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# Report on Deterrence in a World of Nuclear Multipolarity



DEPARTMENT OF STATE  
International  
Security Advisory  
Board

## DISCLAIMER

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October 31, 2023

MEMORANDUM FOR UNDER SECRETARY BONNIE D. JENKINS

SUBJECT: Final Report of the International Security Advisory Board (ISAB) on Deterrence in a World of Nuclear Multipolarity

This report responds to your request of October 18, 2022, that the Board undertake a study on “how to use the mutually reinforcing tools of deterrence and arms control to address the challenges of two future nuclear-armed strategic peers – Russia and China.” The report was drafted by members of a study group chaired by Mr. Jon Wolfsthal. It was reviewed by all ISAB members and unanimously approved by all the ISAB members present at the ISAB plenary meeting on October 31, 2023.

The report examines the challenges facing the United States in a world of nuclear multipolarity. This study first identifies the questions for U.S. deterrence, extended deterrence and assurance, and nuclear nonproliferation. It then evaluates deterrence strategy options, potential arms control measures, implications for reducing the role of nuclear weapons, and the impact of future risk reduction measures. The report concludes with specific recommendations for the Department of State.

My ISAB colleagues and I stand ready to discuss our report with you.

A handwritten signature in black ink, appearing to read "Edwin Dorn", with a long horizontal flourish extending to the right.

Hon. Edwin Dorn

Chair

International Security Advisory Board

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# I. Introduction

This study addresses challenges facing the United States in a world of nuclear multipolarity. The 2022 National Security Strategy states that the United States is “in the midst of a strategic competition to shape the future of the international order.” This competition involves two other nuclear-armed states, the Russian Federation and the People’s Republic of China (PRC). Russia is a nuclear-peer competitor and the PRC has shown signs of seeking some form of nuclear parity with the United States and Russia. The competition with both states is not fundamentally a military armament or nuclear competition, and while it will not be decided solely on the basis of the nuclear balance, it will be shaped by nuclear weapons and military considerations broadly. The power of nuclear weapons to deter and compel, and the compounded risks of nuclear escalation or conflict with multiple nuclear competitors, cannot be overstated. This geostrategic competition is driven, fundamentally, by the ambition of Russian and PRC leaders to alter if not rewrite the global system. As the leaders of Russia and the PRC have consolidated political control through increasing repression, both have sought to justify their authoritarian systems as necessary to protect against purported threats from abroad.

The nuclear landscape has changed significantly since the end of the Cold War. However, the nature of deterrence – how it works, what it requires in order to be effective, and the risks it entails – does not change solely because the United States is now facing two nuclear near-peer competitors instead of one. Russia, a former partner in nuclear risk reduction, has used nuclear threats as tools of coercion in its illegal invasion of Ukraine. And the PRC is seeking to significantly expand its arsenal, with a 2022 Department of Defense (DoD) report projecting that Beijing’s arsenal could reach a stockpile of 1,500 warheads by 2035. Nuclear weapons in the hands of these and other adversaries, including the Democratic People’s Republic of Korea (DPRK), continue to pose existential dangers to the United States and its friends, partners, and allies around the world, and thus responding effectively to these developments must be a national priority.

The report is organized in response to the specific subjects the ISAB was directed to consider by the Terms of Reference – deterrence, extended deterrence and assurance, and

nonproliferation challenges; deterrence strategy options; potential arms control measures; implications for reducing the role of nuclear weapons; and the impact of future risk reduction measures (see Annex A). The report concludes with a consolidated list of recommendations for the Department of State in responding to a world of nuclear multipolarity.

## **II. Challenges for U.S. Deterrence, Extended Deterrence and Assurance, and Nuclear Nonproliferation**

The history of the nuclear age was dominated by the bilateral U.S.-Soviet nuclear confrontation. Even as states like the PRC, and later the DPRK, developed nuclear weapons, the demands of deterrence and assurance in the face of potential Soviet aggression were seen as preeminent. Deterring “lesser” nuclear states was important but multiple U.S. administrations determined that if the United States could deter Soviet aggression, then it could also deter PRC or DPRK aggression with some subset of U.S. strategic assets. Now, the PRC has become what U.S. officials have called “the pacing threat” for which the United States must prepare, and the PRC is projected to significantly increase its nuclear capabilities over the next two decades. Likewise, the DPRK’s nuclear and missile capabilities continue to grow without constraint. As such, it is no longer taken as a given that what is necessary to deter a single nuclear peer like Russia is adequate also to address the deterrence and assurance challenges posed by increasing nuclear arsenals in the PRC and other states. Thus, the era of nuclear multipolarity presents numerous challenges for U.S. policies of deterrence, extended deterrence and assurance, and nuclear nonproliferation.

Fundamentally, deterrence is about convincing an actor not to take specific actions for fear of not achieving its planned objective, or of being forced to absorb unacceptable levels of punishment. Deterrence by both denial and punishment relies on the capability to deliver an effective response to an enemy action, the credibility of threats to follow through with that response, and effective communication of the promised response. Extended deterrence threatens retaliation on behalf of allies and partners, and assurance signals U.S. commitment to their security. Well-functioning deterrence and assurance require a whole

of government approach, and the Department of State has an integral role to play in the development and execution of integrated deterrence policies.

Further, it remains as true today as when nuclear weapons were being developed, that the further spread of nuclear weapons is not in America's interests, as the erosion of extended deterrence and U.S. security alliances would do harm to the U.S. goal of preventing nuclear proliferation, complicate American security relationships, increase the risks of nuclear conflict and accident, and exacerbate regional tensions. These priorities have been articulated in U.S. strategy documents since the start of the nuclear age and remain relevant today. But adapting these priorities to multiple nuclear competitors simultaneously will not be easy and much work inside the U.S. government, in the broader security community and among U.S. friends and allies remains to be done.

## Challenges for Deterrence

- **Tailoring Deterrence:** Deterrence relies upon a clear and clearly communicated strategy that specifies who is being deterred from doing what. Addressing this in a bipolar competition with Russia was difficult enough. Doing so with two nuclear competitors is even more demanding. The goals and objectives of Russia and the PRC and the role of nuclear weapons in their strategic doctrine remain unclear, complicating U.S. deterrence strategies. Greater demands in this environment will be placed on everything from nuclear systems to intelligence assets, as well as diplomatic and information capabilities that are critical to communicating threats and assuring allies. Moreover, the current geostrategic environment is characterized by uncertainty, and future deterrence requirements will hinge on multiple factors, including at a minimum the outcome of the war in Ukraine and the timing and scope of the PRC's strategic ambitions. It is also far from certain that the United States or our allies have a full and accurate picture of what PRC and Russian leaders value, and how to effectively influence their nuclear and strategic decision-making. This is not a new challenge, but one that gets more complicated in a multipolar world.

- **Escalation:** Existing crisis stability challenges in Europe and in East Asia include the use of dual capable (nuclear and conventional) systems; the integration of conventional forces into nuclear planning, especially the use of conventional forces for decapitation strikes; large PRC and Russian investments in anti-satellite (ASAT) and counter-space capabilities; and the possibility of opportunistic aggression, where either Russia or the PRC might take advantage of a crisis in a different theater to pursue regional ambitions, such as attacking a U.S. ally. With nuclear states engaged in competition, there is a constant risk that a small clash of forces could quickly escalate due to miscalculation, miscommunication, human error, or intentionally. Russia's increased reliance on its nuclear systems in an era of conventional weakness is one additional factor that could lead to nuclear escalation. Likewise, possible changes in the PRC's nuclear strategy – including a potential move to adopt launch on warning or launch under attack postures – may also put new demands on U.S. and allied capabilities and strategies. Past U.S. assumptions about how to conduct crisis management with Russia are less certain today, and the United States and the PRC lack an established history for doing so in East Asia.
- **Regional coercion:** Adversaries have regional ambitions, and some are apparently willing to rely on their nuclear weapons capability to signal their resolve. These states may even convince themselves that the nuclear stakes are so high that the United States will not engage far beyond its borders. Deterring such regional aggression and tailoring the required nuclear and non-nuclear capabilities and operations, is a major challenge for U.S. and allied security. Again, this is not a new challenge, as it was a constant requirement in Europe during the Cold War, but this process is growing in importance and requires significant attention and expertise from the United States to manage effectively.
- **Opportunistic aggression and collusion:** Russia and the PRC remain highly suspicious of each other and may never achieve a relationship that will require the United States to plan against contingencies where Russia and the PRC mutually plan and execute attacks on the United States and its allies and partners. Even when their interests may be aligned, they are not so tightly bound to each other or



interdependent that the leaders of one country would necessarily be prepared to coordinate and engage in a combined nuclear war for the sake of the other. However, the United States must be concerned that Moscow or Beijing could engage in opportunistic acts if the other is engaged in a serious conflict with the United States. In understanding how this dynamic affects nuclear requirements, it is important to remember that effective deterrence depends not on the ability to “win” a nuclear war, but rather on the certainty that America will retain the capability and the will to hold key assets at risk and to inflict unacceptable damage simultaneously on both enemies, if needed. Given the costs (financial and opportunity) of finding itself in a three-way nuclear competition, the United States does not need to pursue a strategy that relies on outnumbering aggregate Russian and PRC nuclear forces in order to successfully deter them and assure allies and partners.

## Challenges for Extended Deterrence and Assurance

- **Credibility:** The United States faces a familiar challenge of assuring allies that the United States remains a committed security partner, while also assuring them that they will not be drawn into conflicts between the United States and its adversaries against their will. These two parallel challenges were constant issues during the Cold War in Europe and remain so both there and in East Asia. At the same time, political strains in the United States are already creating extended deterrence challenges for American allies. U.S. officials need to dedicate the appropriate resources – time, attention, personnel, and materiel – to those challenges. Our partners’ doubts about America’s domestic political volatility and foreign policy continuity cannot be successfully managed through enhanced nuclear or military capabilities. U.S. nuclear capabilities should be appropriately sized and configured to make U.S. deterrence and assurance commitments militarily credible to both allies and adversaries alike. At the same time, the political credibility of America's commitment to the defense of allies should be enhanced through diplomatic and other efforts, including an emphasis on political, economic, cultural, and other steps and commitments.

- **Regional balancing:** A particular challenge in an era of nuclear multipolarity will be assuring allies in different regions that extended deterrence is not a zero-sum game. Extended deterrence in one region should not and need not come at the expense of security and assurances in another. The long discussed U.S. “pivot” to Asia has fueled these concerns in Europe, just as the concerted U.S. response to Russia’s aggression against Ukraine has fed uncertainties about the ability of Washington to focus on the challenge of the PRC in East Asia. Put bluntly, the United States must be able to work European and Asian security and deterrence challenges at the same time without actions in one theater undermining stability and deterrence in the other. Current U.S. nuclear strategy has delicately balanced this challenge by referring to Russia as the “acute” threat and the PRC as the “pacing” challenge, but alliance management will be a challenge going forward in multiple theaters.
- **Capabilities:** It takes more than hardware to assure allies, but capabilities are a key part of extended deterrence and assurance. Maintaining a safe, secure, and effective arsenal – both nuclear and conventional – and means of delivery will continue to be a requirement for U.S. strategic and alliance management efforts. America must demonstrate that it has both the capabilities and the will to defeat aggression – whether that be from strategic peers, such as Russia and the PRC, or smaller regional actors, such as the DPRK. With two near-peer competitors to U.S. interests, the demands on these capabilities increase and the credibility of using them in one arena must also factor in the implications of doing so for the other arena.
- **Consultations and dialogue:** Nothing about U.S. efforts to assure allies can happen in isolation from the constant and sustained effort to work with, understand, and engage U.S. allies on key security and geopolitical issues. Alliance management takes time, attention, and dedication as each U.S. ally has its own unique domestic and geopolitical considerations that must be integrated into broader alliance strategies and investments. Thus, developing and sustaining common alliance approaches to security issues requires early and constant consultations in the development of policies. Past examples where policies have been developed in the

United States and then presented as a *fait accompli* to U.S. allies have created significant problems and distrust. Effective alliance management also requires respecting allies' strategic interests that may complicate U.S. decision making, particularly the push-pull nature of their reliance on the United States, including their desire to maintain sufficient independence to avoid becoming U.S. proxies or the battleground on which U.S. wars are fought.

## Challenges for Nuclear Nonproliferation

- **New nuclear actors:** As we enter a new age of broader nuclear competition, nuclear proliferation among other adversaries continues to be a concern. The DPRK continues to develop its nuclear weapons and delivery capabilities, and Iran's nuclear program advanced significantly following U.S. withdrawal from the Joint Comprehensive Plan of Action (JCPOA). These and other potential nuclear actors might reinforce regional proliferation cascades. An additional challenge will be combatting the growing belief among many that the decision by Ukraine not to retain nuclear weapons on its territory when it became independent made Russia's invasions in 2014 and 2022 possible. The failure of the Budapest Memorandum as a vehicle to ensure Ukraine's security and territorial integrity could have long-term implications for the broader effort to use security commitments short of formal alliances or treaty obligations as a nonproliferation tool. It remains very much in U.S. interests to be able to use diplomatic instruments to achieve lasting nonproliferation outcomes. The Department of State should be actively assessing how past efforts have worked, or failed, and develop both the tools and the narrative to ensure that such options remain viable for the future.
- **Allies' proliferation concerns:** In addition to continuing to prioritize nuclear nonproliferation among adversaries, the United States must also consider the possibility that U.S. partners and allies will seek to enhance their own military capabilities in the face of regional adversaries. In cases where conventional investments are coordinated with the United States and additive to alliance strategies for defense and deterrence, they should be welcomed and encouraged by

the United States. The rapid diffusion of technology means that allies are much less dependent on the United States for advanced technology. The gradual abandonment of the U.S.-Republic of Korea missile guidelines over the past two decades illustrates the declining relevance of technology controls in discouraging allies' proliferation. But allies' military ambitions could also entail the pursuit of nuclear weapons. This should be categorically opposed by the United States.

- **Vertical proliferation:** The PRC is actively increasing the quantity and quality of its nuclear arsenal, with a potential to achieve peer or near-peer capability vis-a-vis the United States and Russia within one to two decades. Beijing is also devoting serious effort and resources to developing anti-satellite and hypersonic weapons systems. These developments and their implications cannot be ignored as a deterrence concern, especially as they add complexity to deterrence planning and operations.

At the same time, there are questions about whether, or how quickly, the PRC will achieve its assumed goals of matching U.S. and Russian strategic forces. There remain considerable hurdles, including access to sufficient amounts of weapons-grade material, the speed with which the PRC can produce the new weapons and delivery systems that will be required, and whether the economic and demographic constraints that many experts foresee for the PRC will force it to adjust the scale or timing of its nuclear force objectives. Moreover, recent signs that the Chinese economy is cooling may force PRC leaders to make painful tradeoffs between domestic and military spending. The Department of State should take the lead on developing policies that force the PRC to choose between costly arms buildups and more peaceful paths to achieving international respect for its legitimate interests over the next 10-20 years.

Russia continues to possess and modernize a nuclear arsenal roughly comparable to that of the United States and will be able to maintain those forces for the foreseeable future. It is also possible, moreover, that Russia would move to match any significant increases the United States might undertake. Russia knows that the United States retains a considerable ability to increase the size of its deployed nuclear arsenal through increasing the numbers of warheads on U.S.

intercontinental ballistic missiles (ICBM) and submarine-launched ballistic missiles (SLBM) if the President determines such a step is necessary.

### **III. Deterrence Strategy Options**

Whether the United States faces one or multiple deterrent challenges, the principles and goals of deterrence remain unchanged. The goal of deterrence strategy is to prevent adversaries from attacking U.S. national interests, including U.S. and allied and partner territory, by denying them success or inflicting an unacceptably high level of punishment to outweigh any perceived gain. Key to effective deterrence is ensuring an adversary knows that the United States is capable of taking such actions, and to project itself as committed to doing so in response to an attack on those interests. America has sought to achieve these ends by ensuring that its various tools of national power are sufficient to convince adversaries that any attack on U.S. or allies' strategic interests will be met with a decisive response. Deterrence strategy in this era of complexity and uncertainty must include not only effective military capabilities (nuclear and non-nuclear), but also America's ability to harness its vast non-military assets including its economic and technical strength, as well as its political, democratic, and cultural sources of power and influence.

Deterrence in the age of nuclear multipolarity will require attention to multiple interests. On the one hand, the United States must compete with Russia and the PRC across a wide array of capabilities in order to effectively deter regional aggression and assure allies. On the other hand, the United States should avoid unnecessary risk of arms races or crisis escalation. The United States is modernizing its nuclear forces. That program will continue. The 2022 Nuclear Posture Review (NPR) states that the United States has "a continuing commitment to a safe, secure, and effective nuclear deterrent and strong and credible extended deterrence." The Department of State should put increased emphasis on shaping and carrying out policies that reinforce deterrence and assure allies and partners. At the same time, the United States should make every reasonable effort to reduce risks of nuclear escalation and arms racing, and continue to pursue appropriate and verifiable force reductions among nuclear powers.

In a period where allies are more focused than ever on the credibility and capability of the United States to back up its extended deterrence commitments, the Department of State needs to play a more active and capable role. In particular, the Department of State can do more to balance competition with restraint, cooperative risk reduction efforts, and leadership in the global nuclear order. To do this more effectively in a period of increasing risk, the Department of State needs to enhance its capabilities (including internal bureaucratic support) to play a leading and dynamic role in the interagency process that supports the President on nuclear deterrence and assurance-related issues.

## **IV. Potential Arms Control Measures**

For decades, arms control has included processes to build and enforce global norms along with bilateral agreements between the United States and Russia to manage nuclear competition and reduce the size of respective nuclear arsenals. Arms control is something that one does with adversaries to reduce the dangers of intense strategic competition and of actual nuclear weapons use. Even as pursuing such efforts remains strongly in U.S. interests, leadership needs to remain clear-eyed about the challenges of engaging either Moscow or Beijing in arms control and nuclear restraint in the current security environment. The focus of U.S. arms control efforts must be to strengthen strategic stability – reduce the risk of conflict, risk of nuclear escalation in a conflict, and the pressure to arms race – while maintaining the longer-term goals of reduction and disarmament consistent with long-standing U.S. treaty commitments and security objectives. Arms control can and must continue to work in tandem with deterrence and defense, and limits on strategic capabilities should not come at the expense of America’s engagement with allies and partners to meet its extended deterrence and assurance obligations and commitments. In the absence of interested partners among America’s adversaries, the arms control agenda can take a broader, more integrated approach, by exploring opportunities for arms control across domains, partners, and types of arrangements. Moreover, even in the absence of successful treaty negotiations, an effective diplomatic arms control strategy can be critical to maintaining alliance unity and broader U.S. strategic objectives.

The war in Ukraine and Moscow's increasingly aggressive behavior means the United States and Russia are unlikely to quickly achieve a successor agreement to the New Strategic Arms Reduction Treaty (New START Treaty) or other arms control initiatives. However, pursuing such steps is still worthwhile. Regardless of outcome, it also remains important that the United States push Russia to pursue more limited confidence-building measures that could increase nuclear predictability, and possibly create new crisis management tools. Despite the current challenges, there should be no question that pursuing arms control and achieving it, backed by verification, remains in the U.S. security interest and that of its allies and partners.

Even if they were possible, it would be politically difficult and strategically challenging for the United States to agree to any long-term binding restrictions on the size of its nuclear forces while the PRC is increasing its own arsenal. At the same time, there are clear benefits to both Russia and the United States abiding by limits under the New START Treaty of 1,550 deployed strategic nuclear weapons each. However, the apparent pursuit by the PRC of larger nuclear forces has greatly complicated any near-term prospect of negotiating binding numerical limits. Although the PRC's nuclear forces remain a fraction of those maintained by the United States (or Russia), uncertainty about the future direction of PRC forces makes it more difficult for the United States to adopt binding restrictions on nuclear forces with Russia. Without knowing how large the PRC's forces might grow, and on what timeline – and to what end – there will be significant pressure inside the United States to maintain much greater flexibility to adapt its deterrence forces.

The chances of restoring strategic stability dialogues and agreeing on limited nuclear confidence-building measures may actually be better with the PRC than they are with Russia. Therefore, the United States should continue to pursue the reopening and sustainment of official strategic stability dialogues with the PRC, while remaining fully prepared for a refusal. This will require a carefully implemented process including allied engagement, which could create a foundation for dialogue on such specific topics as threats to nuclear command and control, crisis communication mechanisms, and risks associated with emerging technologies.

Moreover, even if the chances of pursuing and sustaining such talks are low, the United States must continue to do the hard work of preparing for and pursuing such engagement. The United States must prepare to seize opportunities, just as it prepares to handle crises. Even in the absence of success, such efforts have important diplomatic and political value, especially among U.S. allies. At the same time, championing responsible nuclear behaviors even without PRC engagement would help set and reinforce norms that can have a value in protecting U.S. and allied security objectives. U.S. efforts to date to convince the PRC to engage in strategic stability dialogue should be applauded, and must continue. Given the acute nuclear risks associated with U.S.-PRC conflict, it is essential that the Department of State's arms control and nuclear risk expertise be integral to such engagement efforts.

There is a natural division of labor regarding such efforts within the Department of State. The Office of China Coordination (China House) and the regional officials and experts responsible for managing the U.S.-PRC relationships will play a leading role in coordinating such engagement. To facilitate stronger connections between the regional bureaus and the nuclear expertise within the Department of State that are crucial to any successful engagement with the PRC on these priority issues, the Department should facilitate detailing experts from the Bureau of Arms Control, Deterrence, and Stability (ADS – formerly the Bureau of Arms Control, Verification and Compliance) to China House and vice versa so that both can benefit from deeper coordination on policy development and implementation.

Given the challenges for achieving new legally binding arms control measures, the United States is right to champion “responsible nuclear behavior” and should continue to pursue informal risk reduction efforts and behavioral arms control. One important area in this regard would be seeking to establish norms to help avoid escalation to nuclear use. These could build on other steps already taken by the Biden Administration, including on anti-satellite tests. One potential forum for further efforts would be the Treaty on the Nonproliferation of Nuclear Weapons (NPT) “P5” process, where all five Nuclear-Weapon States might agree to a “human in the loop” statement or a multilateral ban on Fractional



Orbital Bombardment System (FOBS)<sup>1</sup> testing, for example. Additionally, the Department of State can seek to create momentum for new risk reduction efforts and responsible nuclear behaviors with like-minded states, including allies and partners.

Even in a period where the prospects for arms control are unlikely, it remains essential that the United States prepare for and be ready to pursue arms control as a component of national security and alliance management strategy if and when opportunities present themselves. The priority skills and experience in this pursuit remain within the Department of State and particularly within the bureaus reporting to the Under Secretary for Arms Control and International Security (T). There are multiple ways that a well-developed and integrated arms control strategy can benefit U.S. and allied security. Among other benefits, being a ready arms control proponent:

- Shows the United States remains committed to all tools of reducing risks; such a commitment is an important element of alliance management in Europe and increasingly in East Asia;
- Ensures Washington is prepared to act quickly if a change in government or approach by an adversary takes place;
- Enables the United States and allies to put political and diplomatic pressure on adversaries who engage in irresponsible behavior or who refuse to engage constructively; and
- Demonstrates that the United States remains loyal to its commitments under international agreements, including the NPT.

ISAB members also discussed the current nuclear modernization program in the United States and the prospects for future arms control agreements. The history from 1991 shows that there were numerous technical and procedural issues with nuclear arsenals built from

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<sup>1</sup> FOBS is a concept for nuclear delivery that would place nuclear weapons in partial orbit before they engage their targets.

the 1950s onward that made the negotiation and rapid implementation of arms control agreements and verification measures highly complicated. When ISAB members asked various interlocutors if there was an ongoing process to ensure that current nuclear modernization programs are being pursued with at least an eye to what future arms control agreements might require or benefit from, it was not clear that anyone in the U.S. government interagency was focused on, or tasked with, considering these challenges. There should be an enhanced and ongoing effort to determine how facilities, weapons, and delivery systems can be engineered and developed from the start with an eye to facilitating future confidence building and arms reduction measures. Facilities and systems well past the design phase are no longer appropriate for such steps, but moving forward U.S. nuclear modernization should be pursued with an eye toward possible future arms control and transparency goals. This is one area where the Department of State (namely, the ADS bureau), working in concert with DoD and the National Nuclear Security Administration (NNSA), could help prepare the future for an arms control agenda, consistent with U.S. national security requirements. Examples include designing nuclear weapons delivery systems or warheads with features that could facilitate accounting or provide access to foreign inspectors without revealing protected information.

## **V. Implications for Reducing the Role of Nuclear Weapons**

It has been a long-held goal of the United States to reduce the role of nuclear weapons in the world and to negotiate reductions in the number of nuclear weapons globally. Preserving its position as a champion of arms control and disarmament has important security, political and diplomatic benefits. The 2022 National Security Strategy highlights these goals, stating, “We remain equally committed to reducing the risks of nuclear war. This includes taking further steps to reduce the role of nuclear weapons in our strategy and pursuing realistic goals for mutual, verifiable arms control, which contribute to our deterrence strategy and strengthen the global nonproliferation regime.”

As a Party to the NPT, and for broader diplomatic reasons, it remains important for the United States to be seen as complying with its obligations under Article VI to “pursue

negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.” Additionally, the NPR states that the United States is committed to, “taking steps to reduce the role of nuclear weapons in our strategy as well as the risks of nuclear war, while also ensuring our strategic deterrent remains safe, secure, and effective, and our extended deterrence commitments remain strong and credible.”

Nuclear weapons have a critical role in deterring aggression by major states, and in assuring allies of American commitments. However, relying too much on nuclear weapons for either deterrence or reassurance has costs both on the global diplomatic front and within key alliances where U.S. allies must balance military and disarmament objectives. Moreover, even if NPT requirements did not exist, ensuring that the civil society and public concerns in the United States and among U.S. allies are taken into account by demonstrating a continued U.S. pursuit of nuclear constraints remains an important objective. Many options for deterrence and reducing military competition with Russia and the PRC will be less sustainable if the United States has not demonstrated that it remains committed to the pursuit of diplomatic solutions to ongoing security challenges.

These undertakings – making progress towards nuclear reductions and disarmament – require balancing existing commitments with a worsening security environment and with the deterrence and extended deterrence requirements outlined above. The 2022 NATO Strategic Concept states that, “Strategic stability, delivered through effective deterrence and defense, arms control and disarmament, and meaningful and reciprocal political dialogue, remains essential to our security.” Moreover, the document lists deterrence, defense, and arms control as three co-equal pillars of NATO strategy. Over the long term, one way to reduce the demand for nuclear weapons would be to broaden the defense and deterrence portfolio, including by developing more advanced conventional means, such as advances in precision, in order to provide the President with more decision-making space and effective strategic options in the event of an existential threat or nuclear coercion against the United States or one of our allies. Advances in conventional weapons could come with a separate set of challenges, of course, such as crisis instability and replicating

nuclear effects. In the near term, nuclear deterrence will remain a more immediate priority.

## VI. Impact of Risk Reduction Measures

The Terms of Reference asked the ISAB to review “How risk reduction could impact future strategies of deterrence.” As long as nuclear weapons exist, there remains a risk that they will be used, deliberately or through some combination of uncontrolled events. Nuclear deterrence itself inherently relies on risk. The operation of nuclear deterrence entails what Nobelist Thomas Schelling called “the deliberate creation of a recognizable risk of war, a risk that one does not completely control.” Arms control has played an important role in managing the risks associated with nuclear deterrence, reducing the dangers of a conflict erupting or spiraling out of control. As we enter an era of increased strategic risks, with Russia, the PRC, and other competitors manipulating risk to pursue their regional ambitions and testing America’s commitments, risk reduction measures – either stand-alone or within arms control agreements – should again be a key element in managing deterrence efforts. Examples might include:

- Discussion of each country's new weapons in order to reduce the risk of technological surprise;
- Agreements (whether binding or informal) not to engage in destructive tests of anti-satellite weapons or to harm satellite surveillance or communications systems;
- Provisions that provide prior notice of missile launches to guard against a country misinterpreting such a launch as an attack, and maintaining effective crisis hotlines; and
- “Rules of the road” agreements to protect nuclear command and control systems from destabilizing actions that raise the risk of escalation into a shooting war.

Risk reduction measures are more necessary now than ever, given the worsening security environment. And as such measures could be negotiated in the course of general strategic stability talks, rather than requiring agreement to engage in specific treaty negotiations, it

will be important for the United States, and the Department of State in particular, to be prepared to take full advantage of opportunities for agreement that may arise in those more general talks.

## **VII. Recommendations**

This section captures the direct and indirect recommendations in this report, grouped around five priorities for the Department of State: 1) contribute to a deterrence strategy; 2) reassure allies; 3) strengthen strategic stability, including with arms control and risk reduction measures; 4) invest in the future of arms control and human capital; and 5) capitalize on the Department of State's unique role and assets in responding to the threats inherent in nuclear multipolarity.

### **Contribute to a Deterrence Strategy**

The fundamentals of deterrence do not change in a multipolar world. Rather, the United States must devote the extra time, attention and resources needed to manage a series of new deterrence and extended deterrence challenges. While much of the work of managing the operations of nuclear weapons and the capability demands of nuclear deterrence will be the responsibility of other stakeholders, particularly the DoD, the Department of State must play a key role in deterrence, assurance and arms control policies if the United States is to effectively address the complex nuclear demands of the time. The Department of State can contribute to a cross-government deterrence strategy for addressing nuclear multipolarity in a variety of ways. These include being more central in crafting a tailored deterrence strategy, particularly in thinking about how to dampen arms races, prevent escalation, assure allies, and use diplomatic engagement to enhance defense, deterrence, and extended deterrence.

In addition, the Department of State should better use its resources and insights to help the U.S. government understand how adversaries think and what they value, with a particular emphasis on managing the deterrence relationships with them. One key area of investment must be to ensure that the Department of State has a greater number of fluent Mandarin

speakers with backgrounds in and a working knowledge of nuclear and strategic affairs. This is an urgent priority. Building up a cadre of knowledgeable Russian speakers was essential to managing strategic nuclear competition with Moscow, and the need to do so with Beijing is now apparent. The lack of such a trained body of experts is a notable weakness in understanding and responding to PRC behavior. To facilitate this, there needs to be a notable demand signal from the Department of State and a commitment to sustained recruitment and retention efforts.

Integrated deterrence means more than just having conventional and nuclear systems working together, or having U.S. and allied militaries being interoperable. Integration means bringing to bear all aspects of U.S. power and influence and all tools of influence and policy. Given the centrality of Department of State capabilities to both diplomacy and communication with other countries, the Department should play an important interagency role in all aspects of deterrence policy, including those in which it is not the lead agency.

## **Assure Allies**

Board members saw this as one of the most pressing issues for the United States, and an area where the Department of State must play a central role. The multipolar competition facing America is as much one of politics, technology, economics, and systems of government as it is military. A lack of allied and adversary confidence in U.S. extended deterrence could have serious, and even catastrophic, consequences for U.S. security and global stability. Military capabilities alone will not solve the extended deterrence and assurance challenges identified in this report. Indeed, the 2022 National Security Strategy outlined an integrated approach to deterrence involving all levers of national power. Diplomacy and engagement with allies and partners will strengthen extended deterrence and be a direct contribution to an integrated deterrence strategy. Greater efforts should be invested by the United States in a whole of government process that makes clear to a broader governmental and public audience the depth of U.S. interdependence with key allies and alliances as a whole.

When allies express doubts about the commitment of the United States to protect their security, they often discount the extent to which the United States is co-dependent economically and financially on their countries. The European Union, Japan and South Korea remain among America's largest trading partners and political, personal and cultural ties with these states remain critical to America's security and identity. Thus, making extended deterrence and assurance credible must be about more than military or nuclear capabilities, but about allies understanding the indispensable nature of our co-dependencies. Communicating these ties and realities often, repeatedly and with conviction should be a focal point of the Department of State's engagement with allies and adversaries alike. These efforts should be tailored to each ally and situation while remaining rooted in an explanation to the American people of how assurance of our allies and partners is vital to U.S. national security.

- Consult with allies early on in policy development as much as possible, rather than presenting policies to allies as faits accomplis.
- Tailor assurance to allies' strategic situations. Respect allies' strategic interests that may complicate U.S. decision-making, particularly the push-pull nature of their reliance on the United States while also needing to maintain independence in decision-making. While some allies will want more capabilities for assurance purposes, others are facing domestic anti-nuclear pressures or fears of being dragged into unwanted wars. Assurance will require continuous engagement and consultation with allies, with the Department of State often playing the leading and coordinating role. The Department should seek ways to enhance the resources, reach and top-level Department of State support for the mission of extended deterrence and reassurance.
- Launch an integrated assurance strategy that relies not just on nuclear and conventional capabilities and military coordination and cooperation, but also on the whole range of governmental and national interdependence with key allies in Europe and Asia. This will require direction from the Secretary of State and coordination throughout the department to break down regional vs. functional barriers. It will also involve other elements of the government under State

leadership, as well as multiple elements of business and civil society. The Department of State should also seek to engage allies on strategic technologies to enhance interdependence and increase U.S. competitive advantage.

- Consider, as needed, new military capabilities that could enhance allied confidence in U.S. commitments. Key considerations should be military need and reliable indications that current capabilities are not effective in deterring adversary action.
- Intelligence- and information-sharing in the lead-up to Russia's illegal invasion of Ukraine proved to have a unifying and assuring effect among European allies over time. The Department of State can also be a major contributor in driving the appropriate sharing of such information and in its dissemination, in close consultation with the Office of the Director of National Intelligence and the intelligence community, as part of its diplomatic engagement that will also strengthen credibility.

## **Strengthen Strategic Stability, Arms Control, and Risk Reduction Measures**

Schelling defined strategic stability as including both arms race stability and crisis stability. Arms race stability means that a military deployment or action by an adversary does not lead directly to a countermeasure in response. Crisis stability means that neither side perceives a need to escalate a crisis solely out of fear of being caught by surprise and left at a strategic disadvantage. This framework remains useful and should inform U.S. efforts to lead on arms control and risk reduction. It is worth recalling that deterrence itself is not an end unto itself. The United States should also demonstrate a commitment to processes that enhance U.S. security and lead to nuclear reductions and eventually disarmament, in support of long-standing U.S. policy.

While arms control may be a pathway for pursuing nuclear reductions and disarmament, its main object is stability, predictability, and risk management. The focus of these recommendations is to preserve strategic stability and to prevent nuclear proliferation in



the absence of new formal arms control agreements and in an era of difficult, complex, and even hostile relations with Russia and the PRC.

- Russia and the PRC are already engaging in qualitative and quantitative nuclear efforts to counter what they see as U.S. advantages. The United States must compete with both adversaries, but should do so without accelerating arms race instability or risking runaway competition. To achieve this, the United States should avoid “match mindset” where the development of new or matching systems is seen as a test of resolve, as opposed to a strategic decision related to deterrence, war fighting or assurance.
- To avoid crisis escalation and strengthen crisis stability, the United States should improve its understanding of adversaries to avoid risks of miscalculation and misunderstanding. With the PRC in particular, this will require considering all scenarios in our defense planning and investments, while being sensitive to potential escalatory effects.
- Continue to encourage Russia to return to compliance with the New START Treaty and to resume meetings of the Bilateral Consultative Commission. If such meetings cannot be resumed, support expansion of Track 1.5 and Track 2 meetings where working-level discussions with Russian nuclear officials could be maintained.
- Continue to pursue U.S.-PRC strategic dialogue. Investing in additional Track 1.5 and Track 2 efforts on nuclear matters and strategic issues would also be additive. Department of State resources to support such engagement should be increased and State should seek to coordinate more effectively with DoD-funded efforts, which are vastly larger in scale.
- Continue to use and enhance multilateral diplomacy, such as the P5 process, to promote parallel risk reduction and enhanced transparency measures without having to reach formal agreements.
- Identify opportunities for behavioral arms control (i.e., the formal or informal adoption of risk-reducing practices by nuclear forces), such as the recent ASAT test

ban and artificial intelligence initiative. The Department of State should work in close consultation with the Office of the Secretary of Defense (OSD), Joint Staff, and U.S. Strategic Command to identify additional future opportunities for behavioral arms control. One such opportunity might be a multilateral ban on FOBS testing. These efforts should be undertaken in close consultation with allies and partners.

## **Investing in the Future**

In the current environment, it is reasonable to expect that many of the traditional tools used to manage nuclear risks will take time to bring to fruition. In some cases, such as new legally binding and verifiable arms control agreements, it may take many years. However, given the equities at stake and the resources required, the United States must continue to invest so that America will have the strategic assets, creative solutions, and human capital in place to create and seize opportunities for progress. History has shown that not possessing the political and technical capabilities needed to effectively pursue negotiated agreements and controls is costly and can leave the United States unprepared to shape global circumstances to serve its interests. To that end, the ISAB recommends that the U.S. Department of State:

- Continue to prepare to pursue future arms control with Russia and the PRC. The war in Ukraine has highlighted the need for a revitalized European and trans-Atlantic security architecture. Arms control with Russia will play an important role in building, strengthening, and maintaining that architecture. Along with its allies and partners, the United States should begin to identify arms control opportunities for when the war in Ukraine ends.
- While the PRC has thus far been a reluctant arms control partner, the United States should continue to encourage strategic stability dialogues with Beijing.

During the Cold War, the Department of State and OSD had whole offices dedicated to understanding and analyzing data and coordinating policy initiatives during crises. Today, there are only a handful of experts in both departments' offices deeply knowledgeable and involved in looking at deterrence and crisis dynamics, employment guidance, and nuclear

issues related to allied reassurance and nuclear stability. Many of the Cold War experts have long since retired from the departments and many, indeed, have passed away. Likewise, the policy community in Washington and elsewhere has atrophied. The community of experts well versed in history, technology and other specializations needed to address security dangers from Russia and the PRC is much smaller than the importance of the issue would suggest is needed.

- Invest in human capital, especially in areas including nuclear weapons, deterrence, verification, technology, and alliance management, as well as arms control policymakers, negotiators, and inspectors. This should be done in close partnership with the NNSA, OSD, and the Defense Threat Reduction Agency (DTRA). The Department of State should also increase its training requirements and adjust its career paths so that, in an era of increased military risk, significantly more political officers assigned to countries within NATO, East Asia, or other related partners have a working background on alliance management and nuclear deterrence, arms control and extended deterrence issues. The United States is at risk of having an arms control “lost generation,” with no direct experience with negotiating or implementing arms control agreements. Investing in human capital, therefore, should also focus on developing early- and mid-career arms control experts across the interagency, even as the Department of State focuses first on strengthening capacity in its own Foreign and Civil Service ranks.

## **Capitalizing on the State Department’s Unique Role and Assets**

The Department of State should be more actively involved in deliberations when nuclear weapons and deterrence policy options are developed and considered, not just after decisions have been made and communication strategies are needed. This is especially true in the arena of allied assurance, where there is a persistent tendency for allies facing military threats to want to coordinate directly with the DoD and combatant commands.

- Build domestic consensus around the importance of allies, strengthening strategic stability, and future risk reduction and arms control efforts. This may require an

- education campaign with Members of Congress and their staffs, similar to what occurred in the past in conjunction with debates over Senate advice and consent to arms control treaty ratification.
- Address the need for substantive and technical experts to support the formulation and pursuit of sound U.S. nuclear policy. In the U.S. government broadly, there is now a substantial gap of experts with both functional and regional experience who understand the complexities of nuclear operations, deterrence, extended assurance, arms control, verification and disarmament.
  - Develop recruitment, training and assignment policies to help build and retain essential expertise. Within the Department of State, the Foreign Service role in this area has been particularly eroding and more needs to be done to address this, such as exploring linked assignments that would provide a career ladder for personnel who have, or are willing to gain, this expertise. Key shortfalls in the Department of State include the following areas: Mandarin especially, but also Russian language; PRC and Russian military analysis; and knowledge of nuclear strategy, nuclear decision making and operations, open source analysis, social media analysis, nuclear weapons technology and experience, engineering, verification, and intelligence.
  - In addition, to attract and retain expertise on nuclear policy, the Department of State should consider the development of linked assignments for key overseas postings related to nuclear issues. This would include, for example, foreign service officers being posted for two years to the Bureau of International Security and Nonproliferation before being eligible for such positions in Vienna, Austria (home of the International Atomic Energy Agency), or in ADS for two years before being eligible for certain assignments to Geneva, Switzerland (home of the Conference on Disarmament) or to Vienna, Austria (home of the provisional secretariat of the Comprehensive Test Ban Treaty Organization).
  - Make better use of cross departmental exchanges for key alliance management issues in the Bureaus of East Asian and Pacific Affairs (EAP) and European and Eurasian Affairs (EUR). Currently, there is no clear process for ensuring that officers

assigned to key roles in regional bureaus have a working knowledge of arms control or nuclear deterrence, and functional bureaus often lack personnel with experience in countries of key importance to the United States. One-year rotational assignments between T bureaus and EAP and EUR could provide significant advantages in intra-departmental understanding and coordination. And indeed, each relevant regional bureau (including the Bureau of Near Eastern Affairs, EUR and EAP) should have experienced experts on nuclear-related issues as part of extended deterrence and assurance and nonproliferation efforts.

## Appendix A – Terms of Reference

**UNDER SECRETARY OF STATE FOR  
ARMS CONTROL AND INTERNATIONAL SECURITY  
WASHINGTON**

October 18, 2022

**MEMORANDUM FOR THE CHAIRMAN, INTERNATIONAL  
SECURITY ADVISORY BOARD (ISAB)**

**SUBJECT: Terms of Reference -ISAB Study on Nuclear Deterrence**

The International Security Advisory Board (ISAB) is requested to undertake a study of how to use the mutually reinforcing tools of deterrence and arms control to address the challenges of two future nuclear-armed strategic peers -Russia and China.

The United States is entering one of the most complex and challenging periods for the global nuclear order, potentially more so than during the Cold War. Since the early years of strategic rivalry with the Soviet Union, the United States has had one nuclear peer. Only the Soviet Union and its successor, the Russian Federation, maintained a nuclear weapons capacity that posed an existential threat to the United States. China, while a competitor with nuclear weapons, did not have an arsenal, posture, or declaratory policy that reflected an existential threat. Consequently, U.S. policy, doctrine, and force structure prioritized deterring a strategic attack from Moscow against the United States and its allies.

However, the United States is increasingly concerned over the rapid growth of China's nuclear arsenal and its apparent deviation from its longtime policy of "a lean and effective nuclear deterrent." The accelerating pace of China's nuclear expansion may allow it to have up to 700 deliverable nuclear warheads by 2027, and at least 1000 warheads by 2030. These estimates exceed the pace and size that the United States projected in 2020. With China's rapid expansion of its nuclear capability, the United States may soon face for the first time the challenge of simultaneously deterring two strategic peers who possess sizable nuclear forces.

Additionally, Russia and China's development of new weapon systems and capabilities will likely complicate U.S. deterrence strategies. The two countries' ongoing nuclear modernization efforts, development of novel nuclear and nonnuclear weapons systems, and potential expansion of missile defenses present a new set of challenges for the United States. These developments will also further strain existing arms control and risk reductions measures that underpin global stability.

The convergence of these factors will require the United States to adapt its future approaches to deterrence and risk reduction in a manner that accounts for multipolar nuclear competition involving advanced technologies. Accordingly, it would be of great assistance if the ISAB study on a three-way nuclear rivalry could examine and assess:

- The unique challenges for U.S. deterrence, extended deterrence and assurance, and nuclear non-proliferation policy and strategy stemming from two nuclear-armed strategic peers and the subsequent implications for arms race stability and crisis stability among the United States, Russia, and China;
- Deterrence strategy options for addressing the challenges noted above, accounting for the identified stability implications of these challenges;
- Potential arms control measures – defined broadly as explicit and tacit cooperation among rivals to reduce the risk of war, arms competitions, and escalation – the United States should consider to mitigate such challenges;
- Implications for U.S. approaches to reducing the role of nuclear weapons in the United States' national security strategy and the salience of nuclear weapons in international security; and
- How risk reduction could impact future strategies of deterrence.

In the conduct of its study, as it deems necessary, the ISAB may expand upon the tasks listed above. I request that you complete the study in 180 days. Completed work should be submitted to the ISAB Executive Directorate no later than April 2023.



The Under Secretary of State of State for Arms Control and International Security will sponsor the study. The Assistant Secretary for Arms Control, Verification and Compliance will support the study. Vincent Manzo will serve as the Executive Secretary for the study and Michelle Dover will represent the ISAB Executive Directorate.

The study will be conducted in accordance with the provisions of P.L. 92-463, the "Federal Advisory Board Committee Act." If the ISAB establishes a working group to assist in its study, the working group must present its report or findings to the full ISAB for consideration in a formal meeting, prior to presenting the report or findings to the Department.

A handwritten signature in black ink, reading "Bonnie D. Jenkins". The signature is written in a cursive style with a large initial "B" and "J".

Bonnie D. Jenkins

## Appendix B – Members and Project Staff

### Board Members

- Hon. Edwin Dorn (Chair)
- Ms. Sherri Goodman, (Vice Chair)
- Dr. Daniel Byman
- Hon. Patricia Falcone
- Dr. Julie Fischer
- Dr. James Goldgeier
- Dr. Gigi Kwik Gronvall
- Dr. Gregory Hall
- ADM Cecil Haney, USN (ret.)
- Dr. Eboni Haynes
- Ms. Julie Herr
- Dr. Michael Horowitz
- Ms. Heather Hurlburt
- Hon. Shirley Ann Jackson
- Amb. (ret.) Laura Kennedy
- Dr. Susan Koch
- Dr. Edward Levine
- Dr. Jeffrey Lewis
- Hon. Jamie Morin
- Hon. Eric Rosenbach
- Dr. Ian Simon
- Ms. Lyric Thompson
- Dr. Paul Walker
- Dr. Heather Williams
- Mr. Jon Wolfsthal

## **Study Group Members**

- Mr. Jon Wolfsthal (Chair)
- Dr. Gregory Hall
- ADM Cecil Haney, USN (ret.)
- Ms. Julie Herr
- Amb. (ret) Laura Kennedy
- Dr. Susan Koch
- Dr. Edward Levine
- Dr. Jeffrey Lewis
- Dr. Heather Williams

## **Project Staff**

- Mr. Vincent Manzo, Executive Secretary
- Ms. Michelle Dover, Executive Director, ISAB
- Mr. Scott Bohn, Deputy Executive Director, ISAB
- Ms. Thelma Jenkins-Anthony, Senior Advisor, ISAB

## Appendix C – Individuals Consulted by the Study Group

### December 14, 2022

Mr. Kent Breedlove	National Intelligence Officer, National Intelligence Council, ODNI
DIA analysts	Defense Intelligence Agency, DoD
Dr. Joshua Handler	Division Chief, Bureau of Intelligence and Research, State
Mr. Jay Ross	Analyst, Bureau of Intelligence and Research, State
Ms. Rose Rodgers	Analyst, Bureau of Intelligence and Research, State

### February 2, 2023

Dr. Vipin Narang	Principal Deputy Assistant Secretary of Defense for Space Policy, DoD/OUUSD
Mr. Richard Johnson	Deputy Assistant Secretary of Defense for Nuclear and Countering Weapons of Mass Destruction Policy, DoD/OUUSD
Ms. Nina Wagner	Principal Director, Nuclear & Countering Weapons of Mass Destruction Policy, DoD/OUUSD

### February 3, 2023

Dr. Marvin Adams	Deputy Administrator for Defense Programs, DoE/NNSA
Ms. Corey Hinderstein	Deputy Administrator for Defense Nuclear Nonproliferation, DoE/NNSA

### June 3, 2023

Mr. Douglas Jones	Deputy Assistant Secretary of State for European and Eurasian Affairs, State/EUR
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**September 21, 2023**

Ms. Alexandra Bell Deputy Assistant Secretary of State for Arms Control, Verification and Compliance, State/AVC

Ms. Anny Vu Deputy China Coordinator, State/EAP