



THE PATH TO ZERO

OPPORTUNITIES AND CHALLENGES IN
DISARMAMENT AND NONPROLIFERATION

NUCLEAR DISCUSSION FORUM, 2012



EASTWEST INSTITUTE
Forging Collective Action for a Safer and Better World



PERMANENT MISSION
OF KAZAKHSTAN

THE PATH TO ZERO

REPORT OF THE 2012 NUCLEAR DISCUSSION FORUM

Organized by



The Permanent Mission of the Republic of Kazakhstan
to the United Nations in New York

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The cover image depicts the interior of London City Hall, which houses the Mayor of London and the London Assembly. The 500-meter spiral staircase traverses the full ten stories of the building, symbolizing transparency and easy mobility from the top floor to the ground floor. This landmark on the River Thames was designed by Norman Foster, who also designed the Palace of Peace Reconciliation in Astana, Kazakhstan.

The EastWest Institute does not generally take positions on policy issues. The views expressed in the publication do not necessarily reflect the views of the organization, its Board of Directors or staff. While a number of delegations attended various meetings hosted by the Mission of Kazakhstan and EWI, this report represents the discussions in general and not necessarily the views of those delegations present.

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On the cover: A scarecrow stands tall in a poppy field in northern Afghanistan.

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The EastWest Institute is an international, non-partisan, not-for-profit policy organization focused on confronting critical challenges that endanger peace. EWI was established in 1980 as a catalyst to build trust, develop leadership, and promote collaboration for positive change. The institute has offices in New York, Brussels, Moscow and Washington. For more information about the EastWest Institute or this paper, please contact:

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FOREWORD

In 2012, the EastWest Institute (EWI) and the Permanent Mission of Kazakhstan hosted the second annual Nuclear Discussion Forum (NDF), a series of unofficial meetings that brought representatives of key United Nations Member States together to discuss key achievements and challenges on the path to zero. The objective of the NDF is to identify common ground, build mutual trust, and produce actionable recommendations to push forward progress on the global nuclear non-proliferation and disarmament agenda.

The NDF initially grew out of a shared commitment by EWI and the Permanent Mission of Kazakhstan to build the political will and international support necessary to overcome the obstacles to a world free from nuclear weapons. The 2012 Forum builds on the successes of the NDF's first iteration to provide an informal setting for UN representatives and experts from the arms control community to develop creative solutions to perennial challenges. In the 2012 session, forum members took stock of progress that had been made on the path to zero, revisited enduring issues, and developed new recommendations for practical, concrete non-proliferation and disarmament measures.

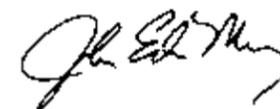
We are immensely grateful for the support of the government of Kazakhstan and EWI's core funders, who continue to make this dialogue possible. In addition we appreciate the support from Dr. Kathryn W. Davis whose passion for peace and a nuclear free world inspired many over many years. Sadly, Dr. Davis passed away this spring at the age of 106.

We are also grateful to the men and women of the 45 missions to the UN who participated in the deliberations. Their helpful input and guidance were instrumental to the forum's efforts to reframe certain issues and revitalize the push for global zero.

A special expression of gratitude is due to the UN High Representative for Disarmament Affairs Ms. Angela Kane and her office; Mr. Geoffrey Shaw, Director of New York Liaison Office of the International Atomic Energy Agency in New York; Dr. Randy Rydell, Senior Political Affairs Officer in the Office of the High Representative for Disarmament Affairs; and Tom Markram, Chief of the Weapons of Mass Destruction Branch (Nuclear Weapons) of the Office for Disarmament Affairs, for the support given to this initiative.

The purpose of this report is twofold. First of all, it is a timely document that incorporates the forum's rich discussions with a substantive background on the issues that Member States found to be among the most pressing. Secondly, it provides forward-looking recommendations with the intention of informing the work of the United Nations First Committee and other disarmament bodies.

It is our sincere desire that this report will enhance engagement with all the relevant stakeholders of the international community. Global zero is a universal goal. We all have a responsibility and the opportunity to contribute to the achievement of that end. For our part, we advocate and promote the conclusions contained within this report to key policymakers and the diplomatic community at large.



John Edwin Mroz



H.E. Byrganym Aitimova



Background

To achieve substantive progress, the disarmament and non-proliferation agenda needs fresh ideas and thinking.

Without question, global opinion is decidedly in favor of a nuclear-free world. While the overwhelming majority of states—three out of four—support the idea of a treaty to outlaw and eliminate nuclear weapons, geopolitical tensions, mistrust, new proliferation threats and the rise of non-state actors have complicated efforts to pursue a world without nuclear weapons. During the 2012 Nuclear Discussion Forum, Ambassador Byrganym Aitimova, Permanent Representative of the Mission of Kazakhstan to the United Nations, laid out some of the larger challenges to a revitalized global-zero agenda: How do we minimize the daunting challenges facing nuclear abolition and what can non-nuclear-weapon states do to persuade nuclear-weapon states to take that path? How can governments be persuaded to honor their responsibility to achieve the goals of non-proliferation and complete disarmament? How do we guarantee future generations that they can live in a secure world free of nuclear weapons? How do we go about the adoption of a Universal Declaration on a Nuclear-Weapon-Free World?

After years of inertia, the end of the last decade witnessed a renewed and reinvigorated effort to reduce the size and operational utility of existing stockpiles, enhance nuclear security and prevent the further proliferation of nuclear weapons. The United States and the Russian Federation signed the bilateral New START treaty, lowering their deployed arsenals by 25 percent over seven years. The 2010 NPT Review Conference provided

much-needed success for the non-proliferation and disarmament regime. A new process dedicated to strengthening nuclear material security was initiated in 2010, followed by a second Nuclear Security Summit in 2012.

Nevertheless, significant challenges remain: treaty non-compliance and the presence of states outside of the NPT; a failure to bring other key disarmament and non-proliferation treaties into force; and the continued reliance on nuclear weapons in national security doctrines.

The “nuclear spring” of 2009-2011, which saw welcome progress in a once-stalled nuclear disarmament agenda, is on the wane. And in many respects, the goal of disarmament has been displaced by other priorities. As UN Secretary-General Dag Hammarskjöld famously noted, in disarmament “... a standstill does not exist; if you do not go forward, you do go backward.”

The Nuclear Discussion Forum

The obstacles to disarmament are as numerous as they are formidable. At the same time, there are numerous opportunities to revitalize the disarmament movement and achieve real progress toward the complete elimination of nuclear weapons. The EastWest Institute is pleased to partner with Kazakhstan—one of the states that has led the way in calling for concrete steps to eliminate all nuclear weapons—in order to explore ways to refresh the



disarmament and non-proliferation agenda.

The Nuclear Discussion Forum, jointly organized and run by the Permanent Mission of the Republic of Kazakhstan to the United Nations and the EastWest Institute since 2011, is one such initiative that has, in the words of one participant, become “part of the UN architecture on nuclear issues.”

This unique forum for Permanent Representatives and First Committee experts in New York provides an unofficial “laboratory” for new thinking and approaches to overcome the political obstacles that hinder progress toward a world without nuclear weapons. Because the NDF operates outside of the United Nations, forum participants are encouraged to embrace a genuine exchange of ideas rather than an exchange of statements. The forum also serves as an opportunity to engage

with innovative experts in disarmament and non-proliferation that will inspire new movement in the work for a world without nuclear weapons. These unofficial sessions then directly feed into the official work of the UN diplomatic community’s non-proliferation and disarmament efforts.

To achieve substantive progress, the disarmament and non-proliferation agenda needs fresh ideas and thinking. This is exactly what Angela Kane, High Representative for Disarmament Affairs, observed in her 2012 speech to the UN Disarmament Commission (UNDC) and the fundamental reason for the NDF’s establishment. As Ms. Kane noted, the work of the UNDC can inspire future General Assembly resolutions and lay the conceptual foundations for new multilateral treaties if the commission can move beyond being a platform for advocating national policies.

This report provides both a general overview of the topics the NDF addressed in its 2012-2013 sessions along with the highlights and findings from each session.

The Forum's Objectives

In 2012, the EastWest Institute and the Mission of Kazakhstan held a series of meetings that brought together representatives from 44 United Nations Member States and outside experts to assess the challenges and opportunities to achieve practical progress on the path to global zero. The forum's stated objectives were as follows:

1. Bring together disparate groups and viewpoints in a sustained dialogue to bridge divides and find common ground in the international agenda on nuclear non-proliferation, disarmament and security.
2. Find common language and opportunities for cooperative action on some of the most contentious issues stalling further progress on disarmament, non-proliferation and nuclear security.
3. Identify actionable recommendations to build upon the momentum of recent successes in the international agenda.
4. Inform the larger work of the First Committee and other disarmament bodies as they seek to make further progress on the road towards nuclear disarmament.

In 2012, NDF sessions focused broadly on three separate, but interrelated topics:

- The role of nuclear weapons in security doctrines,
- Reducing the operational utility of nuclear weapons,
- The path to zero.

While discussing these topics and possible ways forward towards nuclear disarmament, the 2012 Forum also touched upon a number of issues including, but not limited to: nuclear-weapon-free zones, de-alerting, multilateralizing arms control, and the role and status of arms control treaties.

Participants

The 44 Permanent Missions to the United Nations in New York that participated in some or all sessions of the NDF include:

Algeria, Argentina, Australia, Austria, Belarus, Brazil, Chile, China, Costa Rica, Cuba, Egypt, Finland, France, Georgia, Germany, Indonesia, Ireland, Japan, Kazakhstan, Kyrgyzstan, Korea, Malaysia, Malta, Mexico, New Zealand, Nigeria, Norway, Pakistan, Philippines, Poland, Portugal, Romania, Russia, Spain, Sweden, Switzerland, Tajikistan, Tanzania, Turkey, Turkmenistan, Ukraine, United Kingdom, United States and Uruguay.

In addition, we benefitted from the participation and close involvement of the United Nations Office for Disarmament Affairs (UNODA) and the International Atomic Energy Agency (IAEA). Special thanks are due to Angela Kane, High Representative for Disarmament Affairs, Randy Rydell at the UNODA, Geoffrey Shaw of the IAEA and Roman Hunger of the Office of the President of the 67th session of the General Assembly. —all of whom participated in the Nuclear Discussion Forum. We would also like to express our profound appreciation to the distinguished speakers who helped guide the discussions.

This report provides both a general overview of the topics the NDF addressed in its 2012-2013 sessions along with the highlights and findings from each session. It represents the authors' observations and assessments and do not necessarily reflect the views of the EastWest Institute or the Mission of Kazakhstan. Nothing in this report should be attributed to any UN Member State representative. It is not a consensus report, nor was it shared with participants prior to publication. Any errors or omissions are the responsibility of the authors. This report is a reflection of the dialogue that occurred and may not comprehensively cover all the issues, perspectives and regions involved in the field of disarmament, though an attempt has been made to present a balanced representation.

Overview: The Push for Zero

On July 16, 1945, the detonation of the world's first atomic device in the desert of New Mexico irreversibly ushered in the nuclear age. Prior to this infamous test, however, scientists at the Manhattan Project expressed their reservations for the destructive power of nuclear weapons, the impending nuclear arms race and the need for effective international control. Presciently, a June 1945 report authored by the Manhattan Project physicists argued against the use of nuclear weapons, stating that "unless an effective international control of nuclear explosives is instituted, a race of nuclear armaments is certain to ensue following the first revelation of our possession of nuclear weapons to the world. Within ten years other countries may have nuclear bombs."¹ Even at the very onset of the nuclear age, it was understood that road to nuclear disarmament would be arduous and the consequences disastrous if the international community failed to achieve it.

The United Nations has long been the center of the international community's global disarmament and non-proliferation movement, working with States Parties and civil society to address the risk of nuclear weapons and their proliferation. Indeed, the first resolution passed by the United Nations General Assembly (UNGA) in January 1946 was the "The Establishment of a Commission to Deal with the Problem Raised by the Discovery of Atomic Energy," in which the UNGA called for specific proposals "for the elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass

destruction."² The resolution was, in effect, the opening move towards global zero.

Unfortunately, nuclear-weapons testing continued unabated, as more states acquired nuclear weapon capabilities and developed ever more destructive bombs. The political and military tensions of the Cold War would push nuclear arsenals to numbers that were unimaginable in 1945—and still unimaginable today. As nuclear arsenals continued to expand and the number of nuclear-weapon states (declared and non-declared) continued to rise, the goal shifted from complete disarmament to limiting the growth and spread of nuclear weapons. However, recent declarations and disarmament measures demonstrate that the goal of complete nuclear disarmament has returned as a topic of mainstream debate. Indeed, this is no small success.

The Revitalized Global Zero Agenda

The vision of a world without nuclear weapons reemerged in 2007 with new drive and support. The January 4, 2007 *Wall Street Journal* op-ed "A World Free of Nuclear Weapons" by four elder U.S. statesmen—George Shultz, William Perry, Henry Kissinger and Sam Nunn—was an important step in revisiting the arms control debate.

The subsequent formation of Global Zero in 2008 was another important step in bringing the concept of complete disarmament back

Recent declarations and disarmament measures demonstrate that the goal of complete nuclear disarmament has returned as a topic of mainstream debate. Indeed, this is no small success.

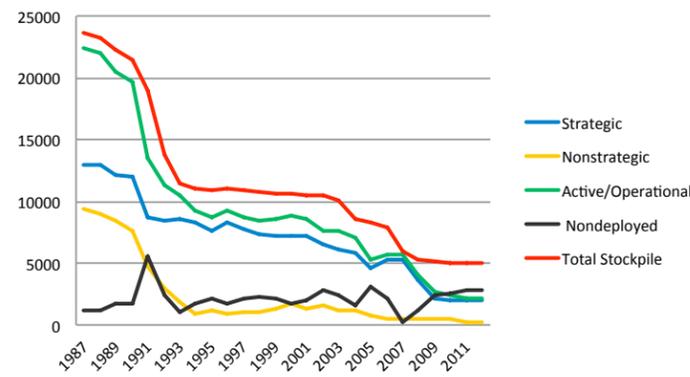


Fig. 1. U.S. Nuclear Weapons

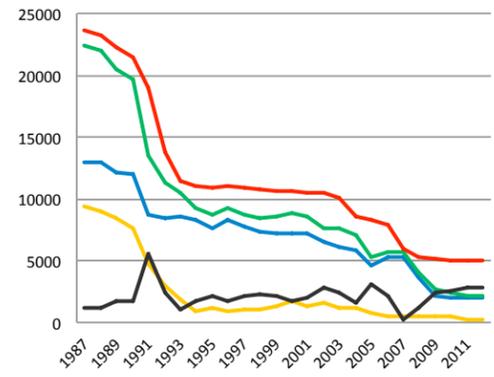


Fig. 2. Russian Nuclear Weapons

to the forefront of disarmament discussions. The group consists of several hundred world leaders from government, non-governmental organizations, academia and business who advocate for the complete elimination of nuclear weapons and suggest practical steps to achieve that end. Having served as the cornerstone of the nuclear non-proliferation and disarmament movement since its inception, the United Nations' leadership was quick to welcome the return of serious discussion on the complete elimination of nuclear weapons. In an address at an EWI-organized event at the United Nations in October 24, 2008, United Nations Secretary-General Ban Ki-moon called a nuclear free-world "a global public good of the highest order" and offered a five-point plan to seize the momentum resulting from "the global outpouring of ideas to breathe new life into the cause of nuclear disarmament."³ Included among the proposals were negotiations for a nuclear-weapons convention, backed by a strong system of verification.

In 2007, a revised draft for a Nuclear Weapons Convention (NWC) was submitted by Costa Rica and Malaysia, updating a draft Costa Rica had introduced in 1997 as a discussion document. This draft, under discussion in the Conference on Disarmament (CD), committed Nuclear Weapons States (NWS) to eliminate their nuclear arsenals in a series of phases and further prohibited all states from participating in the "development, testing, production, stockpiling, transfer, use and threat of use of nuclear weapons."⁴ Support for a NWC has steadily grown, with 146 states now in support of such a convention.⁵

Many world leaders were quick to embrace the goal of global zero, including newly-elected President Barack Obama. Building on the 2007 Shultz et al. op-ed, global opinion leaders and policymakers followed suit in penning pieces calling for the abolition of nuclear weapons.⁶ In April 2009, mere months after being inaugurated, President Obama delivered his famous Prague speech, in which he spoke of the U.S. desire to "seek the peace and security of a world without nuclear weapons" and spelled out his vision for strengthening the global effort to curb the proliferation of nuclear weapons.⁷

Then in September 2009, at a UN Security Council (UNSC) meeting chaired by President Obama with the participation of 13 other heads of state—only the fifth such meeting to be held at this level—the UNSC adopted resolution 1887, which resolved "to seek a safer world for all and to create the conditions for a world without nuclear weapons." The resolution further called on States Parties to the NPT to comply fully with all their treaty commitments and obligations.⁸

During this time, calls for nuclear disarmament were consistently put forth by a wide range of countries. Since 2007, the Non-Aligned Movement (NAM) has sponsored a resolution at every session of the UN First Committee calling for a working group to discuss the possibility of convening a Special Session of the General Assembly devoted to Disarmament (SSOD-IV). NAM states also submitted a working paper to the 2010 NPT Review Conference (RevCon) that outlined a three-phased plan for the complete elimina-

tion of nuclear weapons. Similarly, at its inaugural summit in December 2011, the Community of Latin American and Caribbean States (CELAC) issued a Special Communiqué on the Total Elimination of Nuclear Weapons.

The signing of a new strategic arms reduction treaty (New START) between the United States and Russia in April 2010 further boosted the momentum of the disarmament movement. Shortly thereafter, the 2010 NPT RevCon, after much hand-wringing, successfully produced a consensus document that recommitted the States Parties to the basic bargain of the NPT and introduced action plans on non-proliferation, disarmament and nuclear energy. The final document resolved "to seek a safer world for all and to achieve the peace and security of a world without nuclear weapons, in accordance with the objectives of the Treaty." The document further reaffirmed the unequivocal undertaking of the nuclear-weapon states to accomplish "the total elimination of their nuclear arsenals leading to nuclear disarmament..."⁹

As Figures 1 and 2 indicate below, the United States and Russia have steadily reduced their nuclear arsenals since the end of the Cold War. The U.S. still has some 4,688 nuclear weapons and Russia's arsenal is estimated to stand at 4,430.¹⁰ These figures, however, do not include warheads awaiting destruction, which add significantly to the total. The U.S. is estimated to have 3,000 retired warheads awaiting destruction and Russia 5,500.¹¹ Despite the consistent downward trend in global nuclear stockpiles, Figure 3 shows how many nuclear weapons still remain.

By 2011, the momentum of the "nuclear spring" had begun to dissipate. One significant challenge to sustaining this momentum is that the end goal is indeed distant and the path difficult and often obscured. Recently, Secretary-General Ban Ki-moon described his feelings on the disarmament landscape as "mixed," noting that nuclear disarmament progress is off track. Though the recent surge behind global zero has waned, there is a very real sense that an indelible change has been wrought on the disarmament agenda. As one analyst put it: "The most recent wave in support of zero has crested, leaving behind an altered nuclear landscape.... Zero will always be in the picture now. ... The difficult agenda that lies ahead is far less about zero as an end state than about the incremental, near-term steps required to get there."¹²

Delivering progress on the incremental, near term steps has been an important focus of the EastWest Institute and Mission of Kazakhstan's Nuclear Discussion Forum. Below, we will lay out where we still need to go, some of the major challenges and how progress can be achieved in the short term to bolster the long-term goal of global zero. It will be a challenge to get numbers significantly lower until the missions for and reliance on nuclear weapons are also eliminated. The United States and Russia share a primary responsibility for the next concrete steps in disarmament, but the burden is hardly theirs alone. As this paper will demonstrate, there are important steps that the other nuclear-weapon states and non-nuclear-weapon states can undertake.

Source:
Bulletin of
the Atomic
Scientists

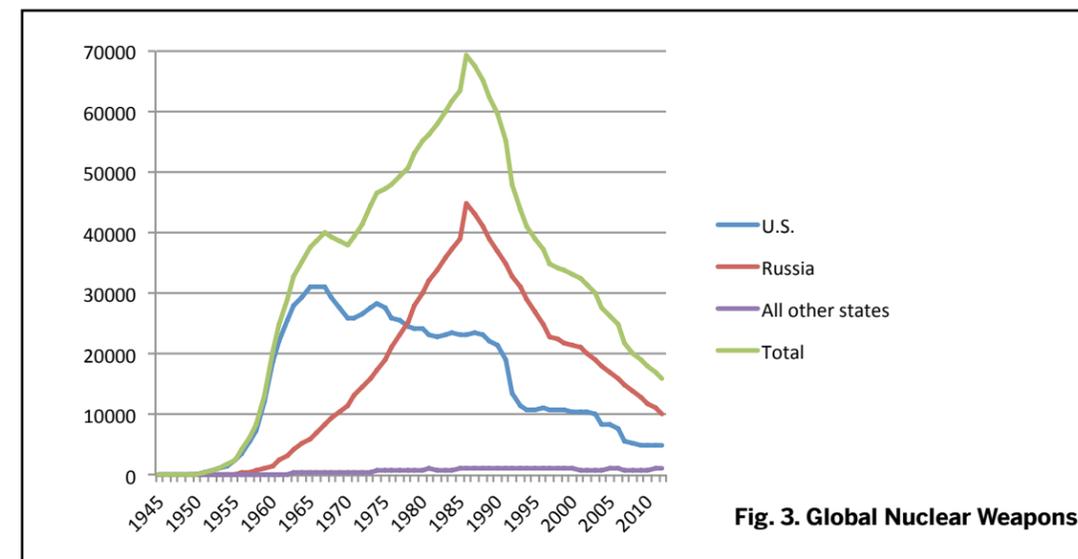


Fig. 3. Global Nuclear Weapons

Reducing Operational Utility

One question that emerged from discussions at the NDF was if leaders fear that nuclear terrorism is a greater proximate threat than nuclear war, why then do we have missiles on high-alert status?

In addition to reducing the risk of nuclear war by decreasing the overall number of nuclear weapons, arms control advocates have been pushing for measures that will diminish the operational utility of nuclear weapons—that is, reducing the number of scenarios in which they can be used and how quickly they can be used. Limiting the role of nuclear weapons is an essential first step in reducing their utility, which in turn is a prerequisite for the complete elimination of nuclear weapons. One can hardly expect nuclear-weapon states to eliminate their arsenals when nuclear weapons are considered strategically important. This section explores the reduction of operational readiness of nuclear arsenals and the establishment of nuclear-weapon-free zones as steps to reduce the strategic importance of nuclear weapons.

Nuclear Weapon Free Zones (NWFZ) can be pursued as a kind of “back door” route to disarmament, limiting the geographic space in which nuclear weapons can be deployed and reducing the number of states that constitute “legitimate” targets of nuclear weapons. De-alerting has been pursued as another route to physically limit how quickly nuclear weapons can be deployed, delaying launches for hours or even days. The responsibility for de-alerting rests solely in the hands of the nuclear-weapon states (NWS)—they set the level of readiness and decide whether to extend a nuclear umbrella. NWFZ are the responsibility of non-nuclear-weapon states

(NNWS) who wish to relinquish arsenals, abolish nuclear weapons programs and decline the defense commitments of a nuclear umbrella. They send a firm signal to NWS that nuclear weapons play no role in their security. Only when nuclear weapons have been delegitimized and de-emphasized in the security doctrines of both NWS and NNWS can global zero make real headway. Disarmament that results in the numerical reduction of forces while states expand the missions for and reliance on nuclear weapons is limited progress at best.

Reducing Alert Status

Throughout the Cold War, the United States and the Soviet Union kept their massive strategic nuclear arsenals on high-alert status, meaning that a nuclear attack could be launched within minutes of receiving an order to launch. Although the Cold War has long since passed, this commitment to high-alert status has not changed; almost 2,000 intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs) can be launched within a few minutes of an order to do so. The states with the largest nuclear arsenals—the United States and Russia—have not adopted a “no first use” policy. The fear of an incapacitating first strike has led each side to adopt a “launch on warning” posture, in which a retaliatory strike could be launched within some 10-25 minutes of receiving the order.¹³

Country	Estimated Stockpile	Warheads on Alert	Notes
United States	5,000	920	450 ICBMs on alert; 540 SLBMs on alert.
Russian Federation	4,500	890	Primary warheads on ICBMs
France	300	80	One nuclear-powered, ballistic missile submarine on patrol
United Kingdom	225	48	One nuclear-powered, ballistic missile submarine on patrol
China	240	0	Warheads not mated with delivery vehicle
Pakistan	100	0	Warheads not mated with delivery vehicle
India	90	0	Warheads not mated with delivery vehicle
Israel	80	0	Warheads not mated with delivery vehicle
Estimated Total	10,540	1,940	

Table 1: Estimated Alert Nuclear Forces, 2012

One of the perceived advantages of maintaining a high-alert status of nuclear weapons was to increase the time horizon for U.S. and Soviet leaders to make a decision about whether or not to launch a nuclear attack. Given that the dynamic between the two nuclear superpowers has fundamentally changed since the end of the Cold War, there is very little expectation that the United States and Russia would launch an intentional nuclear exchange.

Only the United States and Russia keep their forces on a status that would allow them to launch within minutes of an order to do so. The United Kingdom and France also maintain deployed strategic warheads, relying solely on ballistic missile submarines that are believed to need a longer time to prepare for launch than U.S. or Russian warheads. Experts believe that China, Pakistan, India, and Israel do not mate warheads with delivery vehicles. Among the nine nuclear-armed states, only China and India have declared no-first-use policies.¹⁴

In the absence of the Cold War antagonisms, it is anachronistic for the United States and Russia to continue to rely on Cold War-influenced security doctrines and military postures. Of the many pressing security concerns facing the United Nations, armed conflict between Russia and the United States escalating to nuclear exchange is seen as highly unlikely—a point repeatedly emphasized in NDF discussions. One question that emerged from discussions at the NDF was if leaders fear that nuclear terrorism is a greater proximate threat than nuclear war, why then do we have missiles on high-alert status?

The steadfast refusal by the United States and Russia to adjust the operational status of their nuclear arsenals is a source of frustration for NNWS and other NWS alike. These countries do not maintain weapons at a higher state of operational readiness and find it increasingly difficult to accept the risks inherently associated with such operational readiness. Russia and the United States have a similar stake as the rest of the international community in ensuring that their massive ar-

Source: Reproduced from Hans M. Kristensen and Matthew McKinzie, “Reducing Alert Rates of Nuclear Weapons,” New York and Geneva: United Nations Institute for Disarmament Research, 2012, 2.

De-alerting would constitute a much-needed confidence-building and transparency measure not only between those nuclear-weapon states that continue to maintain nuclear-alert levels of the Cold War period but also between nuclear-weapon states and non-nuclear-weapon states.

senals are made secure from an unintended launch caused by technical malfunction, accident, or unauthorized launch. Though the possibility of an accidental or unauthorized launch may seem remote, in the past 30 years there have been at least four false alarms that nearly led to nuclear war.¹⁵

Participants agreed that the lowering of the operational status of nuclear weapons undoubtedly reduces the risk of such a disaster. Given the widespread concern about the nuclear ambitions of some terrorist groups and other proliferation threats, the potential liability of high-alert status of warheads spreads well beyond the NWS that maintain strategically deployed arsenals. Commenting on this threat, some experts note:

“In the future, the danger of mistaken or unauthorized use or of the exploitation of nuclear weapons by terrorists is likely to grow rather than diminish. War-ready nuclear postures keep hundreds of nuclear weapons in constant motion, changing combat positions or moving to and from maintenance facilities. This affords terrorists opportunities to steal them as they are transported and stored temporarily—the relatively exposed phase of their operation.”¹⁶

De-alerting will minimize the probability of an accidental nuclear exchange. As one participant pointed out, detonation is a global issue; an accidental nuclear exchange would have catastrophic humanitarian consequences no less severe than an intentional exchange. As a result, all states have a vested interest in the alerting decisions of the NWS.

Furthermore, de-alerting would constitute a much-needed confidence-building and transparency measure not only between those nuclear-weapon states that continue to maintain nuclear-alert levels of the Cold War period but also between nuclear-weapon states and non-nuclear-weapon states. NDF discussions roundly rejected the notion that de-alerting is solely the domain of the NWS. While most nuclear powers have taken steps to reduce the role of nuclear weapons in their strategic doctrines, as well as offering negative and positive security assurances, the danger of accidental or unauthorized use of nuclear weapons that remain on high alert

status still looms. In the absence of dramatic cuts to nuclear arsenals and stockpiles, one step that can be taken is to remove nuclear weapons from high-alert status; this will immediately decrease the risk of accidental or unauthorized use of these weapons.

One forum participant suggested that reductions in alert status can at first be adopted unilaterally, as prior experience with negative security assurances has shown that NWS are reluctant to make multilateral, legally binding commitments. These can include measures such as setting safeguards/procedures that require a longer period of time to pass before nuclear weapons can be launched (to better ensure that information transmitting a need for use of nuclear weapons is accurate, and to avoid false alarms), de-targeting (reprogramming missiles to have no target or setting them to open ocean targets), and de-mating (removing warheads from delivery systems). All of these steps will strengthen barriers against accidental/inadvertent use, and can also constitute confidence-building measures between NWS and NNWS.

Speakers noted some of the arguments raised against de-alerting nuclear forces. One expert indicated that the proposal reveals a paradox: de-alerting must be verifiable, but if it is verifiable, it could lead to a “re-alerting” arms race in a crisis. In a hypothetical scenario, rising tensions would lead two adversaries to race to re-alert their arsenals, increasing instability, uncertainty, and the likelihood for one side to decide to strike first. However, arms control experts have argued that these claims are largely specious.¹⁷

Nuclear-Weapon-Free Zones (NWFZ)

Nuclear-weapon-free zones are an innovative regional response to the dangers of nuclear weapons. A NWFZ is “any zone, recognized as such by the United Nations General Assembly, which any groups of states, in the free exercise of their sovereignty, have established by virtue of a treaty or convention whereby: a. The statute of a total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone is defined; b. An international system of verification and control is established to guarantee compliance with obligations derived from that statute.”¹⁸

NWFZs were widely seen in the NDF as a source of fresh thinking and cooperation. They are also recognized as an effective way for NNWS to take the lead in sustaining disarmament, developing their own models of cooperation that can be extended cross-regionally or even globally.

One of the principal security benefits that NWFZs aim to provide to their signatories is a legally-binding negative security assurance (NSA) from the declared NWS. By signing and ratifying the treaties’ protocols, they are obligated to refrain from using or threatening to use nuclear weapons against NWFZ signatories. The first legally-binding NSAs were provided in Additional Protocol II of the Treaty of Tlatelolco. Though the assurances were not universal, this set an important precedent that NSA protocols constitute a key element of NWFZ treaties. Nuclear-weapon-free zones are also seen as important confidence-building mechanisms and instruments for regional denuclearization.

During discussions, participants highlighted the importance of NWFZs for the non-proliferation and disarmament regime. The creation of these zones is a big step forward, significantly contributes to regional security, especially in areas that enjoy consensus opinions on disarmament. However, one participant observed that while NWFZ play an important role in sustaining disarmament efforts, they are not effective as tools to force countries to disarm.

At the same time, participants noted with disappointment the failure to establish a Middle East Weapons of Mass Destruction Free Zone (WMDFZ). However, it was argued in the discussions that it is still possible for the negotiations on a Middle East WMDFZ to provide a positive step in worldwide disarmament efforts. The degree of frustration with the lack of progress on the Middle East WMDFZ demonstrates the value of the concept of nuclear-weapon-free zones for disarmament and non-proliferation. It is often suggested as a “back-door route” towards disarmament, whereby more and more of the world restricts the presence of nuclear weapons.

One of the presenters focused on the necessity and continued relevance of NWFZ, and the ways to push a Middle East WMDFZ forward. One suggestion was the creation of a new forum to host a dialogue on the security

elements of a NWFZ. This would accomplish two things. It would provide a more conducive context to discuss how NWFZ fit in the disarmament framework and identify potential areas of collaboration between NWFZ states. In addition, states would have the opportunity to develop a stronger understanding of the terms and conditions for peaceful use of nuclear energy, its environmental impact and the development of the nuclear fuel cycle.

Noting the continued lack of progress on the Middle East WMDFZ despite explicit calls for such action during every NPT Review Conference since 1995, some NDF participants offered useful suggestions on how to move negotiations forward. One speaker advocated convening experts’ consultations on limited topics without resolving strategic concerns or historical grievances. This would avoid the hurdle that all too often plagues disarmament negotiations where nothing is agreed upon until everything is agreed upon.

For example, consultations could focus on ballistic missiles. These discussions would be facilitated by the fact that there is an obvious need for additional limitations of these weapons in both regional and global contexts, such restrictions are easily verified, and there is a broad body of experience for the consultations to draw upon. Alternatively, expert consultations could address non-strategic nuclear weapons. These weapons are smaller and therefore less secure, are more difficult to control, and are more likely to be used in a conventionally armed conflict.

In addition to moving forward in a piecemeal fashion on the topics under discussion in consultations, forum members also proposed a gradual inclusion, first of states willing to participate in the discussion, and slowly drawing holdouts in over time. Although the eventual goal is universal adherence, one speaker pointed out that qualitative discussions are more important than quantitative ones.

As a next step, it was recommended that a regional security dialogue be established that features a more inclusive discussion and enhances mutual understanding. Although this may not immediately lead to a traditional NWFZ, the end result could be a new but nevertheless effective model.

Participants noted with disappointment the failure to establish a Middle East Weapons of Mass Destruction Free Zone

The creation of these zones is a big step forward, significantly contributes to regional security, especially in areas that enjoy consensus opinions on disarmament.

Treaty	Zone of Application	Signed In Force Parties Duration	Basic Prohibitions	Negative Security Assurances from NWS
Treaty of Tlatelolco	Mexico, the Caribbean, Central America, and South America (33 eligible countries).	Signed: 2/14/67 In Force: 4/22/68 Parties: 33 Duration: indefinite	No testing, use, manufacture, production, acquisition, receipt, storage, installation, or deployment of nuclear weapons; no encouraging the above.	NWS will not use or threaten to use nuclear weapons against Treaty Parties. (This is the only NWFZ whose NSA protocol is signed and ratified by all five NWS.)
Treaty of Rarotonga	Australia, New Zealand, and the South Pacific Forum (16 eligible countries).	Signed: 8/6/85 In Force: 12/11/86 Parties: 13 Duration: indefinite	No production, acquisition, possession, testing, or control of any nuclear explosive device; no encouraging the above; no fissile material or related equipment provided to NWS or NNWS unless under NPT and IAEA regulations; no radioactive dumping or storage.	NWS will not use or threaten to use any nuclear explosive device against Treaty Parties or territories of states that have acceded to the Treaty. All have signed, but the United States has not ratified.
Bangkok Treaty	Southeast Asia (10 eligible countries).	Signed: 12/15/95 In Force: 3/27/97 Parties: 10 Duration: indefinite	No production, acquisition, possession, testing, transporting, stationing, or control of nuclear weapons; no encouraging the above; no fissile material or related equipment provided to NWS or NNWS unless under NPT and IAEA regulations; no radioactive dumping or storage.	NWS will not use or threaten to use nuclear weapons against any State Party, or in the zone none signed.
Pelindaba Treaty	Africa including island States (53 AU members and Morocco).	Signed: 4/11/96 In Force: 7/15/09 Parties: 29 Duration: indefinite	No research, development, production, acquisition, assistance, control, or testing of nuclear explosive devices; no assistance or encouragement of the above; mandates reversal of nuclear capabilities according to IAEA procedures; mandates IAEA physical protection procedures; prohibits armed attack of nuclear installations.	NWS will not use or threaten to use nuclear weapons against any Treaty Party or any territory in the zone all have signed; China, France, UK ratified.
Central Asian Treaty	Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan)	Signed: 8/9/2006 In Force: 3/21/2009 Parties: 5 Duration: indefinite	No research, development, manufacturing, stockpiling, acquisition, possession, testing, or control over any nuclear weapon or other nuclear explosive device; no assistance or encouragement of the above; mandates the entry into force an IAEA Safeguards Agreement and the Additional Protocol within 18 months after the treaty's entry into force; mandates export controls under which member states will not provide source or any special fissionable material or related equipment to any NNWS that has not concluded an IAEA comprehensive safeguards agreement and Additional Protocol; mandates IAEA physical protection procedures and standards expressed in the Convention on Physical Protection of Nuclear Material.	NWS will not use or threaten to use nuclear weapons against any Treaty Party.
Mongolia Nuclear-Weapon-Free Status	Mongolia	Adopted by the Parliament of Mongolia on February 3, 2000; UN GA Resolution recognizing nuclear-free status— adopted November 20, 2000	An individual, legal person or any foreign State shall be prohibited on the territory of Mongolia from developing, manufacturing, or otherwise acquiring, possessing, or having control over nuclear weapons; stationing or transporting nuclear weapons by any means; dumping or disposing nuclear weapons-grade radioactive material or nuclear waste. Transportation of nuclear weapons, parts, or components thereof, as well as of nuclear waste or any other nuclear material designed or produced for weapons purposes is prohibited.	NWS joint statement on October 5, 2000 on security assurances in connection with Mongolia's nuclear weapon-free status transmitted to UN Security Council.

Table 2: Nuclear Weapon Free Zones

NWFZs were widely seen in the NDF as a source of fresh thinking and cooperation. They are also recognized as an effective way for NNWS to take the lead in sustaining disarmament, developing their own models of cooperation that can be extended cross-regionally or even globally.

Multilateral Disarmament

A growing chorus of voices, from nuclear weapons states and non-nuclear-weapon states alike, has called not only for further reductions of nuclear weapons by the two nuclear superpowers, but also for the inclusion of all states possessing nuclear weapons into the disarmament process.

Overwhelming numbers of nuclear weapons, once the mainstay of national security strategies, have receded from the forefront of the defense policies of the United States and Russia. This is borne out by the massive reductions of the nuclear arsenals of these two countries over the past 25 years—from a combined stockpile of 68,317 in 1986 to less than 15,000 in 2013.¹⁹ A growing chorus of voices, from nuclear weapons states and non-nuclear-weapon states alike, has called not only for further reductions of nuclear weapons by the two nuclear superpowers, but also for the inclusion of all states possessing nuclear weapons into the disarmament process. Although the limited progress achieved in the field of multilateral disarmament should be recognized, significant obstacles and challenges remain that continue to hamstring further movement down the path to a world without nuclear weapons.

New Strategic Arms Reduction Treaty (New START)

As possessors of over 90 percent of the world's total inventory of nuclear weapons, a broad international consensus places the onus of nuclear disarmament squarely on the shoulders of the United States and Russia.²⁰ The New START treaty between the U.S. and Russia demonstrated the two countries' commitment to taking concrete steps toward disarmament, a move that received near

universal endorsement and commendation at the 2010 NPT Review Conference. Under New START, the United States and Russia agreed to a limit of 1,550 deployed strategic warheads on 700 deployed strategic delivery vehicles (intercontinental ballistic missiles, submarine launched ballistic missiles, and heavy bombers) by 2018. Significantly, New START restored inspection and verification measures between the U.S. and Russia that had lapsed since the expiration of START I in 2009. Though many have criticized the scope and depth of the reductions under the much heralded New START treaty, the agreement nevertheless represents an important step in the disarmament process.

On the face of it, additional cuts would seem likely given that both the U.S. and Russia have expressed interest in seeking further reductions beyond New START limits.²¹ At the treaty signing ceremony in April 2010, President Obama indicated that the U.S. would pursue negotiations with Russia for deeper cuts, including non-strategic and non-deployed weapons, which were not included in New START limits.²² A policy review by the Obama administration, with the support of the Department of Defense and Joint Chiefs of Staff, concluded in 2012 that U.S. national security objectives and obligations could be met with an arsenal of 1,000-1,100 warheads, rather than the 1,550 allowed under New START.²³ Encouragingly, Russia also seems to support deeper reductions, and in fact is already below New START limits on warheads and delivery vehicles.²⁴

Despite these positive indicators, for a variety of reasons it is unlikely that the U.S. and Russia will negotiate a follow-on arms control treaty in the near future. Many analysts in the arms control community concluded, not unreasonably, that the reductions under New START were modest at best, requiring minimal sacrifice from either of the treaty's signatories. Nevertheless, the acrimonious debate surrounding New START's ratification in the U.S. Congress very nearly scuttled the treaty. Russia, for its part, has threatened to withdraw from the New START treaty if the U.S. proceeds with missile defense deployments in Europe.²⁵ A combination of political partisanship, an increasingly fractious U.S.-Russian relationship, and the need to address non-deployed and nonstrategic nuclear warheads, missile defense, and conventional armaments all but precludes another treaty with any meaningful impact.

Mindful of these obstacles, the Obama administration is now considering an informal agreement within the New START framework that would circumvent the need for Congressional approval.²⁶ There is a precedent for bilateral nuclear reductions outside of formal treaties in the 1991-92 Presidential Nuclear Initiatives, which resulted in the reduction of thousands of tactical nuclear weapons by both countries. Although such a proposal would undoubtedly encounter considerable political backlash and draw accusations of executive overreach, Obama may take solace in the fact that a majority of Americans support U.S.-Russian nuclear arms reductions.²⁷

Regardless of what form they come in, further reciprocal reductions would reduce the risk that a nuclear weapon is used, enhance the non-proliferation norm and impel other nuclear-armed states to engage in a multilateral disarmament process.

Disarmament by Nuclear-Weapon States

Indeed, the five permanent members of the UN Security Council (P5), and the only states recognized by the Nuclear Non-Proliferation Treaty (NPT) as nuclear-weapon states, have created a regularized dialogue series to address issues related to multilateral disarmament. The group met in Geneva in April 2013, which led to discussions on NPT reporting requirements, as well as transparency and verification experiences.²⁸ P5 Conferences were held previously in London in 2009, Paris in 2011, and Washington in 2012, with a fifth conference planned for 2014. Since then, the conferences have generated a series of expert exchanges, including a working group led by China to standardize nuclear definitions and terminology. Although it remains to be seen whether the nuclear weapons states will achieve meaningful results before the 2015 NPT Review Conference, the P5 meetings are touted as significant by virtue of the fact that a regular dialogue on multilateral disarmament is now in place where previously one did not exist.

A combination of political partisanship, an increasingly fractious U.S.-Russian relationship, and the need to address non-deployed and nonstrategic nuclear warheads, missile defense, and conventional armaments all but precludes another treaty with any meaningful impact.

Despite the positive rhetoric about commitments to a world without nuclear weapons, a significant obstacle inhibiting the achievement of this goal is that every state with nuclear weapons is planning or engaged in the modernization of their nuclear weapons, delivery vehicles, or related infrastructure.

As the Russian and U.S. nuclear arsenals drop to levels not seen since the late 1950's, the focus of the disarmament debate has shifted to include the participation of all states with nuclear weapons. Of the P5 members, the United Kingdom has moved the closest towards nuclear disarmament. The UK is consistently vocal in its support for global zero, and in 2010 announced that it would limit its nuclear arsenal to 225 warheads, with a ceiling of 160 operationally deployed warheads.²⁹ France has also made commitments to reduce its nuclear arsenal, highlighted by its unilateral reduction in 2008 to a stockpile of less than 300 nuclear weapons.³⁰ However, further reductions beyond this number are unlikely, given France's recent modernization efforts and the centrality of nuclear weapons to French national security policy.³¹

Despite the positive rhetoric about commitments to a world without nuclear weapons, a significant obstacle inhibiting the achievement of this goal is that every state with nuclear weapons is planning or engaged in the modernization of their nuclear weapons, delivery vehicles, or related infrastructure.³² Many of these countries are developing or deploying new types of nuclear-capable ballistic and cruise missiles, and at least two states are actively increasing the size of their nuclear arsenals.³³ Such actions are not only destabilizing, but also complicate the multilateral disarmament process given that nuclear-armed states have expressed their unwillingness to engage in disarmament until the U.S. and Russian nuclear arsenals reach parity with their own. Modernization programs by the U.S. and Russia belie a sincere commitment to disarm and as a result are grist to the mill for states seeking to avoid disarmament. Likewise, the U.S. and Russia point to a wide number of countries that are updating or upgrading their nuclear weapon capabilities as justification for their contin-

ued maintenance of thousands of nuclear weapons. Thus, a glaring contradiction has emerged where nuclear weapons possessors claim to pursue disarmament negotiations in good faith while at the same time undertake substantial investments in the maintenance of their nuclear arsenals.

One participant at the NDF noted a number of initiatives underway through the UN that would restore the international community's focus on multilateral disarmament. The Conference on Disarmament, the sole multilateral disarmament forum of the United Nations, has been mired in procedural deadlock for over 16 years. In order to bypass this stagnant negotiation body, in January 2013 the UN General Assembly passed a resolution to establish an open-ended working group to "develop proposals to take forward multilateral nuclear disarmament negotiations for the achievement and maintenance of a world without nuclear weapons."³⁴ The group will meet for three sessions in 2013 and submit a report to the UN General Assembly, the Conference on Disarmament, and the Disarmament Commission. Predictably, a number of nuclear-armed states opposed the model of an open-ended working group that does not operate on the basis of consensus, which would remove the power of any one country to veto a proposal deemed unacceptable. Furthermore, the UN General Assembly will hold a high-level meeting specifically on nuclear disarmament in September 2013.

Given the modesty of the reductions under New START, one of the speakers called for the U.S. and Russia to accelerate implementation of the treaty measures. Moving forward, the presenter recommended that the next step in bilateral reductions would be to limit the entire inventory (strategic, non-strategic, deployed and non-deployed) to about 2000-2500 warheads, with a cap of 1000 de-

ployed warheads. The speaker conceded that the negotiation process would need several years to resolve many of the major stumbling blocks, including more intrusive verification measures. For example, devising a monitoring system to verify the elimination of non-deployed weapons would require creativity and flexibility.

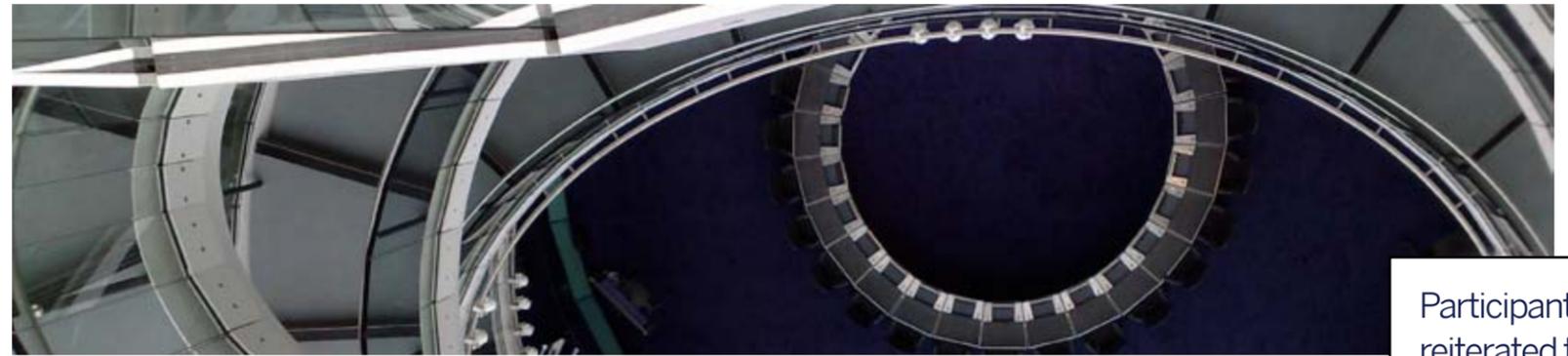
A broad consensus that emerged during the NDF was the expectation that there is still room for one more round of bilateral reductions between the U.S. and Russia before it becomes necessary to include other nuclear countries. Participants noted that only when the two nuclear superpowers achieve meaningful reductions would the rest of the nuclear possessor states be able to follow suit. Nevertheless, members of the forum also recognized the domestic political difficulties involved in ratifying a treaty with more dramatic reductions. It remains unclear whether Russia is prepared for another agreement, and one participant questioned whether the difficulty in passing an arms control treaty through an obdurate U.S. Congress might diminish Russia's interest in pursuing a follow-on agreement at all. However, it was suggested that Obama might appeal to security and budgetary incentives to encourage Russia to implement deeper reductions. On the other side of the table, attaining a two-thirds majority in the U.S. Senate would expend a considerable amount of Obama's political capital, and even then would be far from guaranteed. Should Obama fail to secure support from the Senate, one speaker advocated that the executive branch take unilateral measures in the form of "parallel national policy" in order to bypass Congress.

Forum participants agreed that despite the grossly disproportionate sizes of the U.S. and Russian nuclear arsenals, it was still critical that disarmament expand from bilateral

agreements to a multilateral setting. In light of this, several participants offered creative proposals to involve all states with nuclear weapons into the disarmament process. One suggestion to alleviate some of the concerns that the U.S. and Russia may hold about deeper reductions was for countries like China, France, and the UK to undertake binding commitments to not increase the size of their nuclear arsenals. Another recommendation that received support during the forum was the development of a formula where all nuclear possessors reduce their arsenals by some agreed upon proportion. Finally, one additional option would be for the U.S. and Russia to agree in advance to reduce to certain levels, with the right to halt the process if other countries fail to fulfill their disarmament obligations. Any combination of these schemes would ameliorate concerns about a sudden sprint to parity by an emerging or existing nuclear-armed state, while reducing overall numbers of nuclear weapons.

One key point brought up during the forum was how nuclear security had displaced disarmament as an issue of central importance. Noting the high level of support lent by the presence of 53 heads of state at the 2012 Nuclear Security Summit, one participant questioned why an equal amount of emphasis is not placed on disarmament. One observer warned that this troubling shift in focus, combined with little tangible progress in multilateral disarmament, could stress the non-proliferation and disarmament regime beyond its breaking point. Indeed, some of those present at the forum felt that multilateral disarmament discussions had taken on a ritualistic status without actually accomplishing anything. Participants reiterated that nuclear-armed states must be made to understand that the status quo is simply unacceptable.

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Status and Role of Treaties

The basis of the NPT centers on a grand bargain between NNWS to forgo nuclear weapons while, in return, NWS will strive towards nuclear disarmament and also share nuclear technology and material.

Treaty on the Non-Proliferation of Nuclear Weapons (NPT)

At the core of the nuclear non-proliferation and disarmament regime is the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), which codified the international laws and norms against the possession and spread of nuclear weapons. The NPT divides the world into two camps with concomitant legal obligations: non-nuclear-weapon States (NNWS) are called upon to refrain from manufacturing or receiving nuclear weapons, and submit to IAEA safeguards to ensure compliance with these commitments; nuclear-weapon States (NWS) are obliged to refrain from transferring or otherwise assisting NNWS in obtaining nuclear weapons, and must also work towards complete nuclear disarmament, all the while guaranteeing the right of all states access to the peaceful use of nuclear energy. These obligations broadly outline the three pillars of the NPT—non-proliferation, disarmament and the promotion of peaceful uses of nuclear energy. The NPT enjoys near universal adherence, with 190 state parties, including the five recognized nuclear weapons states: the U.S., Russia, France, China, and the UK. Only four states—India, Israel, North Korea and Pakistan—remain outside of the treaty.

The basis of the NPT centers on a grand bargain between NNWS to forgo nuclear weapons while, in return, NWS will strive towards nuclear disarmament and also share nuclear technology and material. This compromise was absolutely essential in convincing the vast majority of states not to acquire nuclear weapons, and institutionalized the interna-

tional norm against nuclear proliferation and the possession of nuclear weapons.

However, discussions during the NDF suggested that the three pillars of the NPT were not treated equally. Members of the forum indicated that NNWS exercised far too lenient with NWS for their unwillingness to move forward on disarmament commitments and obligations. One presenter urged the NNWS to raise nuclear issues at regular bilateral meetings that did not necessarily focus on non-proliferation and disarmament. NNWS could enhance pressure on NWS to disarm by pressing them to move beyond an interminable series of agreements and promises and achieve tangible results. Speakers also called on the international community to impress upon nuclear-armed states that the persistence of unfulfilled promises on disarmament is untenable.

Following the NPT's entry into force in 1970, State Parties have hosted review conferences every five years to "assess the implementation of the treaty's provisions and make recommendations on measures to further strengthen it." At the pivotal 1995 Review Conference, States Parties agreed to the indefinite extension of the NPT and endorsed negotiations on the Comprehensive Nuclear-Test-Ban Treaty (CTBT), Fissile Materials Cutoff Treaty (FMCT) and a Middle East NWFZ. At the next Review Conference, the NWS affirmed their commitment to complete nuclear disarmament through the agreement on "13 Practical Steps" on nuclear disarmament included in the final document. The last conference held in 2010 reiterated States Parties' support for the early entry into force of the CTBT and negotiations on a FMCT, and an implementation plan for a Middle East NWFZ.

The NPT Preparatory Committee (PrepCom), designed to prepare for NPT Review Conferences by assessing treaty implementation and developing recommendations for the Review Conference, was touted as having significant potential to revitalize the disarmament process. According to Action 5 of the 2010 NPT Review Conference Final Document, NWS are required to report to the 2014 PrepCom session on their progress on disarmament against a number of benchmarks. One speaker suggested that future PrepCom sessions not only assess the implementation of the NPT, but also review the treaty itself and discuss possible ways to strengthen it.

Comprehensive Nuclear-Test-Ban Treaty (CTBT)

As the international community's single multilateral disarmament negotiating forum, the Conference on Disarmament (CD) negotiated many of the foundational disarmament treaties, including the NPT, the Biological and Toxic Weapons Convention, the Chemical Weapons Convention and the Comprehensive Nuclear-Test-Ban Treaty (CTBT). This forum, which evolved from an earlier iteration as the Ten-Nation Committee on Disarmament, currently consists of 65 member states. Work conducted in the CD is governed by consensus, which in the UN context is generally regarded as the adoption of a decision without objection. While the rule of consensus was originally meant to protect the fundamental national security interests of member states, opposition to procedural matters such as a program of work has prevented the CD from even beginning negotiations on disarmament. Since concluding negotiations on the CTBT, the CD has been unable to commence disarmament negotiations. Frustrated by the

continued deadlock, CD Secretary-General Kassym-Jomart Tokayev of Kazakhstan noted in 2012 that the political impasse in the CD "delays, one long and potentially productive year at a time, the start of negotiations to strengthen our common security."

The CTBT, which opened for signature in September 1996, prohibits all types of nuclear explosions in all environments. Proponents of the CTBT argue that the treaty, once in force, would prevent nuclear-armed states from testing newer and more advanced warhead designs, hamper the efforts of aspiring nuclear states to develop a reliable arsenal, and deter testing through inspections and detection techniques. Despite widespread international support for the CTBT, the treaty will not come into force until a number of holdout states ratify. Nevertheless, the CTBT has undoubtedly reinforced the global norm against nuclear weapons tests. Only three states have contravened the de facto moratorium on nuclear testing since 1996: India, Pakistan and North Korea.

Discussants emphasized the urgent need for the U.S. to ratify the CTBT; as it is only one of two remaining NWS not to do so. NDF participants highlighted a growing consensus within the U.S., even from former skeptics, that the U.S. can maintain a safe and reliable nuclear arsenal without additional testing. A 2012 report by the National Academy of Sciences concluded that the U.S. is in a better position to detect clandestine nuclear testing than ever before, dispelling one of the few remaining arguments raised against the treaty when the U.S. Senate rejected it in 1999. CTBT ratification would not only underscore the U.S. commitment to fulfill its disarmament obligations and the outcome of the 2010 NPT Review Conference, but would also

Discussants emphasized the urgent need for the U.S. to ratify the CTBT; as it is only one of two remaining NWS not to do so.

"We are not criminals, we are just trying to survive. What we get from this (poppy field) is only enough for bread on our table." — A farmer from northern Afghanistan.

At the 2010 Nuclear Security Summit, President Nursultan Nazarbayev of Kazakhstan proposed the development of a “Universal Declaration of a Nuclear-Weapon-Free World.”

likely nudge China to ratify the treaty as well. Some experts suggest that ratification by the five NWS could trigger a provisional entry into force that would gradually expand to include other states, despite the continued presence of nuclear-armed states outside of the treaty.

Although no timeline has been proposed to bring the treaty before the Senate, the forum noted with approval that CTBT ratification remains a priority for the Obama administration. At the same time, participants declared that it was essential for the Obama administration to launch a serious and concerted effort to promote the CTBT, as a second rejection by the U.S. Senate would be disastrous for the future of the treaty and by extension, the disarmament regime at large. Advocates have proposed a range of options that Obama could pursue, including widespread dissemination of information to the public and media outlets, the appointment of an executive task force to promote the treaty, consultations with senators and their staff, and inter-agency coordination.

Fissile Materials Cut-off Treaty (FMCT)

While the CTBT would create a qualitative cap on nuclear weapon programs, a Fissile Materials Cut-off Treaty (FMCT) would play a complementary role as a quantitative cap on global nuclear arsenals. Discussions on the proposed FMCT, which would prohibit production of fissionable materials for weapons purposes, are currently held by the UN Conference on Disarmament (CD). However, a lack of consensus has prevented the CD from adopting a program of work before negotiations on the treaty can begin. One of the primary points of contention centers on the scope of the treaty: whether to include existing fissile material stockpiles in addition to prohibiting future production. At present, all five NPT-recognized NWS have declared or are believed to be observing a moratorium on the production of highly-enriched uranium and plutonium for nuclear weapons. Unfortunately, a number of countries continue to produce fissile material for nuclear weapons purposes.

Many of those present at the forum noted with disappointment that FMCT negotiations remain trapped by a stagnant CD. Indeed, the continued absence of even modest progress

on an FMCT prompted the UN General Assembly First Committee to pass three resolutions to break the current impasse in negotiations within the CD. The First Committee called for the creation of a group of experts to recommend steps to advance FMCT negotiations; the creation of an open-ended working group to seek progress on disarmament negotiations; and to convene a high-level meeting during the 2013 UN General Assembly session on disarmament.

In order to realize substantive progress on an FMCT, a number of countries have proposed circumventing the CD altogether and initiating FMCT negotiations in other forums, such as the UN General Assembly. However this position is broadly opposed by the P5 states, which are disinclined to pursue negotiations outside of the consensus-driven CD. NDF participants stressed the need to find additional, more creative solutions to move negotiations forward, such as unilateral declarations by nuclear-armed states to observe a moratorium on fissile material production. Once these unilateral measures are implemented, responsibility could then shift back to the CD to discuss a way forward on reducing existing stockpiles.

Universal Declaration on the Achievement of a Nuclear-Weapon-Free-World

Although a world without nuclear weapons is a long stated goal of countless UN resolutions and disarmament treaties, the continued presence and potential proliferation of these weapons poses an eminent threat to international peace and security. As part of the renewed push towards complete nuclear disarmament, many within the disarmament community have expanded their ambitions to establish not just nuclear weapon free zones, but a world free of nuclear weapons. At the 2010 Nuclear Security Summit, President Nursultan Nazarbayev of Kazakhstan proposed the development of a “Universal Declaration of a Nuclear-Weapon-Free World.” This idea crystallized with the submission of a formal Declaration at the Astana International Forum for a Nuclear-Weapon-Free World in Kazakhstan. The Mission of Kazakhstan is currently holding consultations with relevant UN member states to arrive at commonly acceptable text. As it stands, the comprehen-

sive Declaration calls for, inter alia:

- All nuclear-armed states to take concrete, practical steps towards total elimination of nuclear weapons at the earliest possible time;
- Deep reductions in nuclear weapons of all categories, with an emphasis on irreversibility, verifiability, and transparency;
- Ratification and adherence to the CTBT, FMCT, NPT obligations, existing NWFZ, and the establishment of a Middle East WMDFFZ.

One participant at the forum pointed out that, at present, nuclear arms control treaties have only sought to restrict delivery systems, not the warheads or bombs themselves. The dismantlement and destruction of nuclear warheads remain solely within the purview of the states that possess them. Furthermore, the speaker noted that international law does not explicitly prohibit the use or threat of use of nuclear weapons. In light of these glaring gaps, several NDF discussants advocated the Declaration of a Nuclear-Weapon-Free World as a critical means of moving the world towards the abolition of nuclear weapons.

First and foremost, the Universal Declaration would clarify and revitalize the long-held and widely supported ideal that a nuclear-free world is a safer and more secure one. NDF participants commented that support for the Universal Declaration would demonstrate that the international community stands united in their commitment to achieve this goal. Additionally, the Universal Declaration outlines concrete steps necessary to realize nuclear disarmament and the obstacles that stand in the way. Though the proposed actions contained in the Universal Declaration are not groundbreaking, they serve as a powerful reminder of the paths to progress while UN disarmament bodies remain mired in re-creation and deadlock. Most importantly, while many parties disagree about how to get to nuclear zero, the Universal Declaration unequivocally reaffirms the intention of the international community to arrive at that destination as soon as possible.

Nuclear Weapons Convention

The Universal Declaration proposed by Kazakhstan could pave the way for a Nuclear

Weapons Convention (NWC), which stemmed from a 1996 declaration from the International Court of Justice (ICJ). In its advisory opinion, the ICJ determined that the threat or use of nuclear weapons is illegal and affirmed the existence of an obligation “to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict and effective international control.” Under an updated draft submitted to the UNGA by Costa Rica and Malaysia in 2007, the NWC bans nuclear weapons and weapons-usable fissile material. Nuclear-armed states would be required, over a series of five phases, to destroy their nuclear warheads and destroy or convert their delivery vehicles to a non-nuclear capability. The NWC would also establish an organization charged with verification, compliance, and cooperation efforts related to the convention.

One common argument raised by opponents of the NWC is that disarmament is a gradual process and that calls for a NWC are premature. Participants at the NDF noted that the support of NWS will be vital to the adoption of a NWC. Moving down the path towards a NWC without the endorsement of nuclear-armed states could alienate them and disrupt other pre-existing disarmament agreements. At the same time, speakers at the NDF countered that a number of arms control agreements including the NPT and the Treaty of Tlatelolco initially did not enjoy universal adherence. The NWC would codify the customary norm against nuclear weapons, much as the Convention on Certain Conventional Weapons and the Ottawa Treaty did for weapons deemed excessively injurious and land mines, respectively.

There are some encouraging signs that indicate growing support for the NWC. Although a number of nuclear-armed states oppose the convention, during the December 2006 UNGA session, 125 States Parties, including China, India, and Pakistan, called for the early conclusion of negotiations on a Nuclear Weapons Convention. A 2012 report by the International Campaign to Abolish Nuclear Weapons found that 146 countries support the NWC, while only 26 now oppose the convention. As with the Kazakh Universal Declaration, it is abundantly clear that the international community is in favor of a Nuclear Weapons Convention. All that remains is to amass sufficient political will to initiate negotiations on an agreement.

A 2012 report by the International Campaign to Abolish Nuclear Weapons found that 146 countries support the NWC, while only 26 now oppose the convention.

Highlights and Recommendations

The multilateral disarmament and non-proliferation movement needs to see some concrete progress in the next 12-18 months.

A number of consistent themes emerged from the fruitful discussions held during the NDF, including:

- A deep concern that all relevant actors are not engaged to a necessary extent;
- The risk of nuclear weapons use has not declined even though there are far fewer weapons than at the height of the Cold War;
- There exists a fundamental disconnect between the missions for and reliance on nuclear weapons on the one hand, and the current geopolitical realities on other;
- Multilateral platforms need to be supplemented with bilateral talks and unilateral initiatives should be implemented where necessary;
- There is a limited window for all relevant forums (multilateral, regional, bilateral, and unilateral) to deliver concrete results without setting back the progress of the nuclear spring and global zero movement.

As noted previously, the highlights and findings that are conveyed in this paper are those that EWI has chosen to focus on. There were far more fruitful and engaging discussions among the presenters and UN experts than we can do justice to in this paper. The points we highlight below are strictly EWI's interpretation of discussions, and in some instances, provide further exploration of some of the highlights and recommendations.

A Closing Window of Opportunity

The multilateral disarmament and non-proliferation movement needs to see some concrete progress in the next 12-18 months. There are initiatives underway that could help restore our focus, including the Kazakh-led Universal Declaration for a Nuclear-Free World, the UNGA's October 2012 mandate to convene an open-ended working group (OEWG) to develop proposals to take forward multilateral nuclear disarmament negotiations, the high-level meeting in the UNGA in September 2013, the NPT PrepCom in April 2013 and the March 2013 Oslo conference to address the humanitarian effects of nuclear weapons.³⁵ On the basis of suggestions put forth during the NDF, EWI recommends eight specific measures to secure the disarmament and non-proliferation agenda:

- **Pursue an additional round of U.S.-Russian negotiations:** Even after the New START treaty, the U.S. and Russia still possess over 90 percent of all nuclear weapons. As such, it is critical that these two countries pursue and conclude an additional round of reductions. The next steps could include a cut in nuclear arsenals from 5,000 to 2,000-2,500 weapons, or impose a single aggregate limit on all categories of nuclear weapons, thus forcing more dramatic reductions.
- **Avoid waiting for the U.S. and Russia:** Though further reductions

by the U.S. and Russia are critical to continued disarmament efforts, the entire process should not stall while the world waits for them. Other nuclear-possessor states can work unilaterally, with each other and with NNWS to further the nuclear disarmament agenda.

- **Secure Commitments from all NWS:** All NWS should clarify the requirements and milestones that would allow them to reduce, and ultimately eliminate their nuclear arsenals. At a minimum, all NWS should commit to a moratorium on the production of new nuclear weapons, and freeze any current or planned nuclear weapon modernization programs.
- **Reduce operational readiness of deployed nuclear weapons:** A resolution that requires NWS to maintain a de-alerted arsenal would be a significant step in reducing the possibility that a nuclear weapon is used, intentionally or otherwise. As one participant put it, a nuclear weapon free world is unattainable without de-alerting.
- **Eliminate stockpiles of fissile material:** Steps must be taken to address current stockpiles of fissile materials and prevent the future production of such materials for weapons purposes. An FMCT is the preferred method to accomplish this goal, but creative proposals are necessary to prevent the treaty from languishing further in a stagnant CD. One solution proposed during the NDF would be for states to initially implement unilateral moratoriums on fissile material production and then return to the CD to negotiate reductions in existing stockpiles.
- **Multilateralize disarmament:** Two recommendations on multilateral arms control were proposed during the NDF. First, the United States and Russia could institute a disarmament process whereby they agree to decreases in stages that, at a later level, would be dependent on the other NWS undertaking reductions. A second recommendation suggested that disarmament be undertaken proportionally; that is, a formula could be derived where the United

States and Russia would agree to reduce their arsenals by a much larger coefficient than the other NWS with much smaller arsenals.

- **Increase NNWS pressure on NWS:** NNWS can ratchet up pressure on NWS through the development of their own initiatives. This could take the form of resolutions submitted to the United Nations General Assembly, deepening their commitment to disarmament, and pursuing negotiations in bilateral and multilateral settings. Focused pressure combined with proposals for specific measures has significant potential to force serious dialogue with NWS and move the disarmament process forward.
- **Enhance the role of civil society:** Global civil society has proven effective in limiting and eliminating entire categories of weapons, as evidenced by the Anti-Personnel Mine Ban Convention, the Biological and Toxin Weapons Convention, and more recently, the Arms Trade Treaty. As such, campaigns led by civil society on specific disarmament initiatives have the potential to influence national governments and build the momentum necessary to achieve global zero.

Addressing the "Demand Deficit"

It was consistently noted throughout NDF sessions that there is simply a lack of popular attention to and demand for more significant cuts to nuclear arsenals. An increased role of the public and civil society, then, should be encouraged. As one official noted, people have forgotten what nuclear weapons actually do. There is still overwhelming public support for disarmament—but this support has not translated into public demand for governments to act.

During the Cold War, mass demonstrations were commonplace and attracted broad support, thereby placing heavy pressure on Western governments. As public pressure was successfully brought to bear on governments in the past to alter deployments and doctrines, the same public focus would be an invaluable tool to bring further reductions, changes in postures and alert status, and

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bring relevant treaties like CTBT and FMCT into play. Indeed, the humanitarian impact of the use of nuclear weapons is one facet that has recently gained serious attention, as evidenced by the Oslo 2013 Nuclear Conference. Public pressure could be especially useful to compel states to consider unilateral action in the face of political impasse in negotiating bodies or domestic legislatures. For example, in the foreseeable future the U.S. is unlikely to find sufficient congressional support to accept binding constraints on missile defense, reduce operational readiness, and ratify the CTBT. In this case, NDF participants proposed that the executive branch of the U.S. unilaterally reduce its arsenal and change the requirement for prompt response, thus de-alerting its nuclear forces.

A Shared Responsibility

Traditionally, the United States and Russia have shouldered the responsibility for the lion's share of global non-proliferation and disarmament efforts. It is only sensible that they should continue to do so, given that the two states possess 95 percent of the world's nuclear weapons. However, non-nuclear-weapon states and nuclear-weapon states alike should work in concert to enhance their participation in the disarmament process and implement specific measures to accomplish that end. All states have the opportunity to drive disarmament and lay the foundation that will oblige the nuclear weapons states to draw down to nuclear zero. For example:

- NNWS should hold the NWS accountable to their legal obligations. More than 180 countries have given up the possibility of developing nuclear weapons in exchange for disarmament pledges by the NWS that are simply not being met. The NNWS must be more forceful in conveying that this is not an acceptable situation. Disarmament is, in a very real sense, recompense to the states who agreed to forgo the development of nuclear weapons. Forum participants indicated that the NNWS have been too complacent about the unfulfilled promises of the NWS to move forward on their commitments. There is a gap between the international commitments made by NWS to pursue the elimi-

nation of their arsenals and their routine affirmation of the utility of nuclear weapons for deterrence and national security.

- NNWS can actively promote non-proliferation and disarmament through political pressure and frank discussion between allies (both individually and as groups) that break the taboo of topics not raised between allies. Nuclear issues can also be raised in normal bilateral meetings; there are no compelling reasons for discussions not to take place in bilateral settings to supplement the multilateral forums that currently exist.
- NNWS must make clear that disarmament is not a rhetorical goal but that the majority of states insist upon tangible progress.
- NNWS can help frame the discussion, it need not always be the NWS.
- There are a fairly large number of states under the aegis of a nuclear umbrella, which prevents them from speaking up. Several participants noted the need for the NNWS to set an example by demonstrating that nuclear weapons play no role in their security; to do so, they could refuse defense commitments that include nuclear weapons.
- NNWS have the most significant responsibility in terms of nuclear-weapon-free zones. NWFZ parties can develop their own thinking on cooperation that can be extended globally or cross-regionally. NWFZ constitute a regional response, led by NNWS, against the dangers of nuclear weapons.
- NWS should, given the current lack of multilateral arms control talks, commit not to increase their arsenals.

While there are a number of steps that NWS and NNWS can take together, the NNWS do not need to wait for the acquiescence of the NWS. Although the majority of states are in support of a Nuclear Weapons Convention, the P5 (and many of their allies) have not signaled their support for such an effort. In the absence of support from the NWS, it is still possible for the NNWS to move toward a Universal Declaration on a Nuclear Weapon-Free-World, followed by a Nuclear Weapons

Convention. Of course, complete elimination necessarily requires the support of the NWS. But the process towards a convention should begin without delay. Indeed, most arms control agreements did not begin with universal adherence—including the NPT and the Treaty of Tlateloco, both of which are now foundations of non-proliferation and disarmament.

The Central Importance of Disarmament

The NDF highlighted the fact that nuclear disarmament has become displaced by other concerns. One prominent example includes recent initiatives to enhance nuclear material security. While the Nuclear Security Summit process has the support of over 50 heads of state and governments, participants asked why there is not a similarly high level of support for disarmament. Simply put, the goal of disarmament must be revived. All the direct and ancillary costs of maintaining a nuclear arsenal—such as maintenance, environmental damage, and humanitarian costs—need to be recognized. This discussion has been displaced by other priorities: nuclear security, nuclear alliances and nuclear force modernization. While many of these initiatives contribute to a safer and more secure world, it is critical that we not lose sight of the goal of disarmament.

Moreover, there is fear that nuclear disarmament is becoming less relevant in the face of increasingly powerful, precise and long-range conventional weapons, as well as new cyber weapons. One speaker observed that the idea of nuclear weapons is so diminished in our minds that we primarily focus on other weapons or types of attacks. The damage of nuclear weapons appears remote and distant and thus does not exist for many as a real threat. As one speaker noted, the major threat to our world is a nuclear exchange and we have to find a way to ensure that this does not happen.

If we do not fully appreciate that a nuclear exchange is a real possibility, or that circumstances may arise that make nuclear weapons a viable option for a leader, then we will not be prepared for the fallout—both literal and figurative. Disarmament efforts, then, must take steps to devalue the use of nuclear weapons for military planners. In light of this, one suggestion that surfaced was to reintro-

duce training and education to survive or protect populations from nuclear blasts.

Beyond Numbers: Reducing Reliance

Although the importance of reducing nuclear arsenals is self-evident, this is only one aspect of the disarmament agenda. As Figures 1-3 demonstrate, there has been a steady decline in the number of nuclear weapons over the past quarter century. This is an encouraging trend, and one that must continue. The graphs do not show, however, that while the nuclear "mountain" may be lower, it is broader at its base—more states have or are pursuing nuclear weapons. Additionally, all of the NWS countries are expanding, modernizing, or diversifying their arsenals. Reducing the number of nuclear weapons and the number of states in possession of them is the fundamental goal for all disarmament efforts.

The use of nuclear weapons is also something that must be addressed. At a certain point, the numbers will not shrink any further as states still find military or political value in nuclear weapons. Disarmament efforts then must also work to devalue nuclear weapons. As long as the missions for and reliance on nuclear weapons remain at current levels, there is a threshold of weapons that NWS will not drop below. Both NWS and NNWS can play an essential role in reducing the utility of nuclear weapons and finally arriving at their elimination.

In many cases, nuclear doctrine is dependent on national policies. Even though NWS largely cling to deterrence, deterrence is a fragile concept. Nuclear weapons that are used for deterrence or as a means of terror are primarily used politically; we should think more about those used for military purposes. It was suggested that proposals for the reduction of nuclear weapons should be contemplated with a focus on realistic scenarios. It is unlikely for states to accept policies inconsistent with their own perceived security needs, and all nuclear weapon policies entail opportunity costs. Thus, regional security issues should be considered as part of disarmament efforts. Building security within a region and establishing arms control talks between adversaries could further undermine strategic doctrines that rely on nuclear weapons.

As long as the missions for and reliance on nuclear weapons remain at current levels, there is a threshold of weapons that NWS will not drop below. Both NWS and NNWS can play an essential role in reducing the utility of nuclear weapons and finally arriving at their elimination.

2012 NUCLEAR DISCUSSION FORUM SPEAKERS

November 19, 2012

The Role of Nuclear Weapons in Security Doctrines

Brigadier General Kevin Ryan Director, Defense & Intelligence Project, Belfer Center for Science & International Affairs, Harvard University

December 14, 2012

De-Alerting & Reducing the Role of Nuclear Weapons in Strategic Doctrines

Mr. Hans M. Kristensen Director, Nuclear Information Project, Federation of American Scientists

Dr. Douglas B. Shaw Associate Dean for Planning, Research, and External Relations, Elliot School of International Affairs, Georgetown University

Mr. William H. Tobey Senior Fellow, Belfer Center for Science & International Affairs, Harvard University

January 24, 2013

Moving Forward: The Path to Zero

Ambassador Steven Pifer Director, Arms Control Initiative, Brookings Institution

Dr. Barry M. Blechman Co-founder & Distinguished Fellow, Stimson Center

For all three above sessions, key discussants included:

Geoffrey Shaw Director of New York Liaison Office of the International Atomic Energy Agency in New York

Dr. Randy Rydell Senior Political Affairs Officer in the Office of the High Representative for Disarmament Affairs

Roman Hunger Senior Advisor, Office of the President of the 67th session of the General Assembly

Policy Reference Points

The Role of Nuclear Weapons in Military Doctrines

Prepared by the EastWest Institute, November 2012

Questions to Consider

- What are the major obstacles to reducing the role of nuclear weapons in security doctrines, and what are the political realities that would need to adjust to support such a doctrinal change?
- In light of recent changes in the nuclear doctrines of the P5, what are the practical steps that need to be taken for nuclear weapon countries to reduce their role of nuclear weapons in their security doctrines?
- Could the increased plethora and complexity of non-nuclear security threats, i.e. cyber threats and sophisticated conventional weapon systems, have an impact on limiting the focus on maintaining nuclear weapons in security doctrines?
- Could progress on peace in areas like the Middle East and South Asia increase the likelihood of a reduction in the role of nuclear weapons in security doctrines?
- How do advances in conventional weapons technology and the ability of conventional weapons to perform some of the missions currently assigned to nuclear weapons affect the role of nuclear weapons in security doctrines?

For most states possessing nuclear weapons or enjoying positive security guarantees, the

principal role of those weapons is to deter a nuclear attack by another state. This, however, is not the sole role of nuclear weapons. Given that many policymakers and military planners around the world view nuclear war as a remote possibility, if deterrence were the sole role for nuclear weapons, reducing their role in strategic doctrine and thus creating the doctrinal foundation for reducing the size of nuclear arsenals would be relatively straightforward. But nuclear weapons continue to play a prominent role in strategic doctrines for reasons beyond nuclear deterrence, including prestige; deterring from conventional, biological, or chemical attack; protection from nuclear coercion; and others. This briefing paper quickly reviews the nuclear doctrines of the declared and non-declared nuclear weapons states in order to provide the foundation for a discussion on how to reduce the role of nuclear weapons in strategic doctrines—a necessary step to promote further nuclear disarmament.

Current Postures

China

Since exploding its first nuclear weapon in 1964, China has maintained a fairly consistent nuclear doctrine aimed at deterring nuclear attacks. The most recent defense white paper (2011) noted that China “consistently upholds the policy of no first use of nuclear weapons, adheres to a self-defensive nuclear strategy, and will never enter into a nuclear

arms race with any other country.”³⁶ The size of China's current force is unknown and this ambiguity plays well into Chinese doctrine. Recent estimates place the Chinese nuclear arsenal at 240 warheads.³⁷ Whereas the United States and the Soviet Union developed sophisticated strategic doctrines that were tied on assessments of each other's capabilities (strategic and non-strategic) and that viewed nuclear weapons as tools of war fighting, Chinese force posture and doctrine did not and still does not view nuclear weapons in terms of war fighting. China's political and military leaders view the role of nuclear weapons as a deterrent against nuclear attack and a tool for countering nuclear coercion.³⁸ For deterrence purposes, then, China has not sought nuclear equivalency but a retaliatory capability and it has been argued that by 2010, China had deployed a “credible second-strike capability against all of its nuclear adversaries—its very goal from 1964 onward.”³⁹

France

With an estimated 300 nuclear weapons, France possesses the third largest nuclear arsenal among the declared and presumed nuclear powers. French long-term nuclear strategy is one of minimal deterrence. In 2006, then-President Jacques Chirac said nuclear deterrence was the very foundation of French defense policy.⁴⁰ In March 2008, then-President Nicholas Sarkozy announced a planned reduction of the French nuclear arsenal and several disarmament measures including the disbandment of one of France's land-based squadrons of nuclear-armed aircraft. However, he also stated that the French nuclear deterrent remained a “life insurance” in the face of new threats and that French nuclear forces “by their very existence are a key element in its security.”⁴¹

The 2008 White Paper on Defence and National Security, confirmed nuclear deterrence as the “essential foundation” of French strategic security. The white paper also announced plans for nuclear modernization, explaining

that a credible deterrent depends upon the president's ability to choose between a variety of effective nuclear options, thus necessitating the modernization of France's strategic nuclear forces.

India

India conducted its first nuclear test in May 1974. It remains a non-signatory to the Nuclear Non-Proliferation Treaty but the 2008 safeguards agreement with the IAEA allows import nuclear technology from countries that are party to the NPT. Its stockpile is estimated by the Federation of American Scientists at 80-100 assembled warheads.⁴² India has consistently maintained a minimal deterrence policy, most recently confirmed in its 2003 nuclear doctrine review. Indian nuclear doctrine also maintains a no first-use policy and that nuclear retaliation to a first strike will be “massive and designed to inflict unacceptable damage.”⁴³ Indian National Security Advisor Shri Shiv Shankar Menon may have signaled a significant shift from “no first use” to “no first use against non-nuclear-weapon states” in an October 2010 speech, a doctrine Menon said reflected India's “strategic culture, with its emphasis on minimal deterrence.”⁴⁴

All Indian nuclear delivery systems are capable of carrying either nuclear or conventional warheads. Further, the “the operational status of these systems is ambiguous. This not only makes the size, composition, and readiness of India's nuclear arsenal difficult to determine, but it also has troubling implications for stability on the subcontinent.”⁴⁵

Israel

Israel policy of deliberate ambiguity regarding its nuclear capabilities means that there is no official nuclear policy. The Federation of American Scientists has estimated Israel's stockpile at 80 warheads.⁴⁶ Israel's nuclear use policy has been thought to include a “Samson option” of last resort.

Pakistan

Today, Pakistan's strategic deterrence strategy consists of five major elements: (1) an effective conventional fighting force and the demonstrated resolve to employ it against a wide range of conventional and sub-conventional threats; (2) a minimum nuclear deterrence doctrine and force posture; (3) an adequate stockpile of nuclear weapons and delivery systems to provide for an assured second strike; (4) a survivable strategic force capable of withstanding sabotage, conventional military attacks, and at least one enemy nuclear strike; and (5) a robust strategic command and control apparatus designed to ensure tight negative use control during peacetime and prompt operational readiness (positive control) at times of crisis and war.⁴⁷ Pakistan has not formally declared a nuclear employment doctrine but has developed operational plans and requirements for nuclear use integrated within its military war-fighting plans.⁴⁸ Like India, Pakistan has adopted a policy of minimum deterrence. Unlike India, however, Pakistan has not adopted a no-first-use policy. The fundamental role of Pakistan's arsenal, estimated at 90-110 non-deployed warheads,⁴⁹ is to deter an Indian conventional attack. In 2002, a Pakistan military leader articulated four nuclear use triggers: space threshold (India occupies a large part of Pakistan's territory), military threshold (India destroys a large part of land or air forces), economic strangling, or domestic destabilization by India.⁵⁰

Russia

Russia is thought to have the largest nuclear inventory, with 1,800 operational strategic warheads as part of a total inventory of around 10,000 nuclear weapons.⁵¹ The release of Russia's new military doctrine in 2010 was closely watch, and preceded the release of the United States Nuclear Policy Review by just a few short months. Russia's 2010 doctrine, which replaced the 2000 doctrine, maintained the importance of Rus-

sia's nuclear deterrence, describing the main mission assigned to nuclear weapons as the “prevention of nuclear military conflict or any other military conflict.” The 2010 doctrine appears to have narrowed the situations in which nuclear weapons could be used, moving from the possible use of nuclear weapons “in situations critical for [the]national security” of Russia to the use of nuclear weapons when “the very existence of [Russia] is under threat.”⁵²

In describing the possible military conflicts into which Russia could be drawn (small-scale armed conflict, local war, regional war, and large-scale war), Russia “assigns” nuclear weapons to regional and large-scale wars, as it did in 2000. Russia's nuclear arsenal is seen as a deterrent not just for nuclear exchanges but also in large-scale and regional conflicts that could escalate from conventional to nuclear conflicts.⁵³

United Kingdom

British nuclear policy has long been to maintain a minimum deterrent. In 2010, the Foreign Secretary disclosed the UK's arsenal as consisting of 160 operationally available warheads as part of a stockpile of not more than 225 warheads.⁵⁴

The Royal Navy possesses four Vanguard-class nuclear-powered ballistic missile submarines (SSBNs), each of which can carry up to 16 U.S.-supplied Trident II long-range ballistic missiles. Each missile is thought to carry up to three UK-produced warheads closely resembling the U.S. 100-kt W76 warhead. Current UK posture as outlined in the Strategic Defence Review of 1998 is as it has been for many years. Only the weapon delivery methods have changed. Trident SLBMs still provide the long-range strategic element as they have done for some years.

The United States

In May 2010, the United States declassified the size of its nuclear stockpile, announcing that the U.S. stockpile of nuclear weapons consisted of 5,113 warheads, which includes active and inactive strategic and non-strategic warheads.⁵⁵ According to New START, both Russia and the United States are limited to 1,550 deployed warheads (and 800 delivery vehicles).

The 2010 [Quadrennial Defense Review](#) states that the United States will “maintain a safe, secure, and effective nuclear arsenal to deter attack on the United States, and on our allies and partners.”⁵⁶ The 2010 [Ballistic Missile Defense Review](#) report also underscores the importance of the U.S. missile defense system in “[strengthening] U.S. goals of deterrence, extended deterrence, and assurance.”⁵⁷

The latest U.S. Nuclear Posture Review, which was released in April of 2010, was seen as a significant shift in U.S. nuclear policy, limiting the conditions under which the United States would use nuclear weapons and renounces the development of new nuclear weapons.⁵⁸ The NPR declared the “fundamental role” of nuclear weapons to be deterrence of nuclear attack, but not the sole role, with officials arguing that the conditions did not yet exist to move to a sole-purpose policy. The 2010 NPR disavowed the use of nuclear weapons in response to a chemical or biological attack, but with some important caveats—this assurance only applies to countries that have signed and are in compliance with the NPT. The new NPR also states that the United States can maintain a nuclear deterrent with fewer nuclear weapons and should reduce its reliance on its nuclear arsenal. Instead of focusing on deterring potential threats from states with large arsenals of nuclear weapons, the latest NPR concentrates on nuclear

threats to the United States from terrorists and states suspected of developing nuclear weapons.⁵⁹

Other:

NATO’s 2010 Strategic Concept committed the alliance, for the first time, to the goal of “creating the conditions for a world without nuclear weapons.” The Concept also reconfirmed that in a world where there are nuclear weapons, NATO “will remain a nuclear alliance.” While acknowledging that the use of nuclear weapons is “remote,” the alliance described deterrence based on an “appropriate mix of nuclear and conventional capabilities” as a core element of NATO’s overall strategy.⁶⁰ NATO’s declaratory policy remains ambiguous. The strategic nuclear forces of NATO—and particularly the United States—are the supreme security guarantee of the allies, with the French and British nuclear forces having a deterrent role on their own that contribute to deterrence and security.⁶¹ The strategic review concludes that NATO has reduced “reliance on nuclear weapons in NATO strategy,” but confirms that the alliance will continue to have at its disposal “the full range of capabilities necessary to deter and defend against any threat to the safety and security of our populations.” It states that NATO will maintain “an appropriate mix of nuclear and conventional forces.” The strategic nuclear forces of the alliance, “particularly those of the United States,” are described as the “supreme guarantee” of the security of the alliance.

NATO’s 2012 Chicago Summit reiterated key components of the nuclear posture as put forth in the 2010 strategic concept.

Policy Reference Points

Reducing the operational utility of nuclear weapons: de-alerting, negative security assurances, and nuclear-weapon-free zones

Prepared by the EastWest Institute, December 2012

Questions to Consider

- What developments in the international security environment, as well as bilateral and multilateral political relationships, have changed the contextual debate surrounding negative security assurances?
- In light of recent changes in the nuclear doctrines of the P5, what is the ongoing significance of the 1995 unilateral declarations encapsulated in UN Security Council Resolution 984? What are the possibilities for incorporating negative security assurances into national security doctrines that continue to largely rely on deterrence?
- How can unilateral, bilateral, multilateral measures facilitate greater political will towards binding negative security assurances? What role does Nuclear-Weapon-Free Zone treaties play in this process?
- What are the next steps for the MEN-WFZ process given the postponement of the 2012 conference?
- Will de-alerting necessarily lead to a “race to re-alert,” or can competitive mobilization can be headed off?
- How much de-alerting is “too much” before policymakers and strategic planners in NWS fear that their deterrent capability is in jeopardy?

- Are concerns about de-alerting predominantly technical or political in nature?

De-alerting/Decreasing Operational Readiness

Large numbers of nuclear weapon systems, especially land-based ICBMs, remain on high levels of alert in both Russia and the United States. These are legacy postures from the Cold War. Today’s strategic and political environment does not justify high-levels of alert. Non-nuclear-weapon states find it increasingly difficult to accept the risks inherently associated with such operational readiness. The lowering of the operational status of nuclear weapons undoubtedly reduces the risk of unintended launches caused by technical malfunction, accident, or acts of terrorism. De-alerting will minimize the probability of an accidental nuclear war caused. Furthermore, de-alerting would be a much-needed confidence-building measure not only between those nuclear weapon-states that continue to maintain nuclear alert levels of the Cold War period but also between nuclear-weapon states and non-nuclear-weapon states.

While most nuclear powers have taken steps to reduce the role of nuclear weapons in their strategic weapons, as well as offering negative and positive security assurances, the

danger of accidental or unauthorized use of nuclear weapons that remain on high alert status still looms. In the absence of dramatic cuts to nuclear arsenals and stockpiles, one step that can be taken is to remove nuclear weapons from high-alert status; this will immediately decrease the risk of accidental or unauthorized use of these weapons.⁶²

Reductions in alert status can at first be pursued/adopted unilaterally, as prior experience with NSAs has shown that NWS are reluctant to make multilateral, legally binding commitments. These can include measures such as setting safeguards/procedures which require a longer period of time to pass before nuclear weapons can be launched (to better ensure that information transmitting a need for use of nuclear weapons is accurate, and to avoid false alarms), de-targeting (reprogramming missiles to have no target or setting them to open ocean targets), and de-mating (removing warheads from delivery systems). All of these steps will strengthen barriers against accidental/inadvertent use, and can also constitute confidence-building measures between NWS and NNWS⁶³.

UN resolutions have also been putting pressure on NWS to engage in de-alerting and de-mating their nuclear arsenals, both for safety and a confidence-building measure.⁶⁴ Most recently, UN resolution A/RES/67/L.13 called on NWS to “[reduce] the operational status of nuclear-weapons systems in ways that promote international stability and security... [so as] to reduce the risk of accidental use of nuclear weapons [and] to further enhance transparency and mutual confidence.”⁶⁵

There are at least three kinds of obstacles to further lowering of levels of operational readiness. First, key military and political relationships suffer from a trust and confidence deficit. Second, there are crucial differences in nuclear policies and postures. The third set of obstacles is technical. ICBMs are inherently designed for high alert, and so de-alerting them, depending on the measures chosen, could be costly and fraught with consequences that need to be explored and understood. De-alerting measures must also allow for a possibility of re-alerting within acceptable time limits, which could set up a “re-alert race.”

Negative Security Assurances

No legally-binding document currently exists that guarantees negative security assurances for non-nuclear-weapon states. China is the only P5 state to give an unqualified and unconditional negative security assurance that “undertakes not to use or threaten to use nuclear weapons against non-nuclear-weapon States or nuclear-weapon-free zones at any time or under any circumstances.”⁶⁶ The remaining four P5 states have offered negative security assurances, but these are viewed as *non-binding, limited in scope, or qualified in some way*.⁶⁷ These declarations, however, are not subject to the same strict rules of observance as a legally-binding document. Non-nuclear-weapon states have sought a separate treaty of NPT protocol on negative security assurances. Nuclear-weapon states argue that a legally binding document, guaranteeing negative security assurances to NNWS, would weaken the deterrence capabilities and security umbrellas of NWS and potentially affect their ability to react to unforeseen security situations.

Recent developments⁶⁸

During the first session of the CD in 2012, discussion of NSAs was limited as the body was unable to reach agreement on a program of work. However, the official statements of several countries called for substantive discussions on NSAs, including Mongolia, Ukraine, Bangladesh, the Russian Federation, and New Zealand.

During the May 2012 NPT Review Conference, significant debate was focused on NSAs, often in the context of conversations centered around nuclear-weapon-free zones.

On 12 June, the CD held a thematic discussion on NSAs. Despite the CD’s deadlock on a program of work, no state actively opposed the establishment of a working group on NSAs. While several states noted the inclusion of legally-binding NSAs in the protocols to NWFZs as a significant measure, others cautioned that neither NWFZs nor unilateral statements by NWS could substitute for a universally binding agreement. Algeria also noted that unilateral statements could be withdrawn at any point.

Overview of relevant NWS (declared and non-declared) declarations and doctrine

CHINA⁶⁹

China’s official statement to the United Nations on NSAs states that China will not be the first to use nuclear weapons under any circumstances, as well as refraining from using or threatening to use NW against any NW-free zone or non-NW-state. The letter to the GA also calls for negotiations for an international convention on no-first-use. Finally, China will support appropriate UN Security Council action to defend any non-NW-state that comes under attack by NW.

FRANCE

In a 1995 letter to the UN General Assembly⁷⁰, France reiterated its former assurances that it would not use nuclear weapons against non-nuclear-weapon States Parties to the NPT, except in the case of attack on France or its allies. This was also the first time France made positive security assurances, stating that in the event of nuclear attack on a NNWS, France would support appropriate nuclear retaliation.

More recently, the French White Paper on Self Defense stated that “the use of nuclear weapons would be conceivable only in extreme circumstances of self-defense.

RUSSIA

Russia’s statement on 5 April 1995 contained an assurance from Russia that it would not use nuclear weapons against a non-nuclear-weapon State Party to the NPT, unless it was involved in an attack on Russia or its allies. Russia also supports a draft resolution for the Security Council which would provide positive security assurances to non-nuclear-weapon State Parties to the NPT.⁷¹

The 2010 Russian Military Doctrine continues to emphasize the role of NW in regional and large-scale wars, but specifies that they will only be used in situations where “the very existence of [Russia] is under threat” by either conventional weapons or WMD.⁷²

UNITED KINGDOM

The United Kingdom continues to reiterate its assurance that it will not use or threaten to use nuclear weapons against non-nuclear-weapon State Parties to the NPT, unless one of these is in breach of its NPT obligations and/or involved in an attack on the United Kingdom or its allies.⁷³ In the event of a nuclear attack on NNWS, the UK pledges to take actions as appropriate through the UN Security Council.

In its most recent Strategic Defense Review (2010), the UK describes its nuclear weapons as its “ultimate insurance policy”. It also reiterates its 1995 commitment to no-first-use. While noting that there is currently no direct threat to the UK or its vital interests from states developing capabilities in other weapons of mass destruction, for example chemical and biological, like the United States, the U.K. reserves the right to review their pledged negative security assurance “if the future threat, development and proliferation of these weapons make it necessary.”⁷⁴

UNITED STATES

The 2010 US Nuclear Posture Review strengthened the United States’ previous statements on negative security assurances by declares that the United States will not use or threaten to use nuclear weapons against non-nuclear-weapon State Parties to the NPT that are complying with their non-proliferation obligations. The NPR also narrowed the circumstances in which the United States would resort to nuclear weapons, removing, with some qualifications, chemical or biological attacks from a nuclear response. However, in the face of a devastating biological or chemical attack by a state eligible for the U.S. negative security assurance, “given the catastrophic potential of biological weapons and the rapid pace of bio-technology development, the United States reserves the right to make any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat and U.S. capacities to counter that threat.” In the case of countries not covered by this assurance (NW states, non-compliant states), the United States reserves the right to use nuclear weapons if the “vital interests” of the United States or its allies come under attack (“extreme circumstances”).⁷⁵

DPRK

The Democratic People's Republic of Korea has acknowledged the existence of its nuclear arsenal, and has stated that it will continue to improve this in light of hostile western nuclear strategies against it.⁷⁶ However, they have not given any nuclear or positive security assurances, insisting instead that the USA include the DPRK in its own NSAs.

ISRAEL

Israel has not officially acknowledged that it possesses NW. Its officials have said that Israel will not be the first country in the Middle East to introduce NW to the region.⁷⁷

INDIA

India ascribes to a policy of no first use against non-NW-states, as stated by National Security Advisor Shri Shivshankar Menon in 2010.⁷⁸ This is in line with the conclusion of the 2003 review by India's Cabinet Committee on Security, which stated that nuclear weapons will only be used in retaliation to nuclear attack on India or its forces. It also promises non-use of nuclear weapons against non-NW-states.⁷⁹

PAKISTAN

Pakistan has not formally declared a nuclear doctrine nor offered negative security assurances to any state.

Nuclear-Weapon-Free Zones Overview

The UN General Assembly defined nuclear-weapon-free zones as "any zone, recognized as such by the United Nations General Assembly, which any groups of states, in the free exercise of their sovereignty, have established by virtue of a treaty or convention whereby:

- A. The statute of a total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone is defined;

- B. An international system of verification and control is established to guarantee compliance with obligations derived from that statute."⁸⁰

One of the principal security benefits that NWFZs aim to provide to their signatories is a legally-binding negative security assurance from the declared NWS—their signing and ratifying the treaties' protocols obligates them to refrain from using or threatening to use nuclear weapons against NWFZ signatories. The first legally-binding NSAs were provided in Additional Protocol II of the Treaty of Tlatelolco. Though the assurances were not universal, this set an important precedent that NSA protocols constitute a key element of NWFZ treaties. Nuclear-weapon-free zones are also seen as important confidence building mechanisms and instruments for regional denuclearization.

First proposed in 1974, consistent progress has been difficult on a Middle East Nuclear-Weapon-Free zone. At the 2010 NPT Review Conference, states called the process to begin in earnest. A regional conference with all relevant parties was called for to discuss the issue in 2012—with Finnish Undersecretary of State Jaakko Laajava designated as conference facilitator and December 2012 eventually being agreed to as the timeframe for the conference. The recent announcement by the conveners (Russia, the United Kingdom, the United States, and the UN secretary-general) that the conference was being postponed is perhaps not a surprise, but certainly a disappointment. No time frame has been given for the conference to be rescheduled, nor is their agreement on the reason for the postponement—timing has been cited, as has disagreements over underlying core issues and conference modalities, as well as the present conditions in the Middle East. Conference organizers Russia and the United Kingdom have called for the conference to be held in 2013, as has Secretary-General Ban Ki-moon.⁸¹

Policy Reference Points The Path to Zero

Prepared by the EastWest Institute, January 2013

The global non-proliferation movement's goal of the complete elimination of nuclear weapons received a boost in 2008 with the formation of Global Zero, U.S. President Barack Obama's 2009 Prague Speech, in which he spoke of the U.S.'s desire to "seek the peace and security of a world without nuclear weapons" and spelled out his vision for strengthening the global effort to curb the proliferation of nuclear weapons, and the 2010 signature of New START between Russia and the United States, who together hold 95 percent of the world's nuclear weapons.

Global Zero is an international movement advocating the elimination of all nuclear weapons by 2030. Since its inception in 2008, Global Zero has used public outreach, policy development, and direct diplomacy to raise awareness of the scope of the nuclear threat. Over 300 world leaders (and 400,000 citizens) have signed its declaration, which states "We, the undersigned, believe that to protect our children, our grandchildren and our civilization from the threat of nuclear catastrophe, we must eliminate all nuclear weapons globally. We therefore commit to working for a legally binding verifiable agreement, including all nations, to eliminate nuclear weapons by a date certain."⁸² Asserting that any stability formerly offered by the existence of nuclear weapons is now overshadowed by the dangers of proliferation and the risk of nuclear terrorism, Global Zero offers security policy recommendations for steps states can take to decrease their arsenals and commit to multilateral negotiations on stockpile reductions by 2014. The ultimate goal of the Global Zero Action Plan is to achieve a world free of nuclear weapons by 2030 and to develop a

robust enforcement system which will thereafter prohibit the development and possession of nuclear weapons worldwide.⁸³

While the worldwide anti-nuclear movement gains ground, it is ultimately up to politicians to determine the course of action their government will take. Major nuclear powers all have different motivations for retaining their arsenals. Below is a summary of policies and declarations by declared and non-declared nuclear states:

CHINA⁸⁴

- Consistent no-first-use policy; retains small force exclusively to counter nuclear attack and to deter nuclear attack by others on China;
- Interests lie in building international cooperation and a world nuclear order conducive to peace; will continue modest level of modernization to that end;
- Commitment to reductions will hinge on U.S. and Russian disarmament efforts as well as Chinese perceptions of regional and global security.

DPRK⁸⁵

- Declares that it retains nuclear forces to combat the political, military, and economic "hostile policies" of the United States and its allies;
- Claims concern about nuclear proliferation in Japan and South Korea;
- States improvement in political relations (U.S., Japan, South Korea) is

essential to begin denuclearization of Korean peninsula.

FRANCE⁸⁶

- Maintains nuclear weapons because of security concerns and to support regional and global political ambitions;
- Follows a policy of “sufficiency” in nuclear deterrence;
- Protecting against the possibility of future threats;
- Deterrent intended to cover “vital interests”;
- Repel blackmail or pressure from foreign WMD;
- Discourages nuclear proliferation worldwide – esp. Middle East/North Africa;
- Submarines, land-based aircraft, naval aircraft, less than 300 weapons in stockpile;
- Refuses any further significant reductions or multilateral negotiations on nuclear arms control until the far greater US and Russian stockpiles are decreased (proportionality).

INDIA⁸⁷

- Declared nuclear status in 1998;
- Fueled by security concerns, the need for autonomy from international pressure, military threat from Pakistan, and proliferation;
- Maintain a “recessed” posture: nuclear forces are not on constant alert. Maintain counterattack strategy;
- Consistent commitment to universal disarmament⁸⁸, with emphasis on participation by China and Pakistan, and non-discriminatory character of emerging regime.

IRAN⁸⁹

- Epicenter of western proliferation concerns/suspensions⁹⁰; undertakes both public and clandestine nuclear activities; allegations of nuclear military programs;
- Terminated self-imposed moratorium on nuclear enrichment in 2005;
- Potential nuclear motivations: strong sense of regional and international vulnerability (political/eco-

nomic/military); desire to project power & further regional/global ambitions;

- Ending the Iranian nuclear dispute requires prolonged and complicated negotiations, trust-building, and offering of incentives.

ISRAEL⁹¹

- Has never admitted to nuclear status or declared capabilities
- Nuclear capability developed to combat insecurity relating to Arab-Israeli conflict (military asymmetry) and perceived existential threat;
- Deterrence from nuclear/chemical/biological/conventional attack; use is a “last resort”;
- Have not joined NPT or negotiations for a Middle East Nuclear Weapon-Free Zone;
- Position on arms control is based on pre-existing durable peace process and regional stability.⁹²

PAKISTAN⁹³

- Acquisition and support of nuclear weapons is a result of regional security environment: offsetting conventional military superiority of India, ensuring the permanence of Pakistani state;
- Small arsenal to be delivered by ballistic missiles and aircraft;
- Has proposed numerous initiatives and phases of negotiation with a view to regional disarmament;
- Lacks trust in Western disarmament efforts; would consider disarmament after major initiatives by U.S. and Russia (Phase I), France and Britain (Phase II) and China, India, Pakistan and Israel (Phase III).

RUSSIA⁹⁴

- Nuclear weapons are mainstay of security posture and political status; strong nuclear force offsets mediocre conventional military forces (relative to China and U.S.);
- Post-cold-war security concerns include terrorism, ethnic and religious conflict, transnational crime, access to vital economic and strategic zones, NATO expansion, North Kore-

- an and Pakistani nuclear programs;
- Does not rule out potential first use if its interests are threatened;
- Has signed new START treaty with United States agreeing to large reductions in arsenals by 2021;
- Path to disarmament and abolition would be facilitated by improved relations with the United States, NATO, and EU.⁹⁵

UK⁹⁶

- Nuclear force consists solely of submarines (SSBNs);
- Sustaining minimum deterrent nuclear forces in the face of unknown forces – third world proliferation, chemical/biological weapons, nuclear terrorism;
- Could abandon nuclear program more easily than any other P5; prepared to do so in the event of international nuclear disarmament agreement;
- Minimum nuclear deterrent;
- Has made sweeping unilateral reductions; in case of international disarmament, the UK wouldn’t come into play until late in the process.

United States⁹⁷

- In the 21st century, the United States has reduced its stockpile and downplayed the role of nuclear weapons in security doctrine (although the U.S. has not been willing to declare that the sole purpose of nuclear weapons is deterrence);
- Arsenal has deterrent and political role in US policy; has used nuclear security assurances to convince other countries not to start nuclear programs;
- Has signed on to new START and seeking to start talks with Russia on additional nuclear reductions;
- Concerned with nuclear proliferation, especially in Iran and North Korea;
- Current administration supports ratification of CTBT and pursuit of FMCT;
- Administration has expressed a desire to eliminate nuclear weapons but acknowledge this will be slow.⁹⁸

The challenges and obstacles to eliminating nuclear weapons are significant and the timeframe is long. Among the challenges that the NDF has discussed this year is the role of nuclear weapons in strategic doctrines, the continued alert status of nuclear arsenals, and the lack of a legally-binding agreement on negative security assurances. But there are also opportunities to make progress in the medium and long term. These include:

OPPORTUNITIES

- A universal declaration against nuclear weapons: In opening the 66th General Assembly in September 2011, Secretary General Ban Ki-moon called for states to begin drafting a universal declaration on a “nuclear-weapon-free world.” The next month, the government of Kazakhstan offered text for such a declaration⁹⁹, recognizing a universal declaration as an important step in the efforts to adopt a nuclear weapons convention. The text of the declaration as suggested by Kazakhstan recognizes that “there now exist improved conditions for progress toward a world free of nuclear weapons, and stressing the need to continue to take concrete practical steps towards achieving this goal.”
- Further U.S.-Russia reductions: New START covers only deployed strategic warheads, which represents less than one-third of the total U.S. nuclear arsenal. Despite obvious and ongoing tensions in the U.S.-Russia relationship, there is common strategic interest in pursuing further reductions. Steve Pifer has suggested a new treaty that covers all nuclear weapons. He writes that the United States “should seek to engage Moscow in negotiation of a new treaty to cover all nuclear warheads — strategic and non-strategic, deployed and non-deployed — with the exception of those in the dismantlement queue (to be dealt with separately). An aggregate limit of 2,000-2,500 warheads would require a 50 percent reduction in the current U.S. and Russian nuclear arsenals. It would be a transformational arms control achievement.”¹⁰⁰

The wider benefits of a U.S.-Russia arms control agreement were discussed by Madeleine Albright and Igor Ivanov, who wrote “Russia and the United States control 90 to 95 percent of the world’s nuclear weapons. We can readily continue negotiations of further reductions and still safely ensure our security. If we do, we will be more persuasive when asking other nuclear-weapons states to join in the nuclear-arms reduction process and will enhance the credibility of our diplomacy in mobilizing international pressure on Iran to refrain from trying to build a nuclear weapon.”¹⁰¹

And finally, Pifer and Michael O’Hanlon of Brookings wrote “[A]s the U.S. continues to reduce its nuclear arsenal, the ability of American diplomacy to raise the bar against nuclear proliferation will be bolstered. We will have set an example to the world that giving up nuclear weapons doesn’t mean sacrificing security. That probably won’t affect decision-making in countries such as North Korea or Iran, but it will make it easier to enlist other countries to apply pressure and sanctions against those countries or against any other state that was to consider acquiring nuclear weapons. The general sense that Washington and Moscow are reducing their arsenals is crucial diplomatically for achieving this goal.

“Advancing these three goals should start with seeking a new negotiation with Russia aimed at reducing each side’s nuclear arsenal to between 2,000 to 2,500 total nuclear warheads — strategic and nonstrategic. That would result in a significant reduction, but would still leave the United States and Russia each with nuclear forces an order of magnitude larger than any other country.”¹⁰²

- Multilateralization of arms control: As the countries with still by far the largest nuclear arsenals, the United States and Russia have the largest responsibility and should pursue further bilateral reductions, as noted above. But the P5 collectively also has a “responsibility to advance the global nuclear arms control and disarmament agenda. The United States and Russia are likely to require assurance that China, France and Britain will act with similar restraint before they will agree to further reductions in their own nuclear forces.”¹⁰³ Russia has declared its readiness to further reduce its nuclear forces and “eventually move to ‘complete and universal disarmament,’ as required by Article VI of the NPT, but only in a gradual manner and under strict conditions that would “guarantee equal and indivisible security for all.”¹⁰⁴ Prominent among these conditions was the participation in the disarmament process of all countries possessing nuclear capabilities.



ENDNOTES

- 1 "Report of the Committee on Political and Social Problems," (The Franck Report) Manhattan Project Metallurgical Laboratory, University of Chicago, June 11, 1945. <http://www.dannen.com/decision/franck.html>.
- 2 UN General Assembly Resolution 1(I), January 24, 1946. <http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/032/52/IMG/NR003252.pdf?OpenElement>.
- 3 Address to the East-West Institute: "The United Nations and Security in a Nuclear-Weapon-Free world," Secretary-General Ban Ki-moon, October 24, 2008. http://www.un.org/apps/news/infocus/speeches/search_full.asp?statID=351.
- 4 "Proposed Nuclear Weapons Convention (NWC)," Nuclear Threat Initiative (NTI), 2013. <http://www.nti.org/treaties-and-regimes/proposed-nuclear-weapons-convention-nwc/>.
- 5 Tim Wright, "Towards a Treaty Banning Nuclear Weapons: A Guide to Government Positions on a Nuclear Weapons Convention," International Campaign to Abolish Nuclear Weapons, January 2012. <http://www.icanw.org/wp-content/uploads/2012/08/nwcguide2012.pdf>.
- 6 Remarks by President Barack Obama: Hradcany Square, Prague, April 5, 2009. http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.
- 7 Text of speech available at http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered.
- 8 UN Security Council Resolution 1887, September 24, 2009. <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N09/523/74/PDF/N0952374.pdf?OpenElement>.
- 9 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, Final Document, Volume 1 (NPT/CONF.2010/50 (Vol.1)*), New York, 2010: 19. http://www.un.org/ga/search/view_doc.asp?symbol=NPT/CONF.2010/50%20%28VOL.1%29.
- 10 U.S. figure from Hans Kristensen, "(Still) Secret US Nuclear Weapons Stockpile Reduced," FAS Strategic Security Blog, February 26, 2013. <http://www.fas.org/blog/ssp/2013/02/stockpilereduction.php>; Russian figure from Hans M. Kristensen and Robert S. Norris, "Size of Russian Nuclear Forces, 2012," Bulletin of the Atomic Scientists' Nuclear Notebook 2010, 90. <http://bos.sagepub.com/content/68/2/87.full.pdf>.
- 11 Ibid.
- 12 Michael Krepon, "Seven Days in May," Arms Control Wonk, June 1, 2011. <http://krepon.armscontrolwonk.com/archive/3125/seven-days-in-may>.

- 13 Reportedly, U.S. war planning gives the commander-in-chief 13 minutes to make a decision how to respond to a "serious warning of missile attack." See David Holloway, "13 minutes from an apocalypse," The Philadelphia Inquirer, January 11, 2013. http://articles.philly.com/2013-01-11/news/36281900_1_missiles-russia-warheads.
- 14 Hans M. Kristensen and Matthew McKinzie, Reducing Alert Rates of Nuclear Weapons (UNIDIR/2012/6), New York and Geneva: United Nations Institute for Disarmament Research, 2012: 1. <http://www.unidir.org/files/publications/pdfs/reducing-alert-rates-of-nuclear-weapons-400.pdf>.
- 15 See Geoffrey Forden, "Reducing a Common Danger: Improving Russia's Early-Warning System," Policy Analysis no. 399, May 3, 2001. <http://www.cato.org/sites/cato.org/files/pubs/pdf/pa399.pdf>. <http://www.cato.org/sites/cato.org/files/pubs/pdf/pa399.pdf>.
- 16 Bruce Blair, Victor Esin, Matthew McKinzie, Valery Yarynich, and Pavel Zolotarev, "Smaller and Safer," Foreign Affairs September/October 2010. <http://www.foreignaffairs.com/articles/66540/bruce-blair-victor-esin-matthew-mckinzie-valery-yarynich-and-pav-smaller-and-safer>.
- 17 See Hans M. Kristensen and Matthew McKinzie, Reducing Alert Rates of Nuclear Weapons, 26-32.
- 18 UN General Assembly Resolution 3472 B (XXX), December 11, 1975. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/3472%28XXX%29&Lang=E&Area=RESOLUTION.
- 19 See Hans M. Kristensen and Robert S. Norris, "Global nuclear weapons inventories, 1945-2010," Bulletin of the Atomic Scientists vol. 66 no. 4, July 2010, 77-83. <http://bos.sagepub.com/content/66/4/77.full>.
- 20 See Hans M. Kristensen, "Trimming Nuclear Excess: Options for further Reductions in US and Russian Nuclear Forces," Federation of American Scientists, December 2012. <http://www.fas.org/programs/ssp/nukes/publications1/TrimmingNuclearExcess.pdf>.
- 21 See "Russia Says Ready to Consider Further Nuke Cuts," Nuclear Threat Initiative, February 14, 2013. <http://www.nti.org/gsn/article/russia-says-ready-consider-further-nuke-cuts/>.
- 22 "Remarks by President Obama and President Medvedev of Russia at New START Treaty Signing Ceremony and Press Conference," Czech Republic, April 8, 2010. <http://www.whitehouse.gov/the-press-office/remarks-president-obama-and-president-medvedev-russia-new-start-treaty-signing-cere>.
- 23 R. Jeffrey Smith, "Obama Administration embraces Major New Nuclear Weapons Cut," The Center for Public Integrity, February 8, 2013. <http://www.publicintegrity.org/2013/02/08/12156/obama-administration-embraces-major-new-nuclear-weapons-cut>.

ENDNOTES

24 Kingston Reif, "Breaking Down the First New START Data Exchange," The Center for Arms Control and Non-Proliferation. http://armscontrolcenter.org/issues/nuclearweapons/articles/breaking_down_the_first_new_start_data_exchange/.

25 "Russia Says Exit from New START Treaty Would be 'Undesirable,'" Nuclear Threat Initiative, November 19, 2012. <http://www.nti.org/gsn/article/russia-says-exit-new-start-would-be-undesirable/>.

26 David E. Sanger, "Obama to Renew Drive for Cuts in Nuclear Arms," The New York Times, February 10, 2013. http://www.nytimes.com/2013/02/11/us/politics/obama-to-renew-drive-for-cuts-in-nuclear-arms.html?_r=0.

27 Jeffery M. Jones, "In U.S., 56% Favor U.S.-Russian Nuclear Arms Reductions," Gallup, March 11, 2013. <http://www.gallup.com/poll/161198/favor-russian-nuclear-arms-reductions.aspx>.

28 "Fourth P5 Conference: On the Way to the 2015 NPT Review Conference," Press Release, April 19, 2013. <http://www.state.gov/r/pa/prs/ps/2013/04/207768.htm>.

29 Adrian Croft, "UK sets limit of 25 on nuclear warhead stockpile," Reuters, May 26, 2012. <http://uk.mobile.reuters.com/article/topNews/idUKTRE64P2YH20100526>.

30 "Sarkozy announces small cut in France's nuclear arsenal," The New York Times, March 21, 2008.

31 Thomas Young, "Political Perceptions of Nuclear Disarmament in the United Kingdom and France: A Comparative Analysis," Nuclear Threat Initiative, December 1, 2009. <http://www.nti.org/analysis/articles/disarmament-uk-france/>.

32 See Ray Acheson, "Modernization of nuclear weapons: Aspiring to indefinite retention," Bulletin of the Atomic Scientists, Volume 28, Issue 5, September 2012. <http://thebulletin.org/2012/september/modernization-nuclear-weapons-aspiring-%E2%80%9Cindefinite-retention%E2%80%9D>.

33 "World Nuclear Forces," SIPRI Yearbook 2012, Stockholm International Peace Research Institute. <http://www.sipri.org/yearbook/2012/07>.

34 "Taking forward Multilateral Nuclear Disarmament Negotiations," United Nations Office at Geneva. [http://www.unog.ch/80256EE600585943/\(httpPages\)/160EB2DDE30CCE6BC1257B10003A81A9?OpenDocument](http://www.unog.ch/80256EE600585943/(httpPages)/160EB2DDE30CCE6BC1257B10003A81A9?OpenDocument).

35 Regrettably, none of the P5 sent representatives to the Conference

36 "China's National Defense in 2010," The People's Republic of China, March 2011. http://news.xinhuanet.com/english2010/china/2011-03/31/c_13806851_5.htm.

37 Hans M. Kristensen and Robert S. Norris, "Nuclear Notebook: Chinese nuclear forces, 2011," Bulletin of the Atomic Scientists, November/December 2011, 67-81. <http://bos.sagepub.com/content/67/6/81.full.pdf+html>.

38 M. Taylor Fravel and Evan S. Medeiros, "China's Search for Assured Retaliation: The Evolution of Chinese Nuclear Strategy and Force Structure," International Security 35.2 (2011), 58. http://belfercenter.ksg.harvard.edu/files/Chinas_Search_for_Assured_Retaliation.pdf.

39 Ibid, 75.

40 Bruno Tertrais, "The Last to Disarm? The Future of France's Nuclear Weapons," Non-proliferation Review, Vol. 14, No. 2, July 2007, 252. <http://cns.miis.edu/npr/pdfs/142tertrais.pdf>.

41 Speech by President Nicolas Sarkozy, March 2008, 4-5. http://www.diplomatie.gouv.fr/en/IMG/pdf/Speech_by_Nicolas_Sarkozy__presentation_of_Le_Terrible_submarine.pdf

42 "Status of World Nuclear Forces," Federation of American Scientists, 2013. <http://www.fas.org/programs/ssp/nukes/nuclearweapons/nukestatus.html>.

43 Ali Ahmed, "Reviewing India's Nuclear Doctrine," Institute for Defence Studies and Analyses Policy Brief, April 2009. http://www.idsa.in/policybrief/reviewingindiasnucleardoctrine_aahmed_240409.

44 Speech by NSA Shri Shivshankar Menon at NDC on "The Role of Force in Strategic Affairs," October 2010. <http://www.mea.gov.in/Speeches-Statements.htm?dtl/798/Speech+by+NSA+Shri+Shivshankar+Menon+at+NDC+on+The+Role+of+Force+in+Strategic+Affairs>.

45 Robert S. Norris and Hans M. Kristensen, "Nuclear Notebook: Indian Nuclear Forces, 2011," Bulletin of the Atomic Scientists, September/October 2010 vol. 66 no. 5, 76. <http://bos.sagepub.com/content/66/5/76.full.pdf+html>.

46 "Status of World Nuclear Forces."

47 Peter R. Lavoy, "Pakistan's Nuclear Posture: Security and Survivability," April 2007. <http://www.npolicy.org/files/20070121-Lavoy-PakistanNuclearPosture.pdf>.

48 Peter R. Lavoy, "Islamabad's Nuclear Posture: Its Premises and Implementation," in Henry Sokoloski (ed.), Pakistan's Nuclear Future: Worries beyond War. Strategic Studies Institute, 2008, 134.

49 "Status of World Nuclear Forces."

50 Islamabad's Nuclear Posture: Its Premises and Implementation," 136.

51 "Status of World Nuclear Forces."

ENDNOTES

- 52 Nikolai Sokov, "The New, 2010 Russian Military Doctrine: The Nuclear Angle," February 5, 2010. http://cns.miis.edu/stories/100205_russian_nuclear_doctrine.htm.
- 53 Ibid.
- 54 Hans M. Kristensen, "Britain Discloses Size of Nuclear Stockpile: Who's next?" FAS Strategic Security Blog, May 26, 2010. <http://www.fas.org/blog/ssp/2010/05/ukstockpile.php>.
- 55 Department of Defense Fact Sheet: Increasing Transparency in the U.S. Nuclear Weapons Stockpile, May 2010. http://www.defense.gov/npr/docs/10-05-03_Fact_Sheet_US_Nuclear_Transparency_FINAL_w_Date.pdf.
- 56 Quadrennial Defense Review Report, the U.S. Government, February 2010.
- 57 Ballistic Missile Defense Review Report, the U.S. Government, February 2010. http://www.defense.gov/bmdr/docs/BMDR%20as%20of%2026JAN10%200630_for%20web.pdf.
- 58 David E. Sanger and Peter Baker, "Obama Limits When U.S. Would Use Nuclear Arms," The New York Times, April 5, 2010. <http://www.nytimes.com/2010/04/06/world/06arms.html?pagewanted=all>.
- 59 Nuclear Posture Review Report, the U.S. Government, April 2010. <http://www.defense.gov/npr/docs/2010%20nuclear%20posture%20review%20report.pdf>.
- 60 "Active Engagement, Modern Defence," North Atlantic Treaty Organisation (NATO), 19 November 2010. http://www.nato.int/cps/en/natolive/official_texts_68580.htm.
- 61 Oliver Meier, "NATO Revises Nuclear Policy," Arms Control Today, December 2010. http://www.armscontrol.org/act/2010_12/NATO_Nuclear.
- 62 "Report of the Canberra Commission on the Elimination of Nuclear Weapons," The Australian Government, 1996, 11-12. <https://www.dfat.gov.au/publications/security/canberra-commission-report/>.
- 63 "Confidence-building and the delegitimization of nuclear weapons: Canadian contributions to advancing disarmament," 2000, 34-37. http://www.international.gc.ca/arms-armes/assets/pdfs/nuclear_cbms_paper_mutimer.pdf.
- 64 UN General Assembly Resolution A/RES/54/54G, January 10, 2000, article 5. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/54/54&referer=http://www.un.org/depts/dhl/resguide/r54.htm&Lang=E.
- 65 UN General Assembly Resolution A/RES/67/L.1, October 2012, article 14(e). <http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com12/resolutions/L13.pdf>. <http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/1com/1com12/resolutions/L13.pdf>
- 66 UNGA– China's statement on security assurances, April 6, 1995. <http://www.undemocracy.com/S-1995-265.pdf>.
- 67 "Inventory of International Nonproliferation Organizations and Regimes," James Martin Center for Nonproliferation Studies, March 2011. <http://cns.miis.edu/inventory/pdfs/nsa.pdf>.
- 68 Proposed Internationally Legally-Binding Negative Security Assurances (NSAs), Nuclear Threat Initiative (NTI), 2013. <http://www.nti.org/treaties-and-regimes/proposed-internationally-legally-binding-negative-security-assurances/>
- 69 UNGA – China's statement on security assurances
- 70 UN GA – France's statement on security assurances – April 6, 1995. <http://www.undemocracy.com/S-1995-264.pdf>.
- 71 UNGA – Russia's statement on security assurances, April 6, 1995. <http://www.undemocracy.com/S-1995-261.pdf>.
- 72 Newly-approved Russian Military Doctrine, 2010, 9. http://merln.ndu.edu/whitepapers/Russia2010_English.pdf.
- 73 UNGA – UK's statement on security assurances, April 6, 1995. <http://www.undemocracy.com/S-1995-262.pdf>.
- 74 "Securing Britain in an Age of Uncertainty: The Strategic Defense and Security Review," October 19, 2010. http://www.direct.gov.uk/prod_consum_dg/groups/dg_digitalassets/@dg/@en/documents/digitalasset/dg_191634.pdf?CID=PDF&PLA=furl&CRE=sdsr.
- 75 Nuclear Posture Review Report.
- 76 "North Korea denounces Obama nuclear strategy," Huffington Post, April 9, 2010. http://www.huffingtonpost.com/2010/04/09/north-korea-denounces-oba_n_532206.html.
- 77 "Foreign Relations of the United States, 1964–1968," Volume XX, Arab-Israeli Dispute, 1967–68, Document 349, December 12, 1968. <http://history.state.gov/historicaldocuments/frus1964-68v20/d349>. <http://history.state.gov/historicaldocuments/frus1964-68v20/d349>
- 78 Speech by NSA Shri Shivshankar Menon at NDC on "The Role of Force in Strategic Affairs."
- 79 "The Cabinet Committee on Security Reviews the Operationalization of INDIA'S Nuclear Doctrine," January 2003. <http://www.mea.gov.in/press-releases.htm?dtl/20131/The+Cabinet+Committee+on+Security+Reviews+perationalization+of+Indias+Nuclear+Doctrine>
- 80 UN General Assembly Resolution 3472 B (XXX).

ENDNOTES

81 "Meeting on Middle East WMD Postponed," Arms Control Association, December 2012. http://www.armscontrol.org/act/2012_12/Meeting-on-Middle-East-WMD-Postponed.

82 <http://www.globalzero.org/en/sign-declaration> This link does not work

83 "The Road to Zero," Global Zero. <http://www.globalzero.org/get-the-facts/timeline>

84 "Unblocking the Road to Zero: China and India," The Stimson Center, May 2009, 29-52. <http://www.stimson.org/images/uploads/research-pdfs/UnblockingRoadZeroChinaIndia.pdf>

85 "North Korea and Iran," The Stimson Center, May 2009, 1-16. http://www.stimson.org/images/uploads/research-pdfs/NK_IRAN_FINAL.pdf.

86 "France and the UK," The Stimson Center, February 2009, 1-20. http://www.stimson.org/images/uploads/research-pdfs/Nuclear_Security_FINAL_Complete_UK_France.pdf.

87 "Unblocking the Road to Zero: China and India,"

88 Ibid – see p.18 for 7-point agenda for nuclear disarmament

89 "North Korea and Iran," 19-44.

90 Ibid – see p 34-35 for list of reasons causing suspicions

91 "Pakistan and Israel," The Stimson Center, April 2009, 37-56. http://www.stimson.org/images/uploads/research-pdfs/PAKISTAN_ISRAEL.pdf.

92 Ibid, 49-50.

93 Ibid, 1-31

94 "Russia and the United States," The Stimson Center, July 2009. http://www.stimson.org/images/uploads/research-pdfs/Russia_US_Format_FINAL.pdf

95 Ibid – see 19 for list

96 "France and the UK," 23-56.

97 "Russia and the United States," 23-53.

98 Ibid – see 52 for first steps

99 "Declaration on a Nuclear-Weapon-Free World," October 12, 2011. <http://www.kazakhstanlive.com/Documents/Declaration.pdf>.

100 Steven Pifer, "Nuclear Arms Control: Another New Start," January 17, 2013. <http://www.brookings.edu/research/papers/2013/01/nuclear-arms-control-another-new-start>.

101 Madeleine Albright and Igor Ivanov, "A New Agenda for U.S.-Russia Cooperation," The New York Times, December 30, 2012. <http://www.nytimes.com/2012/12/31/opinion/31iht-edalbright31.html?ref=madeleinekalbright>.

102 Steven Pifer and Michael O' Hanlon, "Arms control should be high on president's agenda," The Los Angeles Times, October 19, 2012. <http://articles.latimes.com/2012/oct/19/opinion/la-oe-ohanlon-nuclear-arms-control-20121019>.

103 Dr. Andrew Cottey, "Multilateralizing Nuclear Arms Control: an agenda for the P5 meeting in Paris," June 29, 2011. <http://www.basicint.org/publications/dr-andrew-cottey/2011/multilateralizing-nuclear-arms-control-agenda-p5-meeting-paris>.

104 Richard Weitz "Global Insights: Russia Sets Bar High on Arms Control," World Politics Review, September 11, 2012. <http://www.worldpoliticsreview.com/articles/12322/global-insights-russia-sets-bar-high-on-arms-control>.

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