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Joint Statement for the Record

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On

Fiscal Year 2013 National Defense Authorization
Budget Request for Department of Defense
Nuclear Forces Programs

Before the
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Subcommittee

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Introduction

Chairman Nelson, Ranking Member Sessions, and members of the Subcommittee, we are pleased to have the opportunity to join Lieutenant General Kowalski, Major General Chambers, and Rear Admiral Benedict in discussing a critical topic – U.S. nuclear forces and policy.

This statement constitutes the combined testimony of our organizations – the Office of the Assistant Secretary of Defense (ASD) for Global Strategic Affairs (GSA) in the Office of the Under Secretary of Defense for Policy and the Office of the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs (NCB) in the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L).

Our offices are responsible for policy development, acquisition management, and oversight for nuclear weapons for the Office of the Secretary of Defense. As the ASDs for GSA and NCB, we also serve as the advisor and executive secretary, respectively, to the Nuclear Weapons Council (NWC) on all areas dealing with nuclear deterrence.

GSA is responsible for policy development in a number of areas, including: nuclear deterrence; countering the proliferation of weapons of mass destruction; strategies for defending against the threat of ballistic missiles; and addressing the emerging challenges the Nation faces in the cyber and space domains. GSA leads the Department of Defense's (DoD) efforts to execute the President's vision to take concrete steps toward a world without nuclear weapons while maintaining a safe, secure, and effective nuclear deterrent for the Nation. We also lead DoD's work with U.S. Government departments and agencies and our international partners to strengthen deterrence around the world.

NCB plays a key role in managing the U.S. nuclear deterrent and leading DoD's efforts to acquire the warheads for nuclear systems in order to meet the operational needs of our armed forces. Two of the ASD(NCB)'s main responsibilities are the missions of providing the United States and its Allies with a safe, secure, and effective nuclear deterrent capability and determining the nuclear survivability of U.S. military forces. In addition to these missions, NCB leads DoD's efforts to counter nuclear terrorism through activities such as the four-year initiative to secure all vulnerable nuclear materials worldwide, the Nuclear Security Summit, and the Global Initiative to Combat Nuclear Terrorism.

As the January 2012 DoD strategic guidance makes clear, the United States will field nuclear forces that can – under any circumstances – confront an

adversary with the prospect of unacceptable damage, both to deter potential adversaries and to assure U.S. Allies and security partners that they can count on the United States' commitment to our shared security.

Today, we would like to touch on several topics: the global nuclear balance; our implementation of the New START Treaty and its implications for U.S. nuclear forces and policy; our work to strengthen regional deterrence and assurance for our Allies and partners; work underway to ensure a future nuclear force structure in line with the President's vision; the important role the budget will play in meeting this vision; efforts that DoD and the Nuclear Weapons Council are undertaking to ensure that we have the forces we require for the foreseeable future, including revitalizing the nuclear infrastructure, meeting DoD stockpile requirements, and modernizing delivery systems and command and control; nuclear physical security; and international efforts to counter nuclear threats.

The Global Nuclear Balance

Let us first set the scene by discussing the nuclear arsenals around the world. In September 2009, the Obama Administration publicly stated that the U.S. nuclear arsenal included 5,113 weapons, not including weapons awaiting dismantlement. That arsenal, although sizeable, has shrunk significantly from a high point of approximately 31,000 warheads in 1967.

Russia has approximately 4,000 to 6,500 nuclear weapons, according to unclassified estimates, of which approximately 2,000 to 4,000 are non-strategic – or "tactical" – nuclear weapons. Russian strategic nuclear warheads are reported under the New START Treaty, and the limits on its deployed strategic nuclear weapons are monitored through on-site inspections, but we lack confidence in estimates of Russian tactical nuclear weapons.

Russia maintains a robust nuclear warhead production capability to remanufacture warheads regularly rather than conduct Life Extension Programs (LEP). Russia is also working to modernize delivery systems, including a mobile variant of the Topol intercontinental ballistic missile (ICBM) and new *Borey*-class missile submarines with Bulava submarine-launched ballistic missiles (SLBM). Under the New START Treaty, Russian forces will be limited to 800 total and 700 deployed strategic delivery systems. Russia will also be limited to 1,550 deployed strategic warheads to comply with the central limits of the New START Treaty.

We do not have arms control insight into China's nuclear capabilities. China appears to be increasing the size of its nuclear arsenal, which today consists

of a few hundred nuclear weapons. We know that China has a broad range of missile-development programs, including an effort to replace some liquid-fueled systems with more advanced solid-fueled systems. China is also pursuing a sea-based deterrent with the construction of the *Jin*-class submarine.

Of course, the list of the world's declared nuclear powers includes two of our NATO Allies. The United Kingdom and France each have a few hundred nuclear weapons. France is upgrading its nuclear capabilities by replacing legacy delivery aircraft with the Rafale and by fielding the new M51 SLBM. The United Kingdom is focused on replacing its *Vanguard*-class strategic ballistic missile submarines and is collaborating with the United States on a new common missile compartment to be used on both the *Vanguard*-class and the U.S. *Ohio*-class replacement submarine.

In recent years, the situation has grown more complicated as other states seek nuclear weapons of their own or enhance their existing nuclear arsenals. Today, India and Pakistan are each estimated to have fewer weapons than China, but they are increasing the size of their nuclear arsenals. Pakistan is expanding its plutonium production capabilities, and both India and Pakistan are seeking advanced delivery systems. In addition, North Korea has tested a plutonium-based weapon design and claims to be enriching uranium. Based on recent events, it is possible that the downward trend of recent years may be reversing with respect to North Korea. However, in the absence of full transparency and cooperation with the International Atomic Energy Agency, we remain concerned about Pyongyang's ultimate intentions. Likewise, we are profoundly troubled by Tehran's nuclear ambitions and its unwillingness to meet its international nonproliferation obligations.

This complex global security environment is the context in which our future force structure decisions must be made.

Implementation of the New START Treaty

One very important step toward addressing the security environment we face, given that the United States and Russia continue to have the vast majority of the world's nuclear weapons, was the entry into force of the New START Treaty in February 2011.

President Obama made the decision to expedite negotiations for the New START Treaty in order to reinvigorate arms control and to minimize the lapse in verification measures occasioned by the expiration of the START Treaty. This decision was consistent with the recommendations of the Congressional

Commission on the Strategic Posture of the United States, which called for an initial agreement with Russia to ensure that a verification program would be in place after the START Treaty expired, followed by negotiations on potential further reductions.

Implementation of the New START Treaty is fully underway. From February 5, 2011 to February 5, 2012, the United States and Russia conducted 18 on-site inspections, which is the maximum number allowed under the New START Treaty. The Defense Threat Reduction Agency conducts these inspections, and the organization's extensive experience with on-site inspections ensures the maximum value of this exercise. The two countries have also exchanged roughly 1,800 notifications regarding nuclear weapons dispositions, deployments, and repairs since the New START Treaty entered into force. This represents a 28 percent increase above the predecessor START Treaty over a comparable period. These exchanges and inspections provide transparency that is crucial to fostering mutual trust between the two countries. Additionally, delegations of both sides have already met three times under the New START Treaty's Bilateral Consultative Commission to discuss implementation issues.

We are on track to meet the 2018 deadline for the central limits of 1,550 warheads on deployed ICBMs, deployed SLBMs, and accountable nuclear warheads for deployed heavy bombers; 700 deployed ICBMs, deployed SLBMs, and deployed heavy bombers; and 800 deployed and non-deployed launchers and bombers – thresholds that, based on careful analysis, are adequate to meet U.S. national security requirements.

The New START Treaty is the first step in the Obama Administration's vision for further reductions in strategic and non-strategic nuclear weapons. The timing and framework for the next round of arms control negotiations have not been set, but new discussions with Russia will need to be broader in scope and more ambitious. The President has made clear that the next phase should include the total arsenal of nuclear weapons: deployed and non-deployed, strategic and non-strategic. To that end, we fully support the Senate's condition in its New START Treaty Resolution of Advice and Consent to Ratification to pursue an agreement with Russia that would address the disparity between the tactical nuclear weapons stockpiles of the Russian Federation and of the United States and would secure and reduce tactical nuclear weapons in a verifiable manner. As the 2010 Nuclear Posture Review (NPR) states, Russia's nuclear forces will remain a significant factor in determining how much and how fast we are prepared to reduce U.S. forces. Strict numerical parity in nuclear weapons between the two countries is no longer as compelling as it was during the Cold War. However, large disparities in nuclear capabilities could raise concerns on

both sides, as well as among U.S. Allies and partners, and may not be conducive to maintaining a stable, long-term strategic relationship. Therefore, we would emphasize the importance of Russia joining us as we move to lower levels of nuclear forces.

We continue to pursue high-level, bilateral dialogues with both Russia and China that are aimed at promoting stable, resilient, and transparent strategic relationships. The United States took a bold step toward transparency by making public the number of nuclear weapons in the U.S. stockpile. We would welcome reciprocal declarations by Russia and China.

Strengthening Regional Deterrence and Assurance

The United States remains committed to our Allies' continuing security through our policy of extended deterrence. We seek to reiterate this message as often as possible, including through efforts to bolster regional deterrence architectures around the world. We are building regional cooperative missile defenses, forward-deploying U.S. forces, and maintaining what is commonly referred to as the "nuclear umbrella." The Obama Administration will uphold U.S. security commitments to our Allies.

We would like to touch briefly on deterrence issues in three regions, starting with the Asia-Pacific region. As DoD's new strategic guidance makes clear, this region is being accorded increased importance, and we are strengthening our security partnerships there. In 2010, for example, we added new forums to our already robust relationships to enhance extended deterrence in Northeast Asia – the Extended Deterrence Policy Committee with the Republic of Korea and the Extended Deterrence Dialogue with Japan.

Japan is also a strong partner in ballistic missile defenses, successfully developing its own layered capabilities and co-developing an advanced version of the SM-3 interceptor, the SM-3 Block IIA. We regularly train together, learn from each other, and conduct cooperative missile defense exercises. In addition, the United States is consulting with the Republic of Korea and Australia about possibilities for missile defense cooperation.

Another priority region for DoD is the Middle East. For the United States, the Arab Awakening and the withdrawal of U.S. military forces from Iraq present new strategic opportunities and new challenges. Developments stemming from the Arab Awakening provide an opportunity to support governments that are responsive to the aspirations of their people. At the same time, we remain unrelenting in our commitment to counter the proliferation of ballistic missiles and weapons of mass destruction. The

United States is nurturing longstanding relationships and expanding new ones to prevent Iran's development of a nuclear weapon capability and to counter destabilizing policies in the region.

Israel and the United States coordinate and cooperate extensively on missile defense. We have a long history of cooperation on plans and operations, combined exercises, and combined research and development programs. The United States maintains a constant missile defense presence in the Persian Gulf region, and we are working with a number of Gulf Cooperation Council members – Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) – on missile defense, including the purchase of U.S. capabilities. The UAE, for example, recently announced its plan to purchase Terminal High Altitude Area Defense (THAAD) and Patriot systems from the United States.

DoD's strategic guidance also makes clear that "Europe is our principal partner in seeking global and economic security, and will remain so for the foreseeable future." The guidance affirms the critical importance of NATO, as President Obama did in November 2010 when he invited his fellow heads of state and government to Chicago for the first NATO Summit in the United States in 13 years. This came on the heels of the Lisbon Summit, which made real progress in strengthening our ties as Allies through the approval of a new Strategic Concept for the Alliance and through NATO's adoption of territorial missile defense as an Alliance mission. Allies at Lisbon also agreed to undertake a Deterrence and Defense Posture Review (DDPR) to determine the appropriate mix of nuclear, conventional, and missile defense forces that NATO will need to deter and defend against threats to the Alliance. This review will consider how arms control, disarmament and nonproliferation could promote Alliance security.

Guided by the Strategic Concept, Allies are working to complete the DDPR by the time of the NATO Summit in Chicago in May 2012. The primary aim of the DDPR is to determine the appropriate mix of nuclear, conventional, and missile defense forces that NATO will need to deter and defend against threats to the Alliance, and to ensure its members' security. The drafting of the DDPR is proceeding in accordance with the premises that continue to be central to NATO's nuclear posture, particularly the basic principles reaffirmed by the United States in the 2010 NPR that any changes in NATO's nuclear posture will be taken only after a thorough review within – and decision by – the Alliance as a whole.

A Nuclear Force Structure for the Future

As part of the NPR, the President called for follow-on analysis to set a goal for future nuclear reductions below New START levels while strengthening deterrence of potential regional adversaries, enhancing strategic stability vis-à-vis Russia and China, and assuring our Allies and partners. Even as we consider future reductions, the President has made clear that the entire Administration remains committed to retaining a safe, secure, and effective nuclear arsenal for as long as nuclear weapons exist.

The Administration's review of nuclear guidance in light of the current and expected future security environment is making good on the President's commitment, and it is consistent with how past Presidents have managed their responsibilities as Commander in Chief. We want to underscore that this process is not a re-evaluation of the NPR, but that it is a key part of its implementation.

The study is not revisiting the first principles outlined in the NPR. Indeed, in undertaking this effort, we are focused on achieving the NPR's five strategic objectives: preventing nuclear proliferation and nuclear terrorism; reducing the role of U.S. nuclear weapons in U.S. national security strategy; maintaining strategic deterrence and stability at reduced nuclear force levels; strengthening regional deterrence and reassuring U.S. Allies and partners; and sustaining a safe, secure, and effective nuclear arsenal. These are the standards by which we will assess deterrence requirements.

Our analysis is also considering the critical question of what to do if deterrence fails. In effect, we are asking: What are the guiding concepts for employing nuclear weapons to deter adversaries, and what are the guiding concepts for ending a nuclear conflict on the least catastrophic terms if one has already started?

The Office of the Secretary of Defense is working closely with the Joint Staff and U.S. Strategic Command (USSTRATCOM) in conducting this analysis. We are closely coordinating with the National Security Staff and senior representatives from the Departments of Energy and State. The results are intended to inform the President's guidance to DoD on nuclear planning and to shape the force structure needed to protect the United States, its Allies, and its partners.

Budget

The budget, of course, influences our plans looking forward. The current fiscal situation is putting pressure on the entire Department of Defense, and the nuclear enterprise is no exception.

For Fiscal Year (FY) 2013, we have made careful choices to protect high-priority programs while allowing some efforts to be delayed with acceptable or manageable risk. Some programs, including the replacement for the *Ohio*-class ballistic missile submarine, will be delayed. Others, such as a new bomber, will remain on schedule. As we look to sustain the current triad and develop the appropriate force mix, cost efficiencies must be factored into the sequencing of our upgrade efforts.

Ensuring that our nuclear forces are properly sized and configured to face real threats, both today and in the future, is a responsibility this Administration takes very seriously. The Obama Administration continues to believe that maintaining a nuclear triad is essential to U.S. national security.

The budget request protects investments in homeland missile defense, and we will continue to develop our regional missile defense capabilities, although at a somewhat slower rate.

In this budget, we will also continue to fund the development of conventional strike capabilities, another important part of deterrence. The DoD budget includes a Defense-wide technology development program on Conventional Prompt Global Strike (CPGS), the objective of which is to develop and demonstrate boost-glide CPGS technologies and test capabilities. CPGS would provide the President with a wider range of options to engage targets at strategic ranges in less than an hour, a capability that has previously only been available with nuclear-armed strategic missiles. DoD has no current plans to replace nuclear warheads on our Minuteman ICBMs or Trident SLBMs with conventional warheads.

It is worth bearing in mind that some of the most important initiatives detailed in the NPR do not require any additional funding. These include support to the Nuclear Nonproliferation Treaty, pursuing future arms control negotiations, and reducing the role of nuclear weapons in national strategy. Such efforts continue apace.

Revitalizing the Nuclear Infrastructure

Despite an overall declining top line for DoD, the President's FY 2013 budget request makes the investments necessary for DoD to meet its deterrence

requirements. To do so, these investments must span the nuclear enterprise, including the infrastructure that provides agile research and development and manufacturing capabilities upon which an effective strategic deterrent relies.

DoD and the Department of Energy (DOE) are committed to a shared approach to recapitalizing the Nation's nuclear infrastructure in a responsible, fiscally prudent way. The NPR states that the physical infrastructure supporting the nuclear weapons complex "has fallen into neglect" and that increased investments in the nuclear infrastructure are "needed to ensure the long-term safety, security, and effectiveness of our nuclear arsenal and to support the full range of nuclear security work to include non-proliferation, nuclear forensics, nuclear counter-terrorism, emergency management, intelligence analysis and treaty verification." The NPR also emphasizes that the human capital of the nuclear enterprise has been "underfunded and underdeveloped." It is clear that reversing these trends and accomplishing this revitalization will require significant investment over a sustained period of time.

FY 2013 funding levels in the President's budget will allow us to work with DOE in continuing our efforts to restore the health of the intellectual infrastructure that our national laboratories provide. The scientific and technological base at our nuclear weapons laboratories forms the backbone of our deterrent. As the 2010 NPR states, rehabilitation and modernization in the nuclear weapons infrastructure would allow the United States to "shift away from retaining large numbers of non-deployed warheads as a hedge against technical failure, allowing major reductions in the nuclear stockpile."

DoD has agreed to transfer approximately $8.2 billion to the National Nuclear Security Administration (NNSA) during FY 2011-2016. This funding will help ensure that we can successfully extend the life of our current weapons and modernize the supporting infrastructure. In addition, we are currently working with NNSA on a budget issue team to review joint priorities for support of the nuclear deterrent and to ensure that we are fully aligned for FY 2014 and beyond. We expect the issue team's results later this year.

The aging of the nuclear weapons physical infrastructure presents significant challenges for ensuring that the capabilities needed to support the nuclear deterrent are maintained over the long term. To address these obstacles, construction of the Uranium Processing Facility (UPF) has been accelerated to ensure that current uranium processing capabilities are not jeopardized.

Building a large, one-of-a-kind nuclear facility such as the UPF, presents substantial planning, design, and development challenges. Indeed, the estimated costs for the UPF have grown substantially, raising concerns about the affordability of the project. Particularly in today's fiscally constrained environment, the NWC is prioritizing efforts to control costs.

DOD has worked closely with NNSA in the last year, and will continue to do so, to ensure that necessary plutonium capabilities are available to meet future projected requirements.

Finally, crucial to continued certification of the nuclear arsenal is a robust weapon surveillance program that provides sufficient information for NNSA laboratories to assess the state-of-health of the weapons. NNSA has increased its surveillance funding and reduced test backlogs. With improved science tools, such as advanced computers and new experimental facilities, the national laboratories have increased their capability to understand and resolve stockpile issues. DoD will continue to support these efforts, for example, by providing sufficient flight test assets.

Beyond their national deterrent mission, the national laboratories contribute greatly to our efforts in nonproliferation and WMD counterterrorism. They have become "dual-use" nuclear security research and development organizations that provide considerable leverage to enhance all aspects of global security. Prioritizing these important missions among U.S. national security objectives and supporting the laboratories with sufficient resources are mandatory for recruiting, training, and retaining a talented workforce.

DoD Stockpile Requirements

Today, the U.S. nuclear weapon stockpile is the smallest it has been since the Eisenhower Administration. All three nuclear weapons laboratory directors and Commander, USSTRATCOM assess the stockpile annually. The most recent assessment found that the stockpile is safe, secure, and effective and that there is no need to conduct explosive nuclear testing.

Looking to the future of the nuclear arsenal, DoD and DOE will continue several weapon-system LEPs in FY 2013 to support long-term deterrence capabilities. Among the near-term efforts, DOE will continue the B61 and W76 LEPs. Given fiscal challenges, the NWC agreed to extend the duration of the LEPs, enabling DoD to meet deterrence requirements effectively while more efficiently managing annual costs among multiple programs.

Other ballistic missile warheads are also nearing end-of-life. DoD and DOE are conducting a W78/W88 common warhead study to examine a warhead

option that could be deployed with both ICBMs and SLBMs. To leverage this effort, DOE, the Air Force, and the Navy are jointly developing a modern Arming, Fuzing, and Firing (AF&F) system, initially for the W88 SLBM warhead but also adaptable for use in a potential W78/W88 common warhead.

Efforts to develop a common warhead for deployment on multiple platforms would allow DoD to reduce the number of warhead types in the stockpile and the number of warheads needed to maintain the nuclear deterrent should a failure occur with a delivery platform or warhead. Warhead commonality would also allow for substantial reductions in life-cycle and production costs.

Life extension of the B61 gravity bomb is needed for support to the bomber leg of the triad and to provide U.S. extended deterrence to our Allies. The NPR reaffirms both the extended and strategic deterrent roles of the B61 and affirmed its full-scope life extension. The result will be the B61 mod 12 bomb, which will replace four of the five B61 variants (mods -3,-4,-7, and -10), further promoting efficiencies and lowering costs.

Delivery Systems and Command and Control Modernization

DoD will continue to modernize programs for the delivery systems that underpin nuclear deterrence. The NPR's conclusion to retain a nuclear triad of ICBMs, SLBMs, and nuclear-capable heavy bombers is premised on maintaining these delivery systems, and the President's FY 2013 budget reflects this approach.

Sustaining the sea-based, and most survivable, leg of our nuclear deterrent is particularly vital as we move to lower numbers under the New START Treaty. To ensure the continued health of this critical capability, the service lives of our Trident D-5 missiles are being extended to 2042, and construction of the first of the *Ohio*-class replacement submarines is scheduled to begin in 2021. As mentioned, this represents a two-year slip compared with last year's plan. However, the Navy believes it can manage the challenges resulting from the delay: specifically, that the first *Ohio*-class SSBNs would reach end-of-life before replacement boats come on-line, and that the common missile compartment would be installed first in the new British submarine. Twelve new boats are planned for purchase, with the first scheduled to begin patrol in 2031. All DoD sustainment and modernization efforts for the submarine-based deterrent are fully funded in the President's FY 2013-2017 request.

With respect to ICBMs, the Administration plans to sustain the Minuteman III (MMIII) through 2030. Ongoing intensive flight test and surveillance efforts

will inform sustainment and modernization planning by providing better estimates for component aging and system reliability. The Air Force will begin an Analysis of Alternatives in 2013 (to be completed in 2014), examining options and required capabilities for a follow-on system. Further, a small-scale program to maintain a "warm" production line for MMIII solid rocket motors was completed last year. Among key modernization issues is sustainment of the large-diameter solid rocket motor industrial base, pending decisions to produce a follow-on system. The President's budget request includes an $8 million Air Force study to evaluate a path forward to sustain this key industrial capability.

Thirdly, the United States will maintain two B-52H strategic bomber wings and one B-2 wing. Both bombers, however, are aging, and sustained funding and support are required to ensure operational effectiveness through the remainder of the aircrafts' service lives. The FY 2013 budget request allocates funding to upgrade these platforms; for example, providing the B-2 with survivable communications, a modern flight system, and updated radar.

In addition, this year DoD intends to begin a program for a new, long-range, nuclear-capable, penetrating bomber that is fully integrated with a family of supporting aircraft and intelligence, surveillance, and reconnaissance assets. DoD continues to invest to ensure that we maintain an effective stand-off capability as the anti-access threat continues to evolve. Thus, DoD is carrying out an Analysis of Alternatives, to be completed early in 2013, for an air-launched cruise missile (ALCM) follow-on system called the long-range standoff (LRSO) missile. We plan to sustain the ALCM and the W80 ALCM warhead until the LRSO can be fielded.

To allow us to continue the U.S. nuclear presence in Europe in support of our extended deterrence and assurance commitments, DoD is planning to provide a nuclear capability to the Joint Strike Fighter to replace aging F-16 dual-capable aircraft. The original plan was to deliver a dual-capable Joint Strike Fighter (JSF) in 2017. As a result of changes in the JSF program, the Air Force now intends to deliver nuclear capability to all JSFs in Europe in the 2020 time frame via the Block IV upgrade. The Air Force will ensure there is no gap in our ability to meet extended deterrence assurances to our Allies and partners.

We also want to take note of a critical but often underappreciated component of strategic deterrence: the nuclear command and control (NC2) system that links the triad of nuclear forces. Independent of deployed delivery systems and warheads, we require robust, survivable, and effective systems for early warning, attack assessment, and force direction to support our existing nuclear employment plans, as well as associated contingencies.

An effective NC2 system must clearly and unambiguously detect and characterize an attack; assemble key decision makers in a conference so an appropriate response can be chosen in a timely manner; disseminate emergency action messages to nuclear forces taking into account the survivability of the force elements involved; and provide enduring control of surviving forces.

We plan to spend significant resources on NC2 system research and development, procurement, and operations and maintenance to address a range of challenges, including: the need for survivable satellite communications; survivable communications to forces; early-warning satellite modernization; improved, secure senior leader conferencing; hardening of critical communications links to electromagnetic pulse; and airborne and ground mobile command post sustainment/modernization.

Physical Security

In addition to our efforts to revitalize weapons, delivery systems, and facilities, we continue to enhance nuclear physical security. Most notably, we have formalized DoD-DOE collaboration through a memorandum to pursue a common basis for the protection of nuclear weapons and weapons-usable fissile material. This effort will provide consistency when addressing enterprise nuclear concerns, facilitate collaborative risk-informed decisions, and provide better communication with Congress.

The first major step in this process was the Nuclear Security Threat Capabilities Assessment, which was jointly developed by the Defense Intelligence Agency and the DOE Office of Intelligence/Counterintelligence. This assessment provides the basis for developing a baseline of terrorist attack force size and capabilities to inform security system design and evaluation. DoD and DOE are moving forward to shape the methodology for vulnerability assessments, test and evaluation, and physical security standards to maximum commonality. Although the memorandum specifically links DoD and DOE efforts, DoD is also actively engaging with the Nuclear Regulatory Agency and our United Kingdom counterparts to optimize physical security methodology and our understanding of threats to the nuclear enterprise.

Finally, DoD is enhancing the physical security posture in “nuclear mission environments,” where the current environments meet nuclear weapons security standards, but there is room for improvement.

International Efforts to Counter Nuclear Threats

The last area we want to highlight is DoD's efforts to ensure that terrorists and proliferators cannot access nuclear materials and expertise abroad. Since September 11, 2001, there has been tremendous collaboration on this goal at the Federal level. President Obama has called nuclear weapons in the hands of terrorists "the single biggest threat to U.S. security." In his words, just one nuclear weapon detonated in an American city would devastate "our very way of life" and represent a "catastrophe for the world." For this reason, the NPR outlines a series of policies that reflect the gravity of this threat. Specifically, it placed the prevention of nuclear proliferation and nuclear terrorism at the very top of its list of five key objectives.

To meet this goal, the United States has been aggressive in its threat reduction efforts; but it cannot meet this challenge alone. In President Obama's view, there is a pressing need to "deepen our cooperation and to strengthen the institutions and partnerships that help prevent nuclear materials from ever falling into the hands of terrorists." Thus, DoD and its interagency partners are building on our long history of nuclear cooperation with Allies such as the United Kingdom and France to expand that partnership into threat reduction activities. This mission is growing in importance for an increasing number of countries, and we will continue to make building international partnership capacity in this area a high priority.

Just yesterday, we concluded the second Nuclear Security Summit in Seoul, South Korea. This gathering brought together more than 50 heads of state to address measures to combat the threat of nuclear terrorism, protect nuclear materials, and prevent the illicit trafficking of these materials. The Summit successfully built on the achievements of the first-ever Nuclear Security Summit in Washington, D.C. in 2010, which focused on improving the security of weapons-grade plutonium and uranium. An outgrowth of the Washington, D.C. Summit was the Global Nuclear Lockdown initiative, a four-year effort to secure all vulnerable fissionable materials worldwide. This initiative involves participation from across the U.S. Government, including the Departments of State, Defense, Energy, Justice, and Homeland Security.

Conclusion

Upon taking office, President Obama made it a priority to sustain a safe, secure, and effective nuclear deterrent. Implementing these commitments requires a partnership between the Executive Branch and the Congress. President Obama has demonstrated his commitment to these priorities, which have enjoyed strong bipartisan support in the past. We trust that

Congress will continue to demonstrate the same commitment. These programs are central to our national security. They deserve full, bipartisan support.

Our nuclear forces remain the foundation of deterrence. Our arsenal needs significant and immediate investment. Given the declining defense budget, some modernization efforts may proceed more slowly than desired, but to reiterate the President's statements, the NPR, and DoD's strategic guidance, the United States will maintain a safe, secure, and effective arsenal to deter threats to our Homeland, our deployed forces around the world, and our Allies and partners. The President's Fiscal Year 2013 budget ensures that this will remain a leading national security priority.