LAYERED HOMELAND MISSILE DEFENSE

A Strategy for Defending the United States

"Our fundamental responsibility is to protect the American people, the homeland, and the American way of life... A layered missile defense system will defend our homeland against missile attacks. ~ National Security Strategy, 2017

DEFENDING THE HOMELAND

- Defending the U.S. homeland is DoD's number one objective.
- Rogue states seek to threaten the U.S. homeland with long-range ballistic missiles to coerce us, restrict our freedom of action, and undermine our resolve to defend allies and partners.
- A secure U.S. homeland allows us to defend our security interests, commit to the defense of others, resist coercion, and negotiate from a position of strength.

THREATS TO THE HOMELAND

- Rogue state adversaries like North Korea and Iran seek dangerous capabilities, including long-range ballistic missiles that can threaten the U.S. homeland, support regional aggression, and deter potential U.S. responses.
- North Korea, despite repeated diplomatic engagements, is developing and testing nuclear-capable intercontinental ballistic missiles (ICBMs) that could reach the U.S. homeland.
- Iran has demonstrated a space-launch capability that could lead to the development of an ICBM.
- These threats are likely to advance in capability and capacity by mid-decade and beyond, which is why President Trump stated, "We are committed to establishing a missile defense program that can shield every city in the United States. And we will never negotiate away our right to do this."

U.S. MISSILE DEFENSE POLICY

- U.S. missile defense policy recognizes the reality and enduring nature of these threats plus the need to hedge against the uncertain nature of future threats.
- U.S. policy for missile defense of the homeland is to stay ahead of rogue state missile threats while relying on nuclear deterrence to address the larger and more sophisticated Russian and Chinese strategic missile arsenals.
- U.S. missile defenses provide a number of benefits:
 - Complicate adversary attack planning increasing uncertainty and making attack less attractive.
 - Provide insurance against the failure of diplomacy and deterrence.
 - Provide U.S. decision-makers additional time during an escalating crisis or confrontation.
 - Safeguard against unauthorized or accidental launches by others.
 - Protect critical military systems that provide command and control and situational awareness.

WHY LAYER MISSILE DEFENSES?

- > Additional, overlapping layers of defense increase overall reliability, resiliency, and effectiveness.
- New geographically dispersed sensors and interceptors could track and engage inbound threats at multiple points along the missile's flight trajectory.
- Missile defense-in-depth provides more opportunities for the United States to intercept an adversary missile, increasing overall system effectiveness to protect the homeland.

COMPONENTS OF LAYERED HOMELAND DEFENSE

The First Layer: GMD AND NGI

- The first layer in the U.S. homeland missile defense architecture is the Ground-based Midcourse Defense (GMD) system, which defends the U.S. against long-range ballistic missile threats using 44 Ground-Based Interceptors (GBIs) to intercept adversary warheads during their mid-course of flight.
- Initially fielded in 2004, the GMD system is undergoing life extension and will be improved with the addition of the Next Generation Interceptor (NGI), starting in 2028.
- The NGI will be the first, all new interceptor design since the fielding of the GMD system, and will incorporate the latest technology to defeat more advanced rogue state ballistic missile threats.
- The U.S. will field NGI in a mixed fleet with GBIs for a total of 64 interceptors.



The Second Layer: Aegis BMD, SM-3 Block IIA, and THAAD

- The Aegis Ballistic Missile Defense (BMD) system was designed to defeat short- to intermediate-range missiles, using the Standard Missile (SM) family of interceptors.
- The SM-3 Block IIA was originally designed to intercept medium- to intermediate-range ballistic missile threats but, with modifications, it may have a capability to intercept an ICBM warhead in the late mid-course phase of flight.
- The Missile Defense Agency will conduct an intercept flight test of the SM-3 Block IIA against an ICBM-class target this year to assess the feasibility of incorporating Aegis BMD into a homeland missile defense architecture as an additional complementary "layer" to augment the GMD system.
- If shown to be feasible, SM-3 Block IIA interceptors could be deployed within a few years to support the homeland defense mission.
- If deployed, this additional layer of defense would not be a substitute for the GMD system, but would provide additional defense-in-depth.
- The layered defense architecture could be further augmented in the future by a new variant of the Army's Terminal High Altitude Area Defense (THAAD) which is designed to intercept ballistic missiles in the terminal phase of flight.
- The Department is examining the potential for enhancements to the THAAD interceptor to increase its ability to engage and intercept ICBMs in the terminal phase.

ANSWERING OBJECTIONS

Objection #1: China and Russia assert that the United States is building up its missile defenses so much that it will negate their nuclear deterrent, causing instability.

- The United States has consistently said its homeland missile defenses are sized to stay ahead of the rogue state threat not to negate Chinese or Russian strategic nuclear arsenals.
- Russia has approximately 1500 operationally-deployed strategic nuclear warheads on land-, sea-, and airbased platforms that could significantly overmatch U.S. missile defenses, and China is modernizing its strategic missile force and developing several new long-range missiles with multiple independentlytargetable re-entry vehicles (MIRVs).
- Russia has deployed the world's first intercontinental-range hypersonic glide vehicle while China has developed and tested a similar system – both designed to overcome U.S. missile defenses.
- Both states have well established missile defense countermeasure programs and have boasted about their ability to overcome U.S. missile defenses, making their criticism appear disingenuous at best, and more likely meant to erode support for U.S. homeland missile defense leaving the U.S. more vulnerable and susceptible to coercion from rogue states.
- The United States continues to rely on its nuclear arsenal to deter Chinese or Russian strategic attack.

Objection #2: China and Russia are likely to respond to U.S. layered homeland missile defenses by building up their own missile forces, causing a broader "arms race."

- China and Russia are in the midst of decade-long missile modernization programs both begun well before the United States pursued layered homeland missile defense.
- When China and Russia size their missile arsenals, they factor in shifting threat perceptions, resources available, defense strategy, and domestic political conditions.
- The perceived capability of U.S. missile defenses is only one factor among many in the Chinese and Russian respective decision-making processes.

- Though the United States has fielded only 44 homeland missile defense interceptors, this restraint did not cause reciprocal restraint by China or Russia, which have both improved the size and sophistication of their offensive missile arsenals.
- Similarly, the Soviet missile arsenal grew substantially in the 1970s even after the public U.S. decision not to pursue missile defenses for a time after signing the 1972 Anti-Ballistic Missile Treaty.
- U.S. restraint in its missile defenses historically has not produced reciprocal restraint in Chinese or Russian missile advances; nor can U.S. deployment of limited homeland missile defenses be pinpointed as the primary cause for advances in Chinese or Russian missile arsenals.

Objection #3: The U.S. layered homeland missile defense system is destabilizing and meant to allow more aggressive foreign policy actions.

- The United States is not alone in the world in building missile defense systems for the defense of its homeland – as is every nation's right.
- In fact, China and Russia while claiming the U.S. missile defense system is destabilizing are themselves pursuing missile defense against the full range of threats.
- Russia is upgrading its 68 ballistic missile interceptors around Moscow which, disturbingly, utilize nuclear warheads, rather than the conventional kill vehicles employed by the United States.
- Contrary to Russian claims, the United States is not seeking "perfect security" or freedom to attack. Rather, by providing a measure of defense and raising the cost of an adversary attack, missile defenses buy time for diplomatic solutions to emerging crises.
- Without missile defenses, the United States would need to rely on riskier strategies of pre-emption, timeconstrained decision-making, and reduced situational awareness, giving adversaries more opportunities for coercion and violence.

CONCLUSION

- The U.S. homeland is no longer out of range from rogue state missile threats, and the threat is only increasing.
- Although the U.S. is protected from current rogue state threats, a complementary layered missile defense of the U.S. homeland will provide an effective and credible counter to these threats well into the future.
- The United States will continue to be transparent about its missile defense goals and capabilities while supporting the number one objective of the Department of Defense: defending the homeland.