercion, and attacks. Operationally, by developing a more coordinated, and where possible, integrated approach to air and missile defense, we will improve our ability to work with allies and partners to address adversary A2/AD strategies and capabilities collectively.

Conclusion

As the Department prepares for its strategic review, I assure members of this committee that it will remain committed to key missile defense missions and priorities. In today's complex operating environments we must be prepared to meet the risks and danger from missile threats together as allies and partners. Lastly, in an emerging multi-domain battlefield, it will be critical to invest in effective missile defense technologies in a responsible, cost-effective manner that maintains regional and strategic stability and reliably retains U.S. advantage long into the future.