FPI Policy Briefs

Toward Disarmament Securely

Clarifying the Nuclear Security and Disarmament Link

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ACKNOWLEDGMENTS

The author wishes to thank the leadership of The Foreign Policy Institute (FPI) at SAIS, particularly Dean Vali Nasr, FPI Chair, for his support and especially Dr. Carla Freeman, FPI Director, for her unstinting guidance and enthusiasm for the Nuclear Policy Initiative, including this research project. She also thanks the more than 23 officials from 17 countries responsible for nuclear security and/or disarmament who agreed to be interviewed for this project and shared their perspectives and insights. A tremendous debt of gratitude is owed to John Carlson, Jeffrey Fields, and Carla Freeman for their review and feedback of the draft report, while noting that their willingness to do so in no way implies endorsement for the content or responsibility for any unintended errors. She also cannot express adequately her gratitude to two of her mentors for their generosity of spirit in supporting her professional endeavors including this project, generosity of intellect in sharing their insights from which this study has benefited enormously, and generosity of time, something which both of them have very little of yet seem to always spare for her—they know who they are and she hopes they know how thankful she is for them. Special thanks are due to Research Assistant Channa Yu whose stellar contributions, diligence, responsiveness, and comity throughout were indispensable. Also, without the support of Christine Kunkle and the FPI team this report would not have been possible. Finally, the author also wishes to convey her gratitude to the John D. and Catherine T. MacArthur Foundation for its vision and generous support.
CURRENTLY, THERE IS NO COMMON UNDERSTANDING among nuclear-armed and non-nuclear-weapon states about the link between nuclear security and disarmament. Perhaps this is to be expected because nuclear security focuses on the realm of the non-state actor—seekers of nuclear bombs or nuclear bomb-making materials such as terrorists, criminals, and the corruptible insider. Nuclear disarmament, meanwhile, focuses on the realm of the nation-state—possessors of nuclear bombs and large amounts of nuclear bomb-making materials. Both endeavors are about reducing and eliminating nuclear dangers. Yet the varying perspectives held by countries on how the concepts of nuclear security and disarmament relate have implications for progress on global agendas and shaping national priorities. As such, the link between nuclear security and disarmament merits examination and clarification.

One challenge to such an assessment is that discussions relating nuclear security and disarmament do not usually occur within established and formal multilateral settings. The connection, however, has been made recently and explicitly within the Nuclear Security Summits (NSS), which were initiated by U.S. President Barack Obama during his 2009 Prague speech calling for “the peace and security of a world without nuclear weapons.” These Summits represent not only an innovation in leader-level problem solving on the global threat of nuclear terrorism, but also an unintended backdrop for discerning how countries view the relationship between nuclear security and disarmament.

The Summits are tasked with focusing on nuclear security, but the desire to discuss nuclear disarmament has been continually raised from the outset by avid proponents of disarmament such as Egypt and South Africa, among other non-nuclear-weapon states. A contributing factor to the emergence of the disarmament discussion within the Summits could be the first Summit in 2010 through the fourth and likely last Summit in 2016 coinciding with the Nuclear Non-Proliferation Treaty (NPT) Review Conference cycles. The Review Conferences as a once every five-year exercise to evaluate the operations and implementation of the NPT tend to
highlight particular challenges to the nuclear regime. For example, leading up to the 2010 NPT Review Conference and since then, non-nuclear-weapon states have made clear their increasing dissatisfaction with the pace at which the five acknowledged nuclear-weapon states under the NPT (China, France, Russia, the United Kingdom, and the United States) are discharging their legally binding obligation to disarm.

This growing and palpable disarmament frustration related to Article VI of the NPT and the failure of Obama’s “Prague Agenda” to meet overblown expectations to make progress toward a world without nuclear weapons has boiled over into forums such as the Nuclear Security Summits. What motivates this? Are the actions undertaken by frustrated states productive for the disarmament agenda and counterproductive for the nuclear security agenda? What do the ideas promoted by those actions reveal about potential conceptual disconnects between nuclear security and disarmament?

To help illuminate these issues, 23 senior diplomats and officials responsible for and knowledgeable about nuclear security and/or disarmament from 17 of the 53 Summit participating countries and the United Nations (UN) were interviewed and asked about:

- The relationship between nuclear security and disarmament
- The motivation for continual efforts to address disarmament within the Summits
- The reactions to the ideas connecting nuclear security and disarmament
- The results and costs, if any, to efforts to advance the disarmament agenda within the Nuclear Security Summits

This analysis uses the motivations for, central logic of, and reactions to the joint statement “In Larger Security: A Comprehensive Approach to Nuclear Security” supported by 15 countries, more than a quarter of Summit participants, and offered at the 2014 Nuclear Security Summit, as a proxy for how a range of nuclear-armed and non-nuclear-weapon states understand the link between nuclear security and disarmament.

Examining the linkage made in the joint statement reveals hidden assumptions that many states, beyond the 15 signatories of the statement, hold about nuclear security and disarmament. These assumptions are also attached to beliefs about the nature of a world without nuclear weapons, sources of risk related to nuclear weapons and materials, and expectations about the practical
aspects of implementing disarmament. These hidden assumptions include:

- Eliminating nuclear weapons eliminates the threat of nuclear terrorism
- A world without nuclear weapons is a world free of nuclear dangers
- Nuclear materials under safeguards are not materials at risk
- Materials of concern are mostly in nuclear weapons
- Disarmament is a low- or no-risk endeavor
- Disarmament means responsible disposition of material

Identifying hidden assumptions is crucial because, if left unaddressed, they run the risk of undermining support for the global nuclear security mission, setting unrealistic expectations about the practical aspects of disarmament, and hindering progress on both agendas. Rectifying conceptual disconnects in how states view nuclear security and disarmament, meanwhile, may identify opportunities for constructive dialogue and action. With that purpose in mind, this analysis also provides recommendations for nuclear-armed and non-nuclear-weapon states participating in the 2015 NPT Review Conference and the 2016 Nuclear Security Summit.
INTRODUCTION:  
WHY CLARIFY THE LINK BETWEEN NUCLEAR SECURITY AND DISARMAMENT?

THE FIRST STEP to clarifying the link between nuclear security and disarmament is to make sure terms are understood and used the same way. Nuclear security as defined by the International Atomic Energy Agency (IAEA) is the, “the prevention and detection of, and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities.” The objective of nuclear security is to ensure nuclear materials and associated facilities are secure from unauthorized access, diversion, and sabotage by corruptible insiders, criminals, or terrorists. For the purposes of this analysis, the term “nuclear materials” more narrowly references weapons-usable nuclear materials, specifically, highly enriched uranium (HEU) and separated plutonium.

Nuclear security is considered a sovereign responsibility to be implemented primarily by nation-states. Adopted in 2004, UN Security Council Resolution (UNSCR) 1540 is the only binding obligation on all states to implement measures to prevent non-state actors from acquiring nuclear weapons. Despite that, most nuclear security measures states implement are voluntary and the international legal framework governing nuclear security is an incomplete patchwork of agreements that does not fully address the risks associated with nuclear materials in all uses and sectors. Partially in response to this circumstance, the Nuclear Security Summits were created as an accelerated global effort to take action at both the national and international level to secure weapons-usable nuclear materials that terrorists, criminals, or others could use to make a nuclear bomb. The participation of leaders was the vital ingredient for galvanizing meaningful commitments and swift action. This is especially noteworthy in the NSS context as the Summit participating countries are not a coalition of the willing or the like-minded. The diversity of countries involved can be characterized in many ways, such as those with or without nuclear materials, those with or without nuclear weapons, some who previously had nuclear weapons, some who had considered nuclear weapons in the past, countries that are leaders in political groupings or their region, and those who have one view of what makes the world a safer place in contrast to those who have exactly the
opposite. As a result of that diversity, there was a steep learning curve for countries without nuclear materials to understand the purpose of nuclear security and for many other countries to be persuaded that nuclear terrorism represented a threat globally and not just to the West.

In comparison to nuclear security, “nuclear disarmament” as a term offers less precision in how it is used and defined. Steps to reduce and eliminate nuclear weapons are referred to as nuclear disarmament as is the end state of a world without nuclear weapons. The term can also refer to the process of nuclear disarmament specific to warheads, which includes operational and technical steps, such as retiring a warhead from use and de-mating it from its delivery system, dismantling the warhead and disassembling the components required for a nuclear detonation (which include weapons-usable nuclear material), and finally disposing of the weapons-usable nuclear material as appropriate. Complete nuclear disarmament would also include the closure and destruction (to the extent possible keeping in mind public safety and the environment) of the facilities or other infrastructure of the nuclear weapons enterprise (e.g., nuclear materials production facilities, nuclear test sites, etc.)

Unlike nuclear security, nuclear disarmament through the NPT has legally bound the five acknowledged nuclear-weapon states to disarm under Article VI. Disarmament also has formal processes and institutions—known as the disarmament machinery—devoted to it, such as the Conference on Disarmament, UN General Assembly First Committee, UN Disarmament Commission, and the NPT Review Conferences. Through them other measures to facilitate disarmament have been developed (e.g., the Comprehensive Test Ban Treaty) or are being formulated (e.g., a treaty to end the military production of fissile material) that encompass the other nuclear-armed states as well. How well the disarmament machinery works, though, is another question.

These political, institutional, and bureaucratic differences between nuclear security and nuclear disarmament provide some insight into why these two concepts do not have a long-established history of discussion among states about how they can and should relate. Until the opportunity afforded by the Nuclear Security Summits, another reason for the lack of dialogue among many states could be that fewer than 10 states on the planet have direct experience to inform their views. For instance, France, Russia, the United Kingdom, and the United States should have experience-based views on how nuclear security and disarmament connect informed by measures they have taken to reduce and eliminate nuclear weapons and associated nuclear materials. Four other countries have past experiences that could, in theory, also inform their views: South Africa due to
its voluntary dismantlement of its apartheid regime’s covert nuclear weapons program, and Belarus, Kazakhstan, and Ukraine, which returned nuclear weapons to Russia or dismantled nuclear weapons infrastructure after the dissolution of the Soviet Union. Except Belarus, all of these states have participated in the first three Nuclear Security Summits. Kazakhstan, South Africa, and Ukraine are three of the 15 signatories of the joint statement offered at the 2014 Nuclear Security Summit that makes an explicit link between nuclear security and disarmament. These factors help explain the absence of considered debate and dialogue on the intersection of nuclear security and disarmament, but not why clarifications about linkages made might be required. Recounting how the demand to discuss disarmament at the Summits evolved may shed some light on this.

The scope of the three Nuclear Security Summits to date has been purposefully limited to advancing the objectives of nuclear security. The success of the Summits in delivering tangible results has been attributed to its agenda discipline. Nevertheless, since the planning process for the first Summit, some participants—all non-nuclear-weapon states—repeatedly have raised the need to also discuss nuclear disarmament. This desire to address disarmament at the initial gathering, which included leaders from eight of the nine nuclear-armed states and at the time 39 non-nuclear-weapon states, has strengthened with each successive Summit. For countries like South Africa, it has been expressed as a demand, and even has emerged into a roadblock, to the consensus-based process. An element producing more pressure for disarmament to be raised within the Summits could have been the concurrence of the NPT Review Conferences and the dynamics associated with them. Planning for the first NSS in March 2010 corresponded with the lead up to the 2010 NPT Review Conference. The preparations for the fourth and likely last Summit overlaps with the 2015 NPT Review Conference and its aftermath, but the 2012 and 2014 Summits took place during the middle of the NPT Review cycle where the predominant concern of non-nuclear-weapon states has been the failure of nuclear-weapon states to disarm more rapidly. Such circumstances make creating other opportunities to advance disarmament objectives, particularly if heads of government are participating, tactically reasonable.

Despite efforts in previous Summits to assuage concerns, there was the possibility that frustrations could escalate during the preparations for the 2014 Nuclear Security Summit. According to one diplomat, “The tension between nuclear security and disarmament was enormous. [Disarmament advocates] wanted more than a repetition of the same statements in the 2010 and 2012 Summit Communiqués. Several countries hinted at their intention to walk out of the process.” Amid the planning for the Seoul Summit in 2012, one country threatened outright to do so. In the run-up to The Hague Summit, Brazil, to prevent the issue from further festering, organized a
joint statement, “In Larger Security: A Comprehensive Approach to Nuclear Security.” The statement received the support of more than a quarter of Summit participants, including Algeria, Argentina, Brazil, Chile, Egypt, Indonesia, Kazakhstan, Malaysia, Mexico, New Zealand, Philippines, Singapore, South Africa, Ukraine, and Vietnam. The joint statement promoted their views about a “comprehensive approach” to nuclear security, which had not found consensus support in the drafting of the Summit Communiqué. The primary assumption animating this comprehensive approach is that “eliminating nuclear weapons eliminates the threat of nuclear terrorism.” The seeming logic of this assumption has gained wider purchase among other countries within and outside of the Summit, beyond the 15 signatories to the joint statement.

The motivations for, central logic of, and reactions to the joint statement serve as a valuable proxy for discerning the perspectives of a range of nuclear-armed and non-nuclear-weapon states on the link between nuclear security and disarmament. Moreover, the link between nuclear security and disarmament should be clarified because of how the two concepts have been connected conceptually to advance disarmament.

Examining that link uncovers hidden assumptions that both nuclear-armed and non-nuclear-weapon states hold about nuclear security and disarmament. These assumptions include beliefs about the nature of a world without nuclear weapons, sources of risk related to nuclear weapons and materials, and expectations about the practical aspects of implementing disarmament. Identifying these assumptions is worthwhile because in many cases they reveal conceptual disconnects that, if left unaddressed, will undercut crucial support for the ongoing global nuclear security mission, set unrealistic and potentially destabilizing expectations about how disarmament is implemented in practice, as well as obscure opportunities for progress for both agendas.

Unintentionally, the Summits created conditions in which nuclear security and disarmament have directly intersected, whereas otherwise they would not in other forums. The Summits are also a particularly pertinent backdrop for evaluating potential tensions among policy priorities because of the nearly six years of intensive commitment at the highest levels of government devoted to a relatively arcane and technical topic. An undertaking such as this has required an enormous amount of political will, political capital, and time, as well as human and financial resources. Over time, these factors tend to clarify views on whether efforts to achieve the objectives of each are complementary or competitive to one another. Delving into the origins of the Nuclear Security Summits may be instructive and prove to have explanatory value for determining the compatibility of nuclear security with nuclear disarmament.
IN APRIL 2009, President Obama's discourse about the role of nuclear weapons in the twenty-first century included the overarching commitment to "seek the peace and security of a world without nuclear weapons." That speech delivered in Prague and the agenda associated with it became primarily, and for many wholly, defined by the elements specific to facilitating disarmament (e.g., reducing the salience of nuclear weapons in U.S. national security strategy, reducing U.S. warheads and stockpiles first through bilateral arms control with Russia and later with all nuclear-weapon states, ratifying the Comprehensive Test Ban Treaty, and seeking a treaty to end the military production of fissile material). In the six years since the Prague speech, the action plan defined narrowly by only these measures was first praised around the world, concurrently criticized strongly by proponents of nuclear deterrence, and for the most part, then considered a disappointment by even its staunchest supporters.

This disappointment can be partially attributed to an agenda overburdened by expectations of what the United States can achieve absent cooperation from other nuclear-armed states. Lack of appreciation for the wider scope of action advocated by Obama for reaching the ultimate goal of a world without nuclear weapons is also to blame. Achieving such a world does not come about only through steps on disarmament. Instead, to make sure possessors of nuclear weapons fully relinquish their weapons, other changes must also occur before and in parallel with disarmament. Obama put forward a holistic approach that involved strengthening the non-proliferation regime through improved civilian nuclear cooperation and enhancing the resources and authority of key institutions to make sure rules matter. He also included an endeavor enlisting nuclear-armed and non-nuclear-weapon states alike to tackle "the most immediate and extreme threat to global security," namely, nuclear weapons in the hands of terrorists.

The most underappreciated, least understood, yet arguably most successful part of the Prague agenda is the accelerated global effort to secure weaponsusable nuclear materials—HEU or separated plutonium—that terrorists, criminals, or others
could use to make a nuclear bomb. So far, three Nuclear Security Summits, engaging leaders from 53 countries, have produced concrete and tangible results in reducing and eliminating nuclear dangers. Laura Holgate, in her role as the U.S. Sherpa (a Sherpa, borrowing from mountain climbing terminology, represents his/her head of government’s priorities and prepares the leader for the Summit meeting) for the 2016 NSS, affirmed and elucidated the connection between preventing nuclear terrorism and the Prague agenda when she explained,

In announcing his intent to host a fourth and final Nuclear Security Summit in a speech in Berlin in 2013, President Obama situated this decision squarely in the vision of a world without nuclear weapons that he put forward in Prague in 2009. Clearly, disarmament cannot be fully achieved in a world in which nuclear terrorism remains a threat.

The logic of the last statement should be straightforward and readily accepted: States possessing nuclear weapons will not give them up fully if there is still a possibility that criminals, terrorists, or an unauthorized and corruptible insider could obtain the building blocks for a nuclear bomb. That possibility means as a world without nuclear weapons comes closer, further progress may slow or halt. This is because especially in a world of low numbers of nuclear weapons the calculations of nuclear-armed states become increasingly sensitized to the risk that non-state actors acquiring nuclear bomb-making materials could subvert the strategic balance. Therefore, ensuring effective nuclear security—meaning that weapons-usable nuclear materials (found in nuclear weapons or elsewhere) and nuclear facilities are secure from unauthorized access, theft, and sabotage by an insider or outsider—is essential to maintaining momentum on disarmament progress. Simply put, every path to disarmament must run through nuclear security. Advocates of disarmament, increasingly losing patience with the slow pace of NPT nuclear-weapon states fulfilling their obligations to disarm, have posited the converse: disarmament eliminates the risk of nuclear terrorism. The implications of this principle need examining, but the conditions leading to its creation and formulation as well as reactions from non-nuclear-weapon and nuclear-armed states should be understood first.
DISARMAMENT ADVOCACY AND THE NUCLEAR SECURITY SUMMITS

IN THE WAKE OF Obama’s 2009 Prague speech, efforts began immediately to have nuclear disarmament addressed at what would be a notable convening of world leaders at the first Nuclear Security Summit in 2010. The United States, as host of the inaugural Summit in Washington explained that the Summit was especially created because there was no comparable high-level forum focused on nuclear security, in contrast to the many avenues in Geneva and New York for engaging disarmament issues (e.g., Conference on Disarmament, UN Disarmament Commission, UN General Assembly First Committee).

Still, an effort was made to show that the interest in including disarmament on the agenda was heard. One of the two key outcome documents of the 2010 Summit, the Washington Communiqué, stated on behalf of all Summit participants, “In addition to our shared goals of nuclear disarmament, nuclear non-proliferation and peaceful uses of nuclear energy, we also all share the objective of nuclear security.” The wording was careful not to reference the NPT due to the sensitivities of the three non-NPT nuclear-armed states of India, Israel, and Pakistan. Disarmament still entered subsequent Summit discussions, but the result was to have essentially the same sentence repeated in the 2012 Seoul Communiqué. These attempts to accommodate concerns have been unsatisfying for what some diplomats and officials refer to as “the disarmament lobby.” Since then, this subset of Summit participants, which reliably includes Brazil, Egypt, Mexico, and South Africa, among others, has become increasingly vocal and active in its desire to have disarmament accorded greater attention.

NUCLEAR SECURITY VERSUS DISARMAMENT?

Within and outside of the Nuclear Security Summit, a perception has taken root among non-nuclear-weapon states impatient with the disarmament dialogue in other forums that the high-level attention given the nuclear security agenda, in light of the involvement of heads of government, distracts from opportunities to promote disarmament objectives. Put another way, the successes attributable to the Summits beg the question of what
could have been achieved on disarmament had it also been on the agenda and given the same high-level attention and political commitment? Has disarmament lost out to nuclear security—the latter characterized by the non-nuclear-weapon states of the Global South (Africa, Latin America, and developing parts of Asia including the Middle East) as effectively additional non-proliferation obligations extended to non-state actors? This assessment appears to have gained traction with the approach of the 2015 NPT Review Conference. As reported in a March 2015 evaluation of the Action Plan resulting from the 2010 NPT Review Conference, “Of the 22 actions related to disarmament, only five have seen definite progress (as compared to 12 of 23 non-proliferation commitments and 11 of 18 related to nuclear energy).”\textsuperscript{14} The imbalance in the relative tally of obligations feeds into long-held views that non-nuclear-weapon states are continually asked to do more on non-proliferation, while nuclear-weapon states do not do nearly enough on disarmament. Although a process exists among the five nuclear-weapon states to work together on their disarmament obligations, political representation is at a lower level, and the results to date have not been satisfying for most non-nuclear-weapon states. This perspective on relative progress toward disarmament and non-proliferation obligations serves as a potential antecedent for fomenting tension between disarmament and nuclear security within the Summits.

In canvassing senior diplomats and officials about how the states they represent view the relationship between nuclear security and disarmament, most did not express the agendas in zero sum. Turkey adopted a position shared by many states of supporting disarmament, while also remaining mindful of the intent of the Summit process. As the official interviewed commented, “Turkey has treated disarmament as a separate issue from the beginning of the NSS process, but it has also expressed a desire to discuss military materials\textsuperscript{15} to the extent possible, understanding the sensitivities, at least at the leader level.”\textsuperscript{16} A Dutch diplomat said, “We [the Netherlands] see them as complementary.”\textsuperscript{17} Additionally, a Dutch official cautioned, “If you put disarmament on the Summit agenda, then you put the problems of those additional issues on the agenda. The success of the Nuclear Security Summits is because of its limited scope.”\textsuperscript{18} Describing an integrated approach to nuclear security, a Swiss official contended, “We [Switzerland] cannot deal with nuclear security in a vacuum and we have always seen it as part of an agenda that includes disarmament and non-proliferation.”\textsuperscript{19} He also pointed out the connection to the holistic approach laid out by Obama,

Look at the Prague speech, it’s there. Nuclear security is an element of non-proliferation and disarmament agenda. Our concern is having some language acknowledging the link. Some parties do not want any link while others use every forum to advance the link. The Nuclear Security Summit is a political forum.\textsuperscript{20}
A UN official best explained the ideological gap between non-nuclear-weapon states from the developing world and proponents of the nuclear security agenda. He illustrated his point using data about how amounts of weapons-usable nuclear materials can be allocated either by use (civilian versus military) or by ownership (nuclear-armed versus non-nuclear-weapon states). In referencing the estimates for ownership of the worldwide stocks of HEU and separated plutonium stockpiles, he stated, “There are considerable differences about how nuclear security and disarmament relate. The developing world doesn’t see that nuclear security is only about non-state actors. They see that 96 percent of the material is in the nuclear-armed states.”

Asked about the relationship between nuclear security and disarmament, an Indonesian diplomat emphasized the need to eliminate nuclear weapons, but he also had advice for non-nuclear-weapon states about putting issues into context. He recommended that they “should address security in parallel. Addressing it side-by-side with disarmament acknowledges the situation and the risk involved.” He continued to share his perception that there was an imbalance in priorities among the agendas, “Right now the Nuclear Security Summit is giving high priority to the issues of nuclear security and non-proliferation when compared to disarmament.”

In response to views that the progress on the nuclear security agenda was detracting from the disarmament agenda, an official from a nuclear-weapon state dismissed the idea, “It’s not an either-or proposition.” He further explained, “Nuclear security is needed even more as we approach zero.” A U.S. official similarly argued that pitting nuclear security against the imperatives of the NPT created a false tension between the two objectives.

In the endgame, which we are far from, no holder of nuclear weapons will set them aside if there is any material in any form of any kind that can be stolen or made into a weapon. The effect of nuclear security is that it is a necessary basis on which you can build any of those three pillars of the NPT. It empowers achievement of ambition of the three pillars. This is not to say that those with weapons should hold tight for a decade or two while everyone was trying to get to effective nuclear security implementation; near-term progress is needed on both disarmament and nuclear security.

Providing insight into the frustration that some nuclear-armed states supporting disarmament feel, one official expressed, “The fact that a state supports nuclear security, doesn’t mean it does not support disarmament. We have to take the world as it is. [Non-nuclear-weapon states] don’t have to approve of nuclear weapons, we want to get rid of them, but until then we want to make sure they are secure.” A corollary that also arose from this discussion was whether some of
the non-nuclear-weapon states from the Non-Aligned Movement (NAM) or states holding Observers status to the NAM felt that supporting nuclear security efforts also meant condoning nuclear weapons. This belief did not seem to shape the perspective of an Egyptian diplomat who stated, “Talk as much as you want about nuclear security; we are okay with the repatriation and consolidation of nuclear materials as long as nuclear weapons are also included in the discussion.”

Neither prizing one agenda nor dismissing the other, an Argentine diplomat suggested, “The debate on disarmament continues to be present, it must be. If we forget it completely, the debate on nuclear security is artificial.” This analysis implies that without acknowledging disarmament concerns on the “externalities associated with the imbalances among the different categories of nuclear materials,” for instance, the nuclear security debate is incomplete. A Japanese diplomat took a long view and opined, “Because both nuclear disarmament and nuclear security will reduce the nuclear risk, the ultimate goal will be the same.”

The most surprising view came from an Indian diplomat who connected the concepts of nuclear deterrence, non-proliferation, disarmament, and nuclear security,

Nuclear security primarily helps in stabilizing the nuclear landscape. If there was a non-state actor theft of material, it would destabilize nuclear deterrence. We need certain stability for disarmament and non-proliferation. If we lose security, then the task of non-proliferation and disarmament is much harder. Therefore, nuclear security is an enabling and contextual factor for disarmament, but not a causative factor.

The reference to nuclear deterrence being undermined by a nuclear security incident seems immediately relevant to the India-Pakistan deterrence dynamic. The observation also has applicability to the U.S.-Russia relations following the dissolution of the Soviet Union and fears of loose nuclear materials and weapons. Arguably, similar concerns could still be triggered, considering the increasing opacity regarding the effectiveness of Russia’s nuclear security system due to its retreat from most global cooperative initiatives on nuclear security.

In contrast to the indirect connection made by the Indian diplomat, a Kazakh diplomat made a direct connection between the two concepts. This widely held belief, also documented in official statements from leaders at the 2014 Nuclear Security Summit, asserts that “general and complete nuclear disarmament is the only guarantee of nuclear security.” Using different words, this is a restatement of “Eliminating nuclear weapons eliminates the threat of nuclear terrorism.”
DISARMAMENT OUTLET: A JOINT STATEMENT

Considering the level of dissatisfaction about nuclear disarmament felt by non-nuclear-weapon states and expressed in the lead up to, at the 2010 NPT Review Conference, and since, the spillover of that issue into the Summit—a process that holds the attention of world leaders—should have been predictable. Mindful of how frustrations had manifested during the 2012 Summit, steps were taken to make sure the preparations for the third Summit in 2014 hosted by The Netherlands in The Hague would not be derailed. To forestall countries making good on threats—implied or outright—to leave the process, the disarmament advocating countries found an outlet for their views and ideas by issuing the joint statement, “In Larger Security: A Comprehensive Approach to Nuclear Security,” supported by 15 countries (Algeria, Argentina, Brazil, Chile, Egypt, Indonesia, Kazakhstan, Malaysia, Mexico, New Zealand, Philippines, Singapore, South Africa, Ukraine, and Vietnam).\(^\text{34}\)

At times, the joint statement reads disjointedly because it cursorily acknowledges nuclear security concepts like the “primary responsibility” states maintain for nuclear security while the true intention of advancing disarmament objectives is apparent. This is obvious from the focus on “nuclear weapons, arsenals and stockpiles,” the “threat of weapons,” and the “security of weapons” rather than more complete references to weapons-usable materials and the other uses for them (both military and civilian). Moreover, the statement is organized around the central argument that “only the complete, verifiable and irreversible elimination of all nuclear weapons”\(^\text{35}\) serves as a sustainable solution to the risk of access by state or non-state actors to nuclear weapons or materials. Simplified, the first hidden assumption is revealed: Eliminating nuclear weapons eliminates the threat of nuclear terrorism. Also, setting it apart from other joint statements typically offered at the Summits, which usually announce the results of actions taken by the signatories, this statement was instead an exhortation for possessors of nuclear weapons to take action while committing the signatories to nothing.

IMPETUS: PRINCIPLES, TACTICS, AND OTHER FACTORS

Three weeks after the September 11, 2001 attacks, the member states of the United Nations discussed international terrorism and agreed that they must work together to prevent the prospect of nuclear terrorism. Also in response, UN Under-Secretary-General for Disarmament Affairs Jayantha Dhanapala articulated principles for placing weapons of mass destruction terrorism in the context of disarmament. He posited that, “Disarmament needs a common strategy to deal with this global challenge while pressing ahead with its objectives of achieving a
common security by totally eliminating weapons of mass destruction and reducing conventional arms to the lowest possible level for legitimate national defense.”  

He identified elements of such a common strategy, including “heightened vigilance and prioritization of disarmament goals” and provided the following rationale for them:

Weapon-based security not only perpetuates the wrong value system internationally. It also increases weapons stocks and the danger of their acquisition by non-state actors and individual warlords with calamitous consequences. The increasing number and sophistication of weaponry and expensive defence systems will not protect us from terrorism. Just as the derogation from fundamental human rights cannot be justified by the fight against terrorism, so short-term expediency should not lead us to compromise disarmament and nonproliferation norms. Weakened or unevenly applied disarmament norms feed terrorism as lessons from recent history has taught us.

This explicit warning that compromising on advancing disarmament actually advantages terrorism is significant. It provides the potential basis for a principle compelling Summit participants to keep nuclear-weapon states accountable to their disarmament obligations without being overly sensitive to the context or how inconvenient doing so will be for others. This can help explain the persistence of some non-nuclear-weapon states for pushing disarmament objectives within the Summits despite disarmament having been deemed repeatedly out of scope.

Diplomats and officials suggested various reasons to explain the frequent promulgation of disarmament messages and goals within the Summit process. “Frustration” was the most frequent explanation given. Offering a metaphor, an Argentine diplomat described the frustration about the pace of disarmament within the NPT process as, “gas on water that finds a way out, no matter what the format or recipient.” He also reflected that, “In this instance, and because of the prominence brought by President Obama, the debate is actually quite constrained and civilized.” Echoing a similar note by referencing that many of the developing countries viewed the Nuclear Security Summits as prestigious, a Japanese diplomat surmised that, “Some of these [developing] countries have huge frustrations about disarmament and the Summit created a theater for expressing them.” The availability of a platform seems insufficient as a reason, but an additional observation about tactics from the same diplomat provided additional explanatory value. He remarked, “The Non-Aligned Movement always tries to make use of any opportunity to put pressure on the nuclear-weapon states.” (Note: Attribution for the “In Larger Security” joint statement should not be generalized to the Non-Aligned Movement. The initiative was not organized or negotiated among the larger grouping of NAM
states. Moreover, nine of the 15 supporters are NAM members, the rest, including Brazil, are Observers to the NAM, except New Zealand, which is neither.\footnote{42}

Another official’s statement built on the Japanese diplomat’s observation and depicted disarmament as “the perennial wedge issue that is raised in the nuclear security forum by states seeking to get stronger language on disarmament at all possible opportunities.”\footnote{43} This assessment was validated by a South African official talking about the imbalance in progress on obligations from nuclear-weapon states on disarmament versus non-nuclear-weapon states on non-proliferation, which includes nuclear security because it can be characterized as non-proliferation applied to non-state actors. In his observation, “the structures in place, the new ones, favor non-proliferation. A lot of countries have to pressurize and filibuster the nuclear-weapon states to remind them that they have to do their part on disarmament.”\footnote{44} A Brazilian official provided a more tactical justification for the genesis of the joint statement and referenced one of the vehicles—termed “gift baskets”—for capturing commitments by groups of countries introduced at the 2012 Summit in Seoul. As he saw it,

We didn’t agree with the gift baskets exercise because it distracts from consensus [on the Communiqué]. By the end of the 2012 Summit, we realize it would be a reality and part of the process. In 2014, if it was part of the process, then we could promote something more in line with what we believed.\footnote{45}

The South African official matter-of-factly stated that with nuclear security counting as non-proliferation and because, “With previous Communiqués, the efforts on disarmament were resisted, the resulting effort [the joint statement] is a counterbalance to that. Nothing more and nothing less.”\footnote{46}

According to a French official, this tension between non-proliferation (both state and non-state actor related) and disarmament has also created a backlash against the nuclear security agenda. He reasoned that, “Nuclear security is devised as a component of the Prague disarmament agenda and as countries realized there would be more constraints on the civilian sector, such as on medical isotopes, there has been a backlash and they wanted to come back to pure disarmament.”\footnote{47} This view ascribes deeper and less benign motivations than simply “balancing” attention provided to one agenda versus the other. The implication is that in response to nuclear security undercutting their civilian sector interests, non-nuclear-weapon states are taking actions to ensure accountability on disarmament, no matter how this complicates the Summit process.

To the extent subject matter expertise is relevant to evaluating how the Nuclear Security Summit militates against other priorities like disarmament, the selection of
people in the process may also matter. According to one assessment, “most Sherpas are diplomats from the disarmament and non-proliferation desk and since they don’t grasp technicalities and there is no interest from leaders in technicalities, they have relied on what they know. This bureaucratic, but not irrelevant, choice of people around the table leads to the disarmament discussion.”48 Prior to the 2014 Summit, two Summits had already occurred and participants had substantial opportunities to become conversant with the relevant technical details of the nuclear security file. Perhaps the bureaucratic factor is most useful for explaining the position and behaviors of countries that may not have nuclear materials or have small teams or high turnover within their Sherpa teams—all points leading to a steep learning curve on understanding the nuclear security agenda and vital concepts.

In response to a suggestion that some Summit participants might be motivated to agitate for disarmament as part of a backlash against constraints on civilian sector interests and thus may not be sincerely committed to strengthening global nuclear security, a Dutch diplomat was dubious,

That assessment may be true for one or two countries, but not for all of them. A number of those countries are generally concerned about nuclear weapons, without diminishing nuclear security. There are a couple of them who are not concerned with further strengthening nuclear security and instead want to focus on disarmament. It is a mixed bag.49

All of these hypotheses have some explanatory value for the continual efforts to raise disarmament, the conditions fomenting the “In Larger Security: A Comprehensive Approach to Nuclear Security” joint statement, as well as the foundation for creating the support attracted and sympathy inspired by the ideas of the joint statement.

**GAMBLE OR GAMBIT: REACTIONS, RESULTS, AND COSTS**

The attempt to further elevate disarmament principles and objectives within the 2014 Nuclear Security Summit through the “In Larger Security” joint statement drew mixed reactions from Summit participants. Some termed it a “gambit.” However, a few saw it as a genuine gamble for policy reform. Many officials and diplomats expressed sympathy for some of the sentiments included, indicating that they could support the joint statement had it not been for concerns about its substance, execution, and true intent. Turkey’s assessment of the experience illustrates the conflicting impulses some countries had as they considered whether to sign on to the joint statement,

If the joint statement was shorter, we could have supported it. Instead, it was too detailed and went beyond the scope of the Summit process. Also, given the
divergence of views among the Summit participants on the “comprehensive approach” suggested and the strong opposition from some countries to this concept, we were also concerned that the recommendations were not realistic enough to gather sufficient support for implementing them within the Summit context. Also, from the way the text was circulated to possible co-sponsors—but not opened for their comments and inputs—it gave us the impression that the move might have been for tactical purposes to make their point on broader issues.\textsuperscript{50}

Another official from a non-nuclear-weapon state also alluded to the tension between supporting certain ideas versus choices made about how to promote them, stating, “We may not agree with all of the methodologies, but we have sympathy and agree with some of the views.”\textsuperscript{51} Countries that are passionate about their priorities and acknowledge the limits of existing avenues for yielding disarmament results may not be overly bothered by whether the timing and use of their tactics are convenient or not. These countries should, though, care about the net results of their initiative.

On that score, the most that could be attributed to the joint statement in terms of results, as perceived by those who did not sign on to the joint statement, was, “There was a certain awareness created when it was circulated and they got reactions from the states they circulated it to.”\textsuperscript{52} A nuclear-weapon state official assessed that the effort had “limited impact, but zero movement for dialogue. We are not dismissive, though, since we understand where the proposers are coming from.”\textsuperscript{53} Indeed, far from dismissing the initiative, the same official engaged the rationale for the approach and evaluated its effectiveness, “If you don’t have nuclear weapons, countries take the easy option and shout about disarmament. Shouting from the rooftops is coherent and reasonable. They are saying what they are expected to say. When they say something unexpected that is what gets attention.”\textsuperscript{54} Explaining the lack of attention, a French official offered, “It’s not in touch with feasibility of what can be done. They make proposals on the basis of ideological grounds and they haven’t thought about implementation.”\textsuperscript{55} Implied in this judgment is also a hidden cost to the credibility of non-nuclear-weapon states in terms of their awareness of the practicalities involved in the process of achieving disarmament.

Overall, most officials and diplomats perceived no, or at most minimal, costs for the organizers and supporters of the joint statement, but they all had a different way of assessing costs. In terms of whether support for the statement would incur transactional costs by influencing future dealings with these states, one official first appraised the endeavor, “It was not without hazard and they are probably worse off,” and then further elaborated, “In one sense it doesn’t change how I work with them, because it is
what I expect from them. The disarmament lobby will take any opportunity to promote their goals.”

This validates previous statements from others about disarmament advocates within the process “taking any opportunity” to highlight the issue. Also reflected in the comment is a common theme from other Summit participants about their “expectations” about the so-called disarmament lobby. For instance, a French official said, “Of course, there were no costs. It was not unexpected from the Brazilians or South Africans as it was similar to the humanitarian consequences initiative.”

One U.S. official related costs to whom was influenced by the statement, “To whom was it meaningful? No one. Therefore, no cost.”

A Dutch diplomat measured cost by the action taken, “There are limited costs because it’s cheap to make statements.” If the signatories committed themselves to take action, perhaps that would have changed both the calculation of costs and results. Another official’s reaction to whether there were any costs to the states for putting forward the joint statement was simply, “No. No way! They wanted to make a point.”

Costs can also be calculated by whether the overall agenda has advanced or regressed vis-à-vis key actors. For disarmament proponents, one of the advantages of raising disarmament within the Nuclear Security Summits would ostensibly be the chance to influence the non-NPT nuclear-armed states present. The reaction of any of these non-NPT nuclear-armed states is pertinent to assessing the impact of the joint statement on the overall agenda. An Indian diplomat commented, “We are sticking to the original purpose of the Nuclear Security Summit, which is to focus on nuclear security issues. We understand and share the frustration about the lack of progress on nuclear disarmament, including in the context of the NPT, but there are other forums to pursue this objective. The NSS process is not the forum for this.”

This response affirms the prior assessment by others that the joint statement had no impact on the states it intended to influence—possessors of nuclear weapons.

The joint statement’s purpose is undercut, however, by some of the language used. There is one reference to “states possessing [nuclear weapons],” but other references in the statement are to “nuclear weapons states” and to measures on disarmament stemming from the NPT. Framing the issues promoted in the joint statement in this way reinforces the notion of disarmament as primarily applicable to the NPT acknowledged nuclear-weapon states, rather than all who possess nuclear weapons whether party to the NPT or not. A Brazilian official indicated that several signatories of the joint statement are interested in a follow-on joint statement for the 2016 NSS. As these countries consider their next steps, they should take into account the reactions of the other Summit participants that support disarmament, but did not support the joint statement and their reasons for that decision.
HIDDEN ASSUMPTIONS

BY THE TIME PREPARATIONS for the 2014 Nuclear Security Summit began in earnest, non-nuclear-weapon states without weaponsusable nuclear materials, such as Brazil, Egypt, and New Zealand, or even those that possess these materials yet prioritize progress on nuclear disarmament, such as Kazakhstan and South Africa, may have found it increasingly harder to rationalize an ongoing investment in the global nuclear security agenda completely delinked from disarmament goals. After an examination of the attempt to link the two agendas, several hidden assumptions related to the following become apparent: the relationship of nuclear security to disarmament, the nature of a world without nuclear weapons, the source of nuclear dangers, and expectations about the disarmament process. Hidden assumptions are important to identify and assess because in addition to the 15 signatories of the joint statement, many more countries, both within and outside of the Summit, agree with some of the stand-alone ideas contained within the joint statement. Those ideas rely on these hidden assumptions and these assumptions do not hold up well in the context of other facts. This makes it incumbent on all countries and stakeholders to reevaluate their positions and the thinking behind them. To assist with that, below are several priority assumptions for attention.

PRIMARY ASSUMPTION:
Eliminating nuclear weapons eliminates the threat of nuclear terrorism.

At the heart of the disarmament advocacy endeavor within the Nuclear Security Summit, manifested most tangibly by the joint statement, is the concept that abolishing nuclear weapons obviates the nuclear terrorism threat. An Australian official acknowledged, “There is an attractive logic to disarmament being the ultimate path to nuclear security. If we no longer have materials of concern, then the nuclear security outcome is much higher,” but then rejoined, “The problem with the logic is that the journey to improving nuclear security is way more complex and nuanced than just disarmament.” The complexities and nuances include states accepting the currently immutable facts that (1) weaponsusable nuclear materials will continue to exist for a very long time, even after nuclear weapons have been
dismantled, and (2) separated plutonium will likely be in use for nuclear fuel in a world without nuclear weapons. Therefore, eliminating nuclear weapons does not eliminate the threat of nuclear terrorism as weapons-usable nuclear materials will continue to exist as will presumably terrorists, criminals, and corruptible insiders.

States should prepare and plan for that reality. This means expanding their conception of what comprises the nuclear threat beyond nuclear weapons to include weapons-usable nuclear materials in all uses and sectors. Doing so will help states develop comprehensive solutions and plan for the risks associated with weapons-usable nuclear materials for the long-term. Accepting the reality presented above also means recognizing that nuclear security is essential to facilitating, achieving, and maintaining a world without nuclear weapons. The shared, albeit differentiated, responsibilities for global nuclear security among countries with nuclear materials and countries without cannot be expediently wished away in the hopes of arriving at a nuclear disarmed world earlier. An unrealistic understanding of the connection between nuclear security and disarmament may create unpleasant surprises and destabilizing suspicion in a world in the process of disarming, if non-nuclear-weapon states are unprepared for the possible risks associated with implementing the practical aspects of the disarmament process.

ASSUMPTION:
A world without nuclear weapons is a world free of nuclear dangers.

A world without nuclear weapons is not necessarily one that is without weapons-usable material or free from the risks incurred by the existence of such materials. Therefore, increasingly robust nuclear security would be needed so the risk of remaining nuclear material being stolen would not trigger states into reconstituting nuclear arsenals or new states arming themselves. A singular focus in the articulated demand from most non-nuclear-weapon states on the elimination of nuclear weapons ignores nuclear dangers in several arenas (points 3 and 4 are addressed later):

1. Ongoing civilian use of HEU
2. Ongoing civilian production and use of separated plutonium
3. Other uses of weapons-usable nuclear materials for military or non-civilian purpose
4. Risks associated with long timelines involved with the process of nuclear weapons dismantlement through disposition

In terms of civilian use of weapons-usable nuclear materials, the Summits have made measurable progress in minimizing and eliminating HEU, which is already voluntarily limited in terms of production and use. This progress is due to countries
taking actions, such as returning vulnerable nuclear materials to countries of origin, down-blending the HEU to low-enriched uranium (LEU), and converting HEU reactors to use LEU fuel instead. Additional commitments are required for HEU to be eliminated from civilian use.

Separated plutonium has been a tougher challenge to address within the Summits because of the sensitivities of participants who use it for their nuclear energy programs. Not until the third Summit could language be agreed upon for the Communiqué pertaining to separated plutonium in civilian use. To date, the production of separated plutonium has not been rationalized with consumption and as a result, large stockpiles have grown, which pose a security threat.

For the future, wholesale rethinking of the front end, back end, and waste streams of the fuel cycle will be necessary to manage demands for energy balanced with proliferation and nuclear security concerns. In the meantime, experts recommend that efforts to minimize HEU transition into plans for eliminating the material, and some experts advocate setting timelines for eliminating HEU use in the civilian sector. Regarding plutonium, countries are urged to reduce their stockpiles while keeping their production and consumption of materials in balance. Although proposed by credible experts for proliferation and nuclear security reasons, eliminating the production of separated plutonium for civilian purposes has yet to gain traction in current policy debates among governments.

ASSUMPTION:
Nuclear materials under safeguards are not materials at risk.

There are countries that do conceive of a world without nuclear weapons as one also including weapons-usable nuclear materials in uses outside of nuclear weapons, such as for civilian nuclear energy. Or during the dismantlement process, weapons-usable nuclear material from warheads may be kept under safeguards for a substantial period of time until it can be dispositioned (meaning disposed of). In either case, one might assume that because the nuclear materials are under tight safeguards, this means they will also be tightly protected. Unfortunately, this is not the case. “Safeguards,” like those put in place by the IAEA are misnamed. They do not “guard” or keep “safe” the nuclear materials to which they are applied. Instead, they comprise various technical measures “to verify the correctness and the completeness of the declarations made by states about their nuclear material and activities.” Safeguards do, however, obligate a state to ensure effective control over its nuclear material and that is important for conveying to a state expectations about its security responsibilities. That said, the range of
nuclear security measures, from physical protection to guarding against the insider threat, to secure these materials remain relevant, if not increasingly so, on the road to and even after having reached a world without nuclear weapons.

**ASSUMPTION:**
Materials of concern are mostly in nuclear weapons.

The joint statement language focuses primarily on the threat from nuclear weapons. Consequently, the impression is given that materials of concern are mostly in nuclear weapons and that is all non-nuclear-weapon states should focus on or care about. Based on open source documents and publicly available information, Figure 1 depicts how nearly 2,000 metric tons of weapons-usable nuclear material are allocated by sector and use as of 2012 and presents a different picture about sources of risk from weapons-usable nuclear materials. At a top line, 15 percent of these materials are estimated to be in use for civilian purposes (e.g., civilian energy programs, research, etc.) and approximately 85 percent are estimated to be for military and other non-civilian purpose. Very few nuclear-armed states have materials in use for non-civilian purpose, which is defined as government-owned, but not for commercial purposes (e.g., work conducted at some of the U.S. National Laboratories that is not for military purposes).

![Figure 1: Global Holdings of Weapons-Usable Nuclear Material by Sector and Use, 2012](image)

**Note:** In 2012, the total weapons-usable nuclear material inventory is estimated at 1,440 metric tons of HEU and 495 metric tons of separated plutonium. Of this, 1,400 metric tons of HEU and 240 metric tons of plutonium are estimated to be outside of civilian programs. The estimated range of uncertainty regarding the total quantity of materials is +/- 140 metric tons.

Only 23 percent of weaponsusable materials are accounted for by nuclear weapons either in active or retired warheads. Primarily focusing on nuclear weapons as the source of potential danger too narrowly defines the threat emanating from other uses of weapons usable nuclear materials. Moreover, a constrained view of where and how these materials may be used and contribute to nuclear threats increases the chances of incomplete policy approaches and solutions. Non-nuclearweapon states can also reinforce their topical credibility by demonstrating an understanding of the larger threat and making appropriate references to nuclear weapons and materials in policy proposals and statements.

**ASSUMPTION:**
Disarmament is a low or no-risk endeavor.

The idea that the decisions, actions, behaviors, and activities involved in implementing disarmament—from dismantlement to disposition—are without risk leads to unrealistic expectations about the relative ease of such processes and their imperviousness to security threats. To make this point, a U.S. official engaged in the following thought experiment:

There is magical thinking on the part of those that say disarmament equals nuclear security. But let’s posit that for nuclear weapons we wave a magic wand and all the weaponsusable nuclear material turns to plutonium oxide or HEU powder. This eliminates some threats, but then creates more and different threats. If you take disarmament seriously, then you need to step out of magical thinking. There is a long, expensive, technically challenging road from dismantlement to disposition, and that disposition involves transforming materials temporarily into forms that may be more susceptible to diversion.

These comments refer to potential challenges to overcome once nuclear material is extracted from warheads. The choices to be made in terms of what next to do with those materials have different security risks associated with them. Feiveson, Glaser, Mian, and von Hippel in *Unmaking the Bomb* describe, “processing the material instead of storing it could increase its exposure to potential theft in the short-term” and they suggest states proceed to disposal only when appropriate security arrangements are in place. However, they also caution, “Conversely, disposal should not be delayed indefinitely. Even a small annual risk of insider theft, outsider penetration, or loss of government control could accumulate over century into a significant risk.” To better illustrate the complexity of the disarmament process from dismantlement through disposition, Figure 2, developed by the Nuclear Threat Initiative for its work on verification, depicts the generic lifecycle of nuclear weapons and military materials from production to disposition. The vertical sections titled Weapons Stockpile, Weapons...
Figure 2: Generic Lifecycle of Nuclear Weapons and Military Materials

Note: This graphic illustrates basic components of a nuclear weapons and military materials lifecycle. The functions depicted are not specific to any one country and not all countries undertake the steps shown. Where multiple arrows lead to the same function, it does not mean the functions are performed at the same facility.

Disassembly, Storage, and Disposition all have processes that pose potential nuclear security vulnerabilities, increasing the risk of unauthorized access from insiders or by criminals or terrorists to weapons-usable nuclear materials. These vulnerabilities may be due to challenges related to transportation, storage, conversion of materials into other forms, long timelines associated with certain activities, suitability of facilities, or other factors. As an example, U.S. experts have ascertained that beyond acquiring HEU from a storage facility, a terrorist group gaining access to such a facility, “might even be able to construct and detonate an ‘improvised nuclear explosive’ on the spot before the guard force of the facility could stop them.”\footnote{\textsuperscript{72}} Disarmament could possibly increase the probability of such risks if nuclear-armed states are not suitably prepared and if such processes are occurring at multiple sites within several countries around the world. This is not an argument for delaying disarmament. Instead, it is a wake up call for the nuclear-armed and non-nuclear-weapon states alike about what the future holds.

The stages depicted also should convey that achieving disarmament—especially irreversible, verifiable disarmament—is not a rapid or simple process. The complexity depicted in Figure 2 also backs up the “long, expensive, technically challenging road” described in the thought exercise provided by the American official. Internalizing the potential risks and problems to solve at different stages of the process will help ensure non-nuclear-weapon states are not taken by surprise by unrealistic expectations about what happens after a political agreement to disarm is reached among nuclear-armed states. Acquiring an understanding of these challenges will help non-nuclear-weapon states become and remain informed and active stakeholders. Nuclear-armed states that have yet to initiate any measures to reduce or eliminate nuclear weapons can start to plan and prepare today so they are not deemed a security risk or target in the future. Luckily, the nuclear security realm already provides plenty of opportunities to learn key principles and to demystify some of the issues involved.

**ASSUMPTION:**

Disarmament means responsible disposition of material.

By touching on issues of deterrence, disarmament, and nuclear security, the same U.S. official connected important dots to reveal the assumption that disarmament automatically means the responsible disposition of nuclear material:

The absence of disposition, however, requires extended storage, perhaps of weapons components, which may be contrary to disarmament goals or future disarmament agreements. This may generate perhaps a higher potential for theft as these weapons components would be understood to not be critical for deterrence and so might be more susceptible to lower security culture.\footnote{\textsuperscript{73}}
Leading to the circumstances above, and accounting for the prospective differences in any given nuclear-armed state’s dismantlement process, there are a few common steps involved before weapons-usable nuclear material is dispositioned. According to a 2010 study published by the Verification Research and Training Information Centre (VERTIC), these steps include,

- **Retirement and Transportation to a Disassembly Plant:** A warhead is retired from active service and transported, perhaps via interim storage, to the facility at which it will be dismantled;

- **Mechanical Disassembly of Warheads:** At a dismantlement facility, extraction of the physics package (the arrangement of nuclear materials, explosives, and various other non-nuclear parts essential to the detonation of a nuclear warhead) from the weapons casing first takes place;

- **Disassembly of the Physics Package:** After the physics package is extracted, it is disassembled into its fissile material components, high explosives, and other non-nuclear parts; and

- **Waste Streams and Disposition:** After disassembly of the physics package is complete, its various components are then disposed of in ways best suited to their type and properties.74

Pertinent to the scenario anticipating a higher potential for theft due to certain processes, “in the U.S., extracted nuclear components are either placed in storage until they are ready to be disposed of or transported to other Department of Energy weapons complex facilities around the country.”75 If weapons components are in storage for long periods of time awaiting disposition, a confluence of circumstances like those outlined by the U.S. official could lead to a decrease in vigilance in the protection of those weapons components and increase the potential for theft. One of the solutions to the challenges posed in this scenario resides squarely in the nuclear security field, such as measures for ensuring demonstrable competence among the people responsible for nuclear security. Deconstructing the assumption has underscored the intrinsic importance of nuclear security to the practical implementation of disarmament ambitions.

**IMPLICATIONS**

The motivations for, central logic of, and reactions to the joint statement “In Larger Security: A Comprehensive Approach to Nuclear Security” serve as a proxy for how a range of nuclear-armed and non-nuclear-weapon states understand the link between the concepts of nuclear security and disarmament. Examining the linkage made in the joint statement reveals Eliminating nuclear weapons eliminates the
threat of nuclear terrorism as the primary assumption at the center of the major initiative to make disarmament relevant to nuclear security within the Summit framework. The apparent logic of this primary assumption and the other identified hidden assumptions described above do not hold up when parsed or evaluated in the context of other information. The logic may be sincerely embraced as a belief possibly based on experience by some countries, or possibly put forward as a cynical ploy by others. Either way, it undermines both nuclear security and disarmament goals.

In regard to nuclear security, by establishing erroneous linkages between nuclear security and disarmament, necessary and ongoing support for the global nuclear security mission can be undermined by potentially distracting states. A particularly troubling aspect of the “eliminating nuclear weapons eliminates the threat of nuclear terrorism” logic is that it undermines the principle established by the leaders participating in three Summits, namely that global nuclear security requires efforts from all states. The joint statement instead argues that it is up to only a few states—the nuclear-armed—to take action and thereby eradicate the nuclear terrorism threat. This line of reasoning is inaccurate and dangerous if it precipitates countries lessening their commitment to nuclear security goals. Non-state actors or other unauthorized individuals gaining access to weapons-usable material will go wherever material is most vulnerable, not where there is the greatest amount of it (e.g., in various uses for military purpose). Events since the inception of the Summits have both rightfully collapsed assumptions about how well military materials are protected and confirmed that non-state actors are seeking nuclear devices to detonate, but that does not mean all of the focus and responsibility should shift to the nuclear-armed states. No doubt, nuclear-armed states should be accountable to others for the effectiveness of the nuclear security arrangements applied to their military materials. This does not mean non-nuclear-weapon states with weapons-usable nuclear materials in civilian use can then reduce, much less abdicate, their responsibilities. Finally, as unfortunately proven by the responses to the joint statement, demands for disarmament are unlikely to translate into the accountability needed or security gains desired.

In regard to disarmament, a source of the conceptual disconnect about how nuclear security and disarmament relate could be whether the most active disarmament proponents perceive nuclear security as a status quo agenda that condones the ongoing possession of nuclear weapons. Feeding this perception would be the massive imbalance in committed actions from nuclear-armed states to address the security of weapons-usable nuclear materials for military purpose in contrast to the actions taken by the majority of Summit participants regarding nuclear materials for civilian purpose. Certainly, more needs to be done on the military
materials side of the ledger, especially as leaders have continually reaffirmed with each Summit, “the fundamental responsibility of States, in accordance with their respective obligations, to maintain at all times effective security of all nuclear and other radioactive materials, including nuclear materials used in nuclear weapons, and nuclear facilities under their control.” A call for disarmament can be a counterproductive response to correct the imbalance. It is counterproductive particularly if that call is ignored by the nuclear-armed states, questioned even by other states that are supportive of disarmament otherwise, and if it also undermines the credibility of the states supporting it because of the flawed arguments upon which it is based. The assessment of officials and diplomats interviewed was that the joint statement had no or low costs associated with it. The joint statement, or more accurately the nuclear security–disarmament link animating it, will incur costs if it distracts states from focusing on what should be achievable regarding military materials, specifically, ensuring nuclear-armed states are accountable to each other and all states for the effective security of those materials. Mutual accountability can lead to decreased uncertainty as well as increased security and stability. Depending on how nuclear-armed states engage one another in pursuit of also building each other’s confidence, an added benefit may be the creation of the norms, behaviors, practices, activities, and relationships (institutional and individual) that can enhance prospects for eventually facilitating and implementing nuclear disarmament.
FROM FRUstration TO INCREASED SECURITY AND ACCOUNTABILITY

FOR PROPONENTS OF DISARMAMENT, nuclear security should be established as essential to, rather than a distraction from, facilitating, achieving, and maintaining a world without nuclear weapons. If the ramifications of the political, technical, and operational relationship between nuclear security and disarmament is recognized and understood, can the nuclear security agenda make a contribution to the disarmament agenda in the near- or medium-term? Also, can countries frustrated with the pace of disarmament implementation find other outlets for addressing their security interests involving more than just the NPT nuclear-weapon states while also improving the prospects for disarmament over time?

APPLYING NUCLEAR SECURITY TO EXISTING APPROACHES

The joint statement and other attempts at promoting disarmament within the Nuclear Security Summits are not the only manifestations of the frequently referenced frustration of non-nuclear-weapon states on disarmament in the aftermath of the 2010 NPT Review Conference and in the run up to the 2015 NPT Review Conference. One effort that has attracted a great deal of support from governments, international organizations, and civil society groups is the informally referred to “humanitarian initiative,” which is based on the acknowledgment in the 2010 NPT Final Document—one of the outcomes of the 2010 NPT Review Conference—of the “catastrophic humanitarian consequences that would result from the use of a nuclear weapon” and the applicability of international humanitarian law. At the government level, the humanitarian initiative consists of garnering support for the “Humanitarian Consequences of Nuclear Weapons” joint statement and convening the three meetings hosted by Norway, Mexico, and most recently Austria, on the Humanitarian Impact of Nuclear Weapons. So far, the Humanitarian Consequences of Nuclear Weapons joint statement enjoys the support of 155 countries as of its submission by New Zealand at the UN General Assembly First Committee meeting on October 20, 2014. The objective of this endeavor is to seek the elimination of nuclear weapons by having all approaches and efforts toward nuclear disarmament
informed by the awareness of the catastrophic consequences of a nuclear weapon detonation, whether by accident, miscalculation, or design, which cannot be adequately addressed by any state or international body. Nuclear-armed state participation has been circumscribed and tepid.

As the "catastrophic consequences of a nuclear weapon detonation, whether by accident, miscalculation, or design" is central to arguments promoted by supporters of the humanitarian initiative, this suggests the potential for establishing common ground between them and those who do not support the initiative through nuclear security. That common ground could be created if the nuclear security agenda—central to preventing such detonations by accident or design—were to become an integrated part of the approach of the humanitarian initiative. However, a Swiss official was the only one among those interviewed to make the connection. He exclaimed,

The link is obvious. The humanitarian narrative is a strong one for doing more on non-proliferation, more on disarmament, and more on nuclear security because it's talking about a nuclear detonation whether by a state or non-state actor. Also the link makes sense because the Nuclear Security Summit has to cover all nuclear material, including the challenge of military materials.

At the Humanitarian Impact of Nuclear Weapons conference hosted by Austria in December 2014, aside from Switzerland's statement that made the explicit link to nuclear security and Norway's that referenced the threat of non-state actors, most other states have yet to make this conceptual, much less strategic, connection. This particular connection is worthy of attention as security imperatives animate the drive for both strengthened global nuclear security and eliminating nuclear weapons.

The underlying rationale for the humanitarian initiative is, "Disarmament is too important to leave in the hands of possessor states. Affected states need to deal themselves back in." A Norwegian official's comment aligned with this assessment, "For non-nuclear-weapon states, because we have our own priorities, like our own security, a realistic disarmament agenda means wanting progress, but not wanting that progress solely dictated by nuclear-weapon states." This comment is indicative of a strain of thinking among many non-nuclear-weapon states for whom nuclear weapons are far from an abstraction. The humanitarian consequences framing has made even clearer for them the pressing need to eliminate nuclear weapons as they represent an unmanageable threat to their own security and humanity. The question remaining for these states is what tools and points of leverage exist to obtain their objectives.

The Norwegian official described a problem that many states grapple with when he continued to say, "The NPT is still very relevant and we are trying to make the
most out of the NPT framework.” Without a doubt, the five NPT nuclear-weapon states could do a lot more on their Article VI commitments. The frustration from non-nuclear-weapon states on this issue is understandable and attributable to a problem that has expanded beyond the boundaries of the solution created for it. Where once there were only five acknowledged nuclear-weapon states obligated by the Article VI NPT commitment to disarm, there are now three de facto nuclear-weapon states—India, Israel, and Pakistan—to which must be added the nuclear-weapon-capable state of North Korea. Unfortunately, the NPT—the mechanism for committing the five nuclear-weapon states to act in good faith to disarm—does not similarly bind these other four states. Therefore, the sheer existence of these states outside of the NPT necessarily limits how far the five NPT nuclear-weapon states will go in eliminating nuclear weapons when others outside of the NPT retain them.

A clear-eyed assessment of the prospects for substantial, much less satisfactory, progress on Article VI means recognizing current twenty-first century realities:

- The tendency of non-nuclear-weapon states and nuclear-weapon states to talk past one another in demanding more progress on disarmament and non-proliferation respectively remains. The defining factor for how far nuclear-weapon states will implement Article VI among themselves, however, exists outside of the NPT regime in the form of non-NPT nuclear-armed states. Therefore, the debate and demands as currently formulated within the Treaty regime are limited from the outset in what outcomes they can yield.

- The primary response from NPT member states to the problem of the non-NPT nuclear-armed is to call for universalizing the NPT. This call is also repeated in the Humanitarian Consequences joint statement likely as NPT catechism. Meanwhile, the non-NPT nuclear-armed have made clear that they will not join the NPT as non-nuclear-weapon states. NPT member states should realize that, in contrast to the urgency conveyed regarding Article VI, an unintended consequence of relying on universalization as the solution to the non-NPT nuclear-armed state challenge is that it instead signals an appetite for waiting far into the future for achieving a world without nuclear weapons. An alternative approach put forward by civil society and supported by many governments proposes a new legal instrument, a nuclear weapons ban, to prohibit and eliminate nuclear weapons through a normative approach where nuclear possessors are not required to agree from the outset. Nuclear-armed states are skeptical about this approach owing to the nature of nuclear weapons in contrast to the other weapons such an approach has been used for in the past.
Finally, prospects for multilateral disarmament should be reevaluated in light of current trends of the twenty-first century. Most nuclear-armed states have not demonstrated the willingness to take on the political agreements much less the capacity required for the technical and operational requirements needed to implement such an approach for achieving a world without nuclear weapons.

These constraints and prevailing conditions should compel nuclear-armed and non-nuclear-weapon states alike to seek opportunities to build, extend, and support the norms, behaviors, practices, activities, and relationships (institutional and individual) that can increase security and stability and decrease uncertainty through improved accountability. Doing so could lead to cultivating the fundamental trust that will be needed as a precursor to any negotiated agreements committing all nuclear-armed states to disarming.

One near-term opportunity to explore is the idea of nuclear-armed states taking steps unilaterally, bilaterally, plurilaterally, or multilaterally to build the confidence of others (e.g., neighbors, allies, rivals, international organizations, or even the public) about the effectiveness of nuclear security pertaining to their military materials and associated nuclear facilities through voluntary measures without disclosing sensitive information. These voluntary measures are also called assurances. Assurances are essentially about accountability. Providing greater and even mutual accountability increases security for all states. For instance, this occurs when the confidence of one or even both states is built in the effectiveness of the nuclear security arrangements of the other. As that confidence builds, it decreases the uncertainty felt, which otherwise could negatively shape threat perceptions. Instead, the decreased uncertainty contributes to the improved stability of the relationship between the two states. This dynamic would work between two states with materials, one with materials and one without, and it applies to both materials in civilian or military use.

ACCOUNTABILITY THROUGH ASSURANCES

The Nuclear Security Summits have defined and raised the bar for what responsible stewardship of the world’s most dangerous nuclear materials looks like when in civilian use and countries have taken demonstrable actions to meet that bar. Because of the widely adopted reasoning voiced by many leaders at the 2014 Summit that lax nuclear security in one country poses a security risk to all others, defining, raising, and meeting that bar in an accountable away is an undeniable national and international security gain. So far, those gains are mostly measurable and attributable
to only 15 percent of weapons-usable nuclear materials in the world—those in the civilian sector. Unfortunately, the same exercise for defining and raising the bar for responsible stewardship of weapons-usable materials for military purpose has not happened to the same extent. Nuclear-armed states may very well have effective nuclear security in place, but it is hard for each of them to know that about the other, much less for the rest of the world to have any confidence about that either. Between any two states, that uncertainty could be captured negatively in threat perceptions; it creates distrust between the states when words meant to assure are not backed up by actions, and the resulting instability created contributes to at least a perceptual and possibly a real decrease in security.

Nuclear security is a young field relative to non-proliferation or disarmament. As such, many norms are still developing, including the norm of mutual accountability. The seed of that idea has been planted through the Nuclear Summits and there was evidence of it taking it root at The Hague Summit as captured in the Communiqué and the commitments of participants. Despite world leaders embracing and expressing at The Hague Summit how important global cooperation and mutual accountability is for effective nuclear security and for national and international security interest, the concept that words must be matched by deeds requires continual reinforcing. For instance, retired Pakistani General Khalid Kidwai, responsible for Pakistan’s nuclear arsenal for much of its existence, made the following statement in March 2015:

I would like to conclude by holding out an assurance to this audience that I know worries the international community all the time, the safety and security of Pakistan’s nuclear weapons in the disturbed security environment of our region. For the last 15 years, Pakistan has taken its nuclear security obligation seriously. We understand the consequences of complacency. We have invested heavily in terms of money, manpower, equipment, weapons, training, preparedness and smart site security solutions. I say with full responsibility that nuclear security and Pakistan is a non-issue. You have all of your national technical means to verify, but you might also take my solemn word for it. Our nuclear weapons are safe, secure, and under complete institutional professional control.87

Government officials through to the public can judge for themselves how much their confidence is built by words alone from former officials, military or otherwise. One particularly curious aspect of the remarks is the confidence in the capabilities of national technical means, presumably of the United States, to independently confirm the validity of his statement. According to author Eric Schlosser, “One of the top-secret documents obtained by Edward Snowden in 2013 says that American intelligence agencies have little ‘knowledge of the security of Pakistan’s nuclear weapons and associated material.’”88 General Kidwai’s statement also presumes
that the United States or other countries with such national technical means are the only ones interested in validating his assertions or whose interests matter. Finally, the invitation to the intelligence agencies of the world seems like an opening for greater rather than less uncertainty. Through nuclear security assurances, though, there are far more straightforward steps Pakistan and other nuclear-armed states can take to establish their nuclear security effectiveness with credibility.

As agreed to by 53 countries in The Hague Communiqué resulting from the 2014 Nuclear Security Summit, assurances are voluntary measures for states, “to show that they have established effective security of their nuclear materials and facilities while protecting sensitive information” and to build “national and international confidence in the effectiveness of their nuclear security regimes.”

A non-exhaustive list of measures includes publishing information about national laws, regulations, and organizational structures; exchanging best practices; inviting IAEA review and advisory services, and other reviews and following up on their conclusions; providing information through relevant existing reporting mechanisms and forums; further developing training for personnel involved in nuclear security by setting up and stimulating participation in training courses; and applying domestic certification schemes. The Communiqué also acknowledges that many states take such measures already.

Assurances, which can be both sharing information and taking actions, are applicable to nuclear materials for both civilian and military purpose. The measures above can be used as is or adapted for the military sector, for instance, the nuclear-armed states can engage each other in activities to share best practices or even to peer review one another. That such activities are happening, not the specific details of them, is what builds the confidence of other states that are not participants in those activities. Countries with nuclear materials in civilian use know from their experience with peer review that outside expertise is necessary for the continual improvements needed for strengthened nuclear security. As assumptions about military materials being perfectly protected have imploded, nuclear-armed states should want to similarly engage in appropriate exchanges to improve their nuclear security beyond what already occurs. Ideas have been put forward and are being further developed for consideration by 2016 Summit participants.

The good news is that United States has already demonstrated a few ways assurances can be applied for nuclear materials in military programs by adding a section titled “Security of Military Materials” to its national progress report for the 2014 Summit. Information about the measures in place around U.S. military materials was provided in addition to a new commitment to use existing mechanisms, such as UN Security Council Resolution 1540, to report on the security of these
materials. The United States also conveyed that the latest IAEA nuclear security guidance (INFCIRC/225/Revision 5) is taken into account in military security provisions. The Russians seemed to make a similar disclosure in their own statement declaring, “in Russia, all nuclear materials, their storage sites and associated facilities, as well as transportation of nuclear material are protected by the relevant security measures, including physical protection, at least at the levels recommended by the IAEA in INFCIRC/225/Rev.5.” Whether this statement was meant as an assurance is unclear in light of Russia’s resistance to the notion of assurances while it was considered during the 2014 Summit process.

One stumbling block to other nuclear-armed states following the example set by the United States are the perceptions some nuclear-armed states have about the process of building confidence in relation to a prospective nuclear security incident and what conclusions are drawn by others when assurances are made.

**ASSUMPTION:**
Assurances are provided after a security breach.

Officials from nuclear-armed states within and outside of the NPT have expressed the point of view that the mere act of providing assurances will undercut confidence in the effectiveness of a country’s nuclear security arrangements. The argument is that if these states took steps similar to what the United States did in the aftermath of a security breach at its largest storage facility for military HEU in 2012, their nuclear security credibility would be further imperiled and that their own public would lose confidence. The flaws in this argument are attributable to the hidden assumption that a state provides assurances only after a serious nuclear security incident. Instead, the process of building the confidence of others should start immediately so that when a security incident occurs, at least some confidence is already in place in the ability of a state managing the aftermath either by itself or working with others.

**ASSUMPTION:**
Providing assurances implies something is wrong.

The concern about how providing assurances could suddenly imperil the confidence of stakeholders in government or the public also should be addressed. Nuclear-armed states should remember that assurances are voluntary and not forced or legally obligated. The objective of the information shared or action undertaken is to build confidence, not to undermine it. Again, the notion of mutual accountability about the security of materials is a new and fragile concept. Until very recently,
states have adopted a stance of “just trust me” for all nuclear materials. Building the confidence of others happens over time and possibly incrementally. Due to countries already providing an array of assurances regarding materials in civilian use, the norm is being established. This provides a foundation upon which to build for applying assurances to materials in military use.

Appropriate expectations should also be set with nuclear-armed states about how assurances work over time. Nuclear-armed states will have to first navigate the initial range of options that have been developed in terms of information that would be useful to share and activities they may want to engage. In all cases, the overriding principle is that no assurance measure should divulge sensitive information about nuclear materials or associated facilities. That said, one nuclear-armed state might be in a position to do and share more than another. The steps the United States took in the aftermath of the incident at the HEU storage facility, is an example of this principle.

Some of the actions taken include expediting the investigation into the circumstances of the security breach, U.S. Secretary of Energy Stephen Chu and other top government officials using the event as a “teachable moment” in nuclear security rather than minimizing it or hiding the details, initiating other investigations and providing public reporting on the results following from the first investigation, and publishing the Inspector General’s testimony to a sub-committee of the U.S. House of Representatives that lists the security failures determined, etc. The United States was able to provide information about these activities and their result without a wholesale loss of confidence from its allies or the public or exacerbating the threat perceptions of its adversaries because it has already built a foundation of confidence about its overall security through actions taken over many years. For instance, the United States publishes a lot of information related to the governance and components of its nuclear weapons establishment, including information related to the amounts and productions history of its nuclear materials.

Nuclear-armed states that are concerned that the effort to build confidence will have the reverse effect should remember that they alone determine what information is provided and in which activities they participate. Also what may seem like small steps initially have meaning from the outset. Even basic or low-level assurances like publishing the broad outlines of a state’s regulations governing nuclear materials provide the foundation for others believing that if a nuclear security incident occurred and additional assurances were then provided, the affected state actually has the capacity and resilience to address future challenges to its nuclear security.
ELEMENTS OF A PRODUCTIVE DIALOGUE

Even if the non-nuclear-weapon states could agree that seeking greater accountability from the nuclear-armed regarding military materials is a worthwhile cause, the nuclear-armed states hold widely varying positions on the issue. Currently, Russia could be categorized as unsupportive of providing assurances regarding its military materials in any formalized way. The views of the non-NPT nuclear-armed Summit participants and China are either unknown or have not been formally articulated. They likely range from negative to highly skeptical, of the idea. Getting at least these three states on board is vital to the process of raising and defining the bar for responsible stewardship of nuclear materials for military purpose. They have strong nuclear security credentials and as one-third of the total number of states with military materials, they should have a leading role in setting the bar.

The focused and constructive input of non-nuclear-weapon states is a key ingredient to achieving the goal of increased accountability. Such feedback will help the nuclear-armed states supportive of and open to considering assurances applied to military materials make the case to internal stakeholders. In terms of the kind of information that will help with making such a case, a French official asked, “Will addressing military materials tame the critics? Perhaps it’s possible to assure the Dutch, Italians, and Germans, but what about the Brazilians, Chileans, and South Africans?” For making sure that a dialogue on assurances about military materials remains a productive one, non-nuclear-weapon state participants, particularly those most disappointed with the nuclear-weapon states and their disarmament record, should understand that assurances are not a substitute for disarmament and a dialogue to address military materials should not be substituted for a discussion on disarmament. Providing some insight into how nuclear-armed officials see this issue, the same official shared, “What I am really struggling with is a way to deal with the security of military materials that will bring real security benefits, but not the side show that will further fuel the claims of countries that mix the ideology of disarmament with security.” There is cause to be concerned for the potential of a “side show.”

Undeterred by the reactions received to the joint statement, or perhaps further motivated by them, signatories of the “In Larger Security” joint statement have approached Brazil about a drafting a follow-on statement for the 2016 Summit. When asked about the focus of such an effort, a Brazilian official shared that the
“purpose would be to reinforce the need for actions on the other side; there has been finger-pointing at civilian facilities, yet the greatest threat is from military materials.”

Ironically, this statement makes the argument for action on assurances rather than another call for disarmament. Non-nuclear-weapon states should evaluate what actions would be effective in regard to military materials and consider actions that have made a difference on the civilian side such as assurances. If the momentum on the follow-on to the joint statement continues, the states involved are urged to keep separate the drive for greater accountability from the desire for disarmament.

A different official from a nuclear-weapon state also reinforced the caution that non-nuclear-weapon states not confuse assurances applied to military materials as disarmament measures, explaining, “They [non-nuclear-weapon states] will be disappointed if [assurances are] sold as a step on the way to disarmament,” but added, “The value will be in the detail of it and if we get to peer review or any sort of mechanism for confirming security. It needs to be done anyway, and it would be useful if we could get it.”

The idea of some set of the nuclear-armed participating in peer review and reporting that such an activity had occurred is an example of an activity that should build a lot of confidence.

Beyond the three nuclear-weapon states discussed above, the national statements from India and Pakistan at the Vienna Conference on the Humanitarian Impact of Nuclear Weapons could hint at potential openings for advancing proposals related to assurances. A reading of the Indian statement relies on the extent to which India intended the ideas expressed to be broadly applied: “We have called for a meaningful dialogue among all states possessing nuclear weapons to build trust and confidence and for reducing the salience of nuclear weapons in international affairs and security doctrines. Given the complex current international situation, the need for building global trust is all the more imperative.”

The Pakistani representative offered, “Pakistan is ready to enter into Confidence Building Measures (CBMs) and more importantly towards a result oriented dialogue process, to resolve the underlying security threats in our region.”

The exchange of nuclear safety best practices has been discussed before between India and Pakistan. Perhaps an exchange of nuclear security best practices also involving other nuclear-armed states could be considered. For these two states, unilateral and multilateral steps are likely to be most suitable.

In terms of input, the nuclear-armed states want to know if providing assurances will have any value for building confidence, and if so, which assurances are most valuable and how much relative confidence do they generate. Within the Nuclear Security Summit process, there will be an opportunity for a discussion. Non-nuclear-
weapon states can determine whether the discussion becomes a focused and productive dialogue based on their own knowledge of existing proposals, having an informed point of view on the value of the proposals (assessed by different factors perhaps), or by even having additional proposals to offer.

To accelerate the climb up the learning curve, some work has already been done to develop the rational for assurances and proposals for how they could apply to military materials. The Non-Proliferation and Disarmament Initiative (NPDI) tabled a Working Paper on Nuclear Security at the Third Preparatory Committee meeting for the 2015 Review Conference that includes recommendations regarding military materials. Other proposals have been offered for how confidence building could occur pertaining to military materials and are being further developed for consideration by Summit participants. Proposals made so far include, but are not limited to, publishing the broad outlines of regulations pertaining to the governance of military materials, using UNSCR 1540 to report on relevant information or activities, sharing best practices and conducting table top exercises, establishing whether the protection of military materials takes into account the most recent IAEA guidelines, and initiating peer review.

An additional proposal to consider is the cooperation that can occur between states in setting up entities or institutions that offer support to the nuclear security mission but may not already exist. For instance, in the United States, the Defense Nuclear Facilities Safety Board (DNFSB) is charged with overseeing public health and safety standards relating to the design, construction, operation, and decommissioning of defense nuclear facilities. This independent organization within the executive branch of the U.S. government provides its recommendations and advises the President of the United States and the Secretary of Energy. Because the DNFSB was only created in 1989, it is possible that other nuclear-armed states may not have a similar entity that provides a vital support function to the nuclear security and other nuclear-related missions. The cooperation between DNFSB and the officials of other governments to explain the value of the DNFSB, how it functions, and even training to help with setting up similar institutions in other states could also have assurance value. This is just one example of an idea based on a feature of how the U.S. governs its nuclear enterprise. All states have different experiences and perspectives and should apply them in providing due consideration to all recommendations and proposals or in developing new ones.

Through the act of providing assurances over time, especially if other nuclear-armed states eventually join the process to demonstrate their responsible stewardship of their military materials (if for no other reason), major contributions will be made that can potentially enhance the prospects for disarmament in the long-term. First,
norms of accountability and the behaviors and practices associated with it will be established through the sharing of information and other activities. Second, through assurance activities themselves, important relationships will develop between people and institutions. In some, but not all, nuclear-armed states, there is a sufficient congruence of people and institutions that will be involved in the provisioning of assurances and other decision-making related to nuclear disarmament. Building, extending, and supporting the norms, behaviors, practices, and relationships are essential for establishing the fundamental trust that will be a pre-cursor to securing political agreements related to disarmament, much less implementing any such agreements. Non-nuclear-weapon states have an important role to play in supporting this process and indicating that such activities are valuable and not taken for granted. Because assurances can be provided unilaterally or by working with others, the effort to build confidence should have nuclear-armed states aiming for the sky and resisting the temptation to race to the bottom for lowest-common denominator solutions. If nuclear-armed states believe that they have effective nuclear security, and non-nuclear-weapon states can strongly impress upon them the benefits accountability and any potential costs they can exact in the absence of it (e.g., political, economic, etc.), the endeavor to build confidence related to 85 percent of the world’s most dangerous materials could result in one of the most important contributions to the international nuclear order.
RECOMMENDATIONS

ALL COUNTRIES—those with weapons-usable nuclear materials and those without, those that possess nuclear weapons and those that do not—have a national security interest in establishing how well these materials are secured whether in civilian or military programs. Just as a government understands that it is in its interests to make sure internal stakeholders have confidence about the nuclear security systems in place, the same is true for building the confidence of allies, rivals, neighbors, and others without disclosing sensitive information. The following are recommendations for nuclear-armed states to take at the 2015 NPT Review Conference and at the 2016 Nuclear Security Summit, followed by recommendations for all non-nuclear-weapon states to take including some that are specific to Summit participants.

ACTIONS FOR NUCLEAR-ARMED STATES

2015 NPT Review Conference Participants

• Establish and extend the mutual accountability norm. Review existing proposals on assurances and use Review Conference statements as an initial opportunity to build the confidence of all NPT member states about effective nuclear security arrangements in each state

• Evaluate the Non-Proliferation and Disarmament Initiative Working Paper on Nuclear Security. Adopt and promote recommendations on military materials within the Review Conference and other relevant institutions (some recommendations pertain to all nuclear-armed states)

2016 Nuclear Security Summit Participants

• Explore opportunities to build, extend, and support norms, behaviors, practices, activities, and relationships (institutional and individual) with and among other nuclear-armed states that will contribute to enhanced security and increased stability through decreasing uncertainty
• Engage in an initial, constructive dialogue with other Summit participants to identify what activities and information others would find assuring (i.e., why and to what extent either relative to other assurances or to other benchmarks)

• Work with other Summit participants to build persuasive cases for internal decision makers as to why providing assurances is worthwhile

• Work with other nuclear-armed states on delineating modalities for unilateral, bilateral, plurilateral, and possibly multilateral voluntary activities to build the confidence of others (other nuclear-armed states, the IAEA, IAEA member states, or even the public, etc.) about the effectiveness of nuclear security pertaining to military materials

**ACTIONS FOR NON-NUCLEAR-WEAPON STATES**

• Use nuclear security to find common ground with other states. Reframe the articulation of the problem to include weapons-usable nuclear materials in addition to nuclear weapons
  
  • Efforts to prevent nuclear detonations and explosions (e.g., the Humanitarian Consequences of Nuclear Weapons joint statements or other related endeavors) should acknowledge the role and contributions of the global nuclear security agenda to that objective

• Develop opportunities, possibly in partnership with nuclear-armed states, to better understand the essential role of nuclear security in implementing and managing the risks associated with disarmament

• Establish and extend the mutual accountability norm. Evaluate and support recommendations of the Non-Proliferation and Disarmament Initiative Working Paper on Nuclear Security, particularly the section regarding military materials within the Review Conference and other relevant institutions (some recommendations pertain to all nuclear-armed states)

2016 Nuclear Security Summit Participants

• Explore opportunities to build, extend, and support norms, behaviors, practices, activities, and relationships (institutional and individual) with and among nuclear-armed states that will contribute to enhanced security and increased stability through decreasing uncertainty

• Seek greater understanding on how assurances work as well as proposals for types of assurances, and be ready to offer realistic short-, medium-, and long-term alternative proposals for assurances while recognizing this is still the beginning of a norm building process on accountability in the nuclear security field
• Use the Nuclear Security Summit to engage in an initial constructive and focused dialogue about what actions and information would have assurance value

  • Brazil and countries that are interested in a follow-on to the joint statement should take a leadership role in eliciting views from joint statement signatories and countries from the Global South

• Work with nuclear-armed states and provide specific inputs to help build the case for their internal decision makers as to why providing assurances would be worthwhile (e.g., how would it influence threat perceptions, diminish uncertainty, contribute to stability, enhance security; in the absence of accountability, what actions are costs are non-nuclear-weapon states willing to exact (economic, political relations, etc.)?

• For assurances already given by nuclear-armed states and to prospectively be given regarding military materials, provide feedback to acknowledge they have been noticed and the extent to which the actions have built confidence
CONCLUSION

THE CONFLUENCE OF SEVERAL FACTORS explains the emergence of nuclear disarmament as an issue for which several vocal countries have continually sought attention within the Nuclear Security Summits. The factors include the renewed prominence given to the prospect of nuclear disarmament through President Obama’s Prague speech and a persistent narrative of non-nuclear-weapon state dissatisfaction supported by the NPT Review cycle momentum, combined with the ready opportunity provided by the innovation in global problem solving at the leader-level represented by the Nuclear Security Summits. As an unintended consequence of efforts to keep the two issues of nuclear security and nuclear disarmament separate, by the time of the third Summit in The Hague, they became directly linked in a bid by more than a quarter of the Summit participants including Algeria, Argentina, Brazil, Chile, Egypt, Indonesia, Kazakhstan, Malaysia, Mexico, New Zealand, Philippines, Singapore, South Africa, Ukraine, and Vietnam to advance disarmament goals within a global nuclear security framework.

Many Summit participants may not accord this endeavor as having great import or impact. The ideas contained within the joint statement and the sympathy inspired in others by those ideas makes the effort worthy of attention and analysis, not least because of the relationship asserted between nuclear security and disarmament and the associated implications. Examining the conceptual connection created reveals both troubled analytic grounding for the proposed linkage between nuclear security and disarmament and troubling implications for the future of both agendas. Rather than affirming nuclear security as subordinated to the ultimate objective of disarmament, the essential role of nuclear security to facilitating, achieving, and maintaining a world free of nuclear weapons is instead made clear.

Nuclear security and disarmament should not be concepts in competition. Nuclear security is necessary for creating the conditions that could facilitate the political agreement needed for disarmament. Actually implementing the disarmament process while mindful of the associated risks also requires a keen appreciation of nuclear security. Finally, nuclear security is essential to maintaining a disarmed
world where weapons-usable nuclear materials and the risks emanating from them will continue to exist for a long time to come.

If approached deftly and without cynicism, an opportunity still exists for advancing nuclear security objectives and, in the long term, enhancing prospects for disarmament. Summit participants are urged to take up in a careful and considered way the proposals related to assurances applied to military materials. Ensuring nuclear-armed states are accountable for the effective security of 85 percent of weapons-usable nuclear material in the world will be a tremendous and meaningful contribution for each nation’s security as well as global security. The currently grim prospects for multilateral approaches resulting in possessors of nuclear weapons relinquishing them anytime soon are hard to avoid. The way in which accountability for the security of military materials can be accomplished, however, can contribute to creating the trust and other elements needed for forward progress toward that vision.
NOTES

1 The term nuclear-armed includes the five acknowledged nuclear-weapon states under the Nuclear Non-Proliferation Treaty (NPT)—China, France, Russia, the United Kingdom, and the United States—and the other nuclear-weapon-capable countries, such as India, Israel, North Korea, and Pakistan. All nuclear-armed states except North Korea participate in the Nuclear Security Summits.

2 “Remarks by President Barack Obama” (Hradcany Square, Prague, Czech Republic, April, 5, 2009), https://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.

3 The Nuclear Security Summit process is anticipated to come to conclusion in its current format of participation at the head of government level in 2016. No decisions have been made as of April 2015 regarding possible successor arrangements to the process and at what level political representation may be convened.

4 Interviews were conducted with senior diplomats and officials responsible for and knowledgeable about nuclear security and/or disarmament. In some cases, multiple people within a government were interviewed. The interviews cited in this analysis were conducted confidentially by the author with the understanding that they were not for individual attribution; therefore, the names of the interviewees have been withheld by mutual agreement. The interviewees are from Argentina, Australia, Brazil, Egypt, France, Germany, India, Indonesia, Japan, Kazakhstan, the Netherlands, Norway, South Africa, Switzerland, Turkey, the United Kingdom, the United Nations, and the United States.


7 Dutch diplomat in discussion with the author, January 6, 2015.

8 “Remarks by President Barack Obama” (Hradcany Square, Prague, Czech Republic, April, 5, 2009), https://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.

9 Ibid.


11 Laura Holgate, United States Sherpa, for the 2016 Nuclear Security Summit (remarks at The Foreign Policy Institute’s Nuclear Security Roundtable, Washington, D.C., January 14, 2015).


16 Turkish official in discussion with the author, March 24, 2015.

17 Dutch diplomat in discussion with the author, October 17, 2014.

18 Dutch official in discussion with the author, October 21, 2014.

19 Swiss official in discussion with the author, December 17, 2014.

20 Ibid.

21 UN official in discussion with the author, October 21, 2014.

22 Indonesian diplomat in discussion with the author, November 24, 2014.

23 Ibid.


25 Ibid.


27 Nuclear-weapon state official in discussion with the author, October 28, 2014.

28 Egyptian diplomat in discussion with the author, December 19, 2014.

29 Argentine diplomat in discussion with the author, December 19, 2014.

30 Ibid.

31 Japanese diplomat in discussion with the author, October 21, 2014.

32 Indian diplomat in discussion with the author, October 21, 2014.

33 Kazakh diplomat in correspondence with the author, January 5, 2015.


35 Ibid.

36 Jayantha Dhanapala et al., Terrorism and Disarmament, (New York: Department for Disarmament Affairs, 2001), 1.

37 Ibid., 2.

38 Argentine diplomat in discussion with the author, December 19, 2014.
TOWARD DISARMAMENT SECURELY

39 Ibid.
40 Japanese diplomat in discussion with the author, October 21, 2014.
41 Ibid.
42 Signatories of the “In Larger Security: A Comprehensive Approach” joint statement include Algeria, Argentina,* Brazil,* Chile, Egypt, Indonesia, Kazakhstan,* Malaysia, Mexico,* New Zealand, Philippines, Singapore, South Africa, Ukraine,* and Vietnam. Except for New Zealand, all states are either Members or Observers of the Non-Aligned Movement. Observers are indicated by an asterisk.
43 Australian official in discussion with the author, October 25, 2014.
44 South African official in discussion with the author, October 21, 2014.
45 Brazilian official in discussion with the author, December 18, 2014.
46 South African official in discussion with the author, October 21, 2014.
47 French official in discussion with the author, December 16, 2014.
48 Ibid.
49 Dutch diplomat in discussion with the author, January 6, 2015.
50 Turkish official in discussion with the author, March 24, 2015.
51 Australian official in discussion with the author, October 25, 2014.
52 Turkish official in discussion with the author, March 24, 2015.
54 Ibid.
55 French official in discussion with the author, December 16, 2014.
56 Australian official in discussion with the author, October 25, 2014.
57 French official in discussion with the author, December 16, 2014.
59 Dutch diplomat in discussion with the author, December 18, 2014.
60 Turkish official in discussion with the author, March 24, 2015.
61 Indian diplomat in discussion with the author, October 21, 2014.
63 Brazilian official in discussion with the author, December 18, 2014.
64 Australian official in discussion with the author, October 25, 2014.
66 See Hartigan, A New Approach to the Nuclear Fuel Cycle, XV; and 5 Priorities for the 2016 Summit.


70 Feiveson et al., *Unmaking the Bomb*, 160.

71 Ibid.

72 They also note that although plutonium would be harder material from which to fashion a bomb, it should not be excluded from consideration. Feiveson et al., *Unmaking the Bomb*, 161.

73 U.S. official in correspondence with the author, March 30, 2015.


75 Ibid., 19.


81 Ibid.

82 Swiss official in discussion with the author, December 17, 2014.

84 Australian official in discussion with the author, October 25, 2014.
85 Norwegian official in discussion with the author, October 20, 2014.
86 Ibid.
89 “The Hague Nuclear Security Summit Communiqué.”
90 Ibid.
97 French official in discussion with the author, December 16, 2014.
98 Ibid.
99 Brazilian official in discussion with the author, December 18, 2014.
100 Nuclear-weapon state official in discussion with the author, October 28, 2014.


105 This list of recommended actions for nuclear-armed states excludes North Korea as it is no longer party to the NPT and does not participate in the Nuclear Security Summits.
ABOUT THE AUTHOR

DEEPTI CHOUBEY was appointed a Fellow at The Foreign Policy Institute (FPI) of the Johns Hopkins University’s Paul H. Nitze School of Advanced International Studies (SAIS) in October 2014. She is a nuclear policy expert with a track record of delivering real-world outcomes reducing nuclear dangers. She has a breadth of experience in high-level government advocacy, independent research and policy analysis, as well as commentary on global nuclear security, non-proliferation, disarmament, and other WMD issues.

At the Foreign Policy Institute, Choubey leads the Nuclear Policy Initiative, which is FPI’s most recent contribution to an established legacy of shaping nuclear policy debates. Her projects include conducting original research and analysis investigating the intersection of nuclear security and disarmament, building and extending the capacity of the Washington diplomatic community in preparation for the 2016 Nuclear Security Summit through convening a series of Nuclear Security Roundtables, and advancing policy debates on nuclear and other contemporary challenges.

From 2010–2014, Choubey was Senior Director for Nuclear and Bio-Security at the Nuclear Threat Initiative (NTI). At NTI, in support of the 2014 Nuclear Security Summit, she co-led the Global Dialogue on Nuclear Security Priorities, involving leading officials, experts, and nuclear industry representatives, which resulted in innovative policy proposals reflected in the final Summit outcomes. She also co-led the inaugural 2012 NTI Nuclear Materials Security Index, a first-of-its-kind public benchmarking of the nuclear security conditions in 176 countries, sparking global discussion among officials and experts about what matters most for nuclear security. From 2006–2010, Choubey was Deputy Director of the Nuclear Policy Program at the Carnegie Endowment for International Peace and Director of the Peace and Security Initiative for the Ploughshares Fund from 2004–2006. She also worked for Ambassador Nancy Soderberg at the International Crisis Group and previous to that had a career in the private sector advising companies on market-leading strategies.
Her research interests include global nuclear security, the nuclear test ban, calculations of non-nuclear-weapon states, the NPT regime and treaty review process, U.S. nuclear security spending, Iran’s nuclear ambitions, and South Asian security. In her career, she has provided analysis for U.S. and foreign media outlets ranging from National Public Radio and the BBC to CNN and NHK. She is a published and widely quoted expert and her op-eds can be found in influential outlets like the Washington Post, and the Los Angeles Times, among others.

Choubey earned her Masters of International Affairs, with a focus on International Security Policy and South Asia, from Columbia University’s School of International and Public Affairs. She also became a Foreign Language and Area Studies Fellow in Hindi and Urdu at Columbia. Her undergraduate degree in Government is from Harvard University. Choubey was a term member of the Council on Foreign Relations from 2009 to 2014 and served on the Term Member Advisory Committee. She is also a former executive board member of Women in International Security (WIIS) and of the Harvard Women’s Leadership Project Alumni Network.
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