# Reducing Nuclear Risks in Europe

## A FRAMEWORK FOR ACTION

EDITED BY STEVE ANDREASEN AND ISABELLE WILLIAMS

TEN YEARS OF NTI BUILDING A SAFER WORLD

**FEATURED ESSAY:** "The Race Between Cooperation and Catastrophe" **BY SAM NUNN**

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NUCLEAR THREAT INITIATIVE
Washington, D.C.

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NTI is a nonprofit, nonpartisan organization with a mission to strengthen global security by reducing the risk of use and preventing the spread of nuclear, biological, and chemical weapons, and to work to build the trust, transparency, and security that are preconditions to the ultimate fulfillment of the Non-Proliferation Treaty's goals and ambitions.

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# Reassembling a More Credible NATO Nuclear Policy and Posture

JOAN ROHLFING, ISABELLE WILLIAMS, AND STEVE ANDREASEN

In January 2007, George Shultz, William Perry, Henry Kissinger, and Sam Nunn wrote the first in a series of essays published in *the Wall Street Journal* calling for a global effort to reduce reliance on nuclear weapons, prevent their spread into potentially dangerous hands, and ultimately end them as a threat to the world. One of the important steps they proposed to reduce nuclear dangers was to start a dialogue, including within NATO and with Russia, on consolidating the nuclear weapons designed for forward deployment to enhance their security, and as a first step toward careful accounting for them and their eventual elimination.[1]

Accomplishing this task will require careful thought and coordinated action within both NATO and Russia, as well as a strategy for engagement between them—the subject of former Senator Sam Nunn's featured essay for this report. To assist in developing such an approach and as a direct contribution to the ongoing NATO Deterrence and Defense Posture Review (DDPR), the Nuclear Threat Initiative commissioned a series of nine policy papers authored and reviewed by a distinguished group of international experts. This collection of papers on NATO nuclear policy analyzes policy and force structure options open to NATO members and aims to promote dialogue and new thinking on several key issues and questions, including:

- Can/should NATO's nuclear declaratory policy be modified to further reduce the role of nuclear weapons in NATO security policy consistent with the recent changes to U.S. and U.K. declaratory policy?

1. George Shultz, William Perry, Henry Kissinger, and Sam Nunn, "Toward A Nuclear-Free World," *The Wall Street Journal*, January 15, 2008.

- What are the security concerns and related risks associated with NATO's existing nuclear posture, and how can these concerns and risks be reduced?
- Are the current nuclear sharing arrangements sustainable in the long term for NATO members, and what are the alternatives that maintain wide participation in nuclear operations and planning?
- What reassurance measures are required for NATO members and partners consistent with the new NATO Strategic Concept, and what are the benefits and risks involved?
- What are the next steps in U.S./NATO–Russia discussions and cooperation on non-strategic nuclear weapons (NSNW), missile defense, and nonthreatening conventional force deployments?
- How does the debate over NATO nuclear policy and NSNW—deployed by both NATO and Russia—relate to Asian security?

This study has defined NSNW as all nuclear weapons intended for use with non-strategic nuclear delivery systems—that is, any nuclear weapon not intended for use on a long-range ballistic missile (ICBM or SLBM) or heavy bomber. NSNW can be delivered by aircraft or missiles deployed on land or at sea, as well as by artillery, torpedoes, or mines.

## BACKGROUND

As detailed in Chapter 1, in the lead up to the November 2010 NATO Lisbon Summit, the complexities of the nuclear issues and the many different positions represented within the Alliance made it difficult for NATO members to agree on several fundamental issues relating to NATO nuclear policy. The Strategic Concept adopted at Lisbon embraced two core principles: that NATO was committed to the goal of creating the conditions for a world without nuclear weapons according to the goals of the Nuclear Non-Proliferation Treaty, and for as long as there are nuclear weapons, NATO would remain a nuclear Alliance.

In this context, the 2010 Strategic Concept also contained key language on nuclear policy-related issues, including:

- The "supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the U.S." The Concept also notes "the independent nuclear forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies."

- Members will "seek to create the conditions for further reductions (of nuclear weapons stationed in Europe) in the future…In any future reductions, our aim should be to seek Russian agreement to increase transparency on its nuclear weapons in Europe and relocate these weapons away from the territory of NATO members. Any further steps must take into account the disparity with the greater Russian stockpiles of short-range nuclear weapons."
- Members will "ensure the broadest possible participation of Allies in collective defense planning on nuclear roles, in peacetime basing of nuclear forces, and in command, control and consultation arrangements."
- No declaratory policy was outlined, although the Concept noted, "The circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote."

To further advance the dialogue on NATO nuclear policy both in design and practice beyond these basic principles, the North Atlantic Council (NAC) was tasked at Lisbon with reviewing NATO's overall nuclear and conventional posture in deterring and defending against a full range of threats, including "NATO's nuclear posture, and missile defense and other means of strategic deterrence and defense." The DDPR is not therefore intended to reopen the broad concepts outlined above that were settled in Lisbon. Rather, it provides a process for members to further discuss issues that were difficult to find consensus on: the role of nuclear weapons, including declaratory policy, in deterrence and defense; the role NATO intends to play in future arms control efforts—primarily with Russia; the willingness and ability of members to sustain the current nuclear mission, as well as alternatives to NATO's existing nuclear arrangements; and the future direction of relations with Russia. The review also importantly allows members to assess whether the Alliance has the appropriate mix of nuclear and conventional capabilities to address current and emerging threats and to ensure that the various components of NATO strategy relate to each other in a coherent way.

## WHAT IS NEEDED FROM THE DDPR

With respect to the nuclear component of deterrence and defense, all members agree that NATO should remain a nuclear Alliance and have committed to maintaining deterrence and advancing nonproliferation and arms control in the context of creating the conditions to move toward a world free of nuclear weapons. All members therefore have a responsibility to demonstrate that NATO's nuclear posture and policies reflect these commitments and are tailored in the most

effective way to ensure they strengthen Alliance security; address the complexity of threats, both old and new, now facing the Alliance; and take into consideration NATO's broader role and mission, including cooperation and partnerships with key global states.

In the crucial months ahead, NATO members should conduct the DDPR deliberations within the context of assessing the cost-benefit ratio of either maintaining the status quo or implementing policy changes. This includes a careful consideration of the security context—including existing and emerging threats—as well as political, security, and financial costs.

## Security Context

Maintaining the status quo, with its attendant costs and risks, can undermine, not strengthen, NATO security.

NATO nuclear policy today has its roots in the Cold War, when NATO faced a fundamentally different set of security challenges. Dramatic political, security, and economic developments have occurred since then: the collapse of the Soviet Union and the Warsaw Pact; the Balkans war; the addition of new NATO member states; terrorist attacks in the United States and Europe; the war in Afghanistan; the global financial crisis and the ongoing debt crisis in Europe and the United States; and most recently, NATO intervention in Libya. NATO needs to continuously assess its evolving security context and existing and emerging threats and take these developments into consideration when reviewing its deterrence and defense posture. Maintaining the status quo, with its attendant costs and risks, can undermine, not strengthen, NATO security.

## Political Costs

In the aftermath of President Obama's 2009 Prague speech proclaiming support for working toward the vision of a world free of nuclear weapons, other European NATO member states also made clear their strong support for U.S. efforts to reinvigorate the nuclear disarmament agenda. The 2010 Strategic Concept, therefore, committed members to work toward creating the conditions for a world free of nuclear weapons. Given this commitment by NATO and the global momentum behind dialogue and action on addressing nuclear dangers, members should consider the potential political cost of announcing next year a "status quo outcome" on NATO nuclear policy and posture—aspects of which have not been revised for decades—and the message this will send to other countries.

One of the key issues is whether NATO will adopt a new declaratory policy. Such a statement has traditionally played an important role in communicating how nuclear weapons contribute to collective defense and deterrence and support the Alliance's arms control and disarmament commitments. As explained in Chapter 2, with both the United States and the United Kingdom adopting new

declaratory policies that make more explicit how remote the potential is for any nuclear use, it would appear there is a good case for NATO to do the same.

NATO members hosting U.S. NSNW and deploying dual capable aircraft (DCA) will also need to consider whether they are willing to invest the political capital necessary to achieve Parliamentary approval for any new nuclear-related investments, which could be viewed by their publics as "nuclear modernization" or "nuclear rearmament."

## Security Costs

One key risk that NATO must address is that of a terrorist attack on a European base with U.S. forward deployed weapons. As discussed in Chapter 3, no matter what degree NATO assesses the risk of such an attack, the political and security consequences of any infiltration of a site would be potentially severe for the Alliance. Therefore, as long as U.S. NSNW remain deployed in Europe, all of NATO has a stake in their security, and those countries possessing or storing nuclear weapons on their territory must be committed to responsible stewardship. NATO should assess what security upgrades are necessary to weapons and bases, evaluate the potential costs of implementing such upgrades—which could be in the hundreds of millions of dollars—and assign the responsibility for these costs. If resources are not available, steps such as further consolidations of these weapons should be implemented without delay.

As long as U.S. NSNW remain deployed in Europe, all of NATO has a stake in their security.

## Financial Costs

Discussions on NATO nuclear policy will be held against the backdrop of a significant decline in the defense spending of NATO European members. Members will need to assess all capabilities and resources based on emerging threats and declining budgets. Financial considerations will therefore likely have a significant effect on how members view the role of nuclear weapons. For example, NATO members hosting U.S. NSNW will need to consider the financial cost of maintaining the status quo—including the cost of maintaining DCA, either by extending the life of existing aircraft or providing funding for nuclear-capable replacement aircraft, in particular, the Joint Strike Fighter (a key issue for Belgium and the Netherlands). NATO members should also take into account the negative effect of defense cuts on efforts to "reassure" certain Allies of NATO's commitment to Article 5.

## COMMON THEMES

There are several common elements and themes that run through the following chapters, underscoring the importance of the DDPR process and—potentially—providing a blueprint for reassembling a more credible NATO nuclear policy and posture.

If current arrangements are not deemed sustainable in the long term, NATO must begin a serious dialogue on how these alternatives might be developed and implemented . . .

### Nuclear Sharing Arrangements

Certain NATO members cannot now envision NATO nuclear policy without the current nuclear arrangements, including NATO DCA and U.S. NSNW deployed in Europe; to some, an end to the current arrangements would mean nonnuclear Allies are no longer directly involved in the Alliance's nuclear deterrence posture. There is also a growing recognition within NATO, however—including those states that currently operate NATO DCA—that the status quo is not sustainable, and that there are alternatives to the current arrangements that would maintain the nuclear sharing even without U.S. forward based NSNW and could provide a more credible and sustainable posture for NATO. As explained in Chapter 4, discussions on these alternatives should focus on four dimensions: nuclear information sharing, nuclear consultations, common planning, and common execution. Members, therefore, need to assess how to proceed with NATO's nuclear sharing mechanisms. If current arrangements are not deemed sustainable in the long term, NATO must begin a serious dialogue on how these alternatives might be developed and implemented by consensus within NATO in ways that strengthen the Alliance.

### Relationship with Russia

All NATO members recognize the importance of the relationship with Russia, and no country stands to benefit if the relationship deteriorates. U.S./NATO–Russian cooperation is required to reduce nuclear threats in the Euro-Atlantic region, as well as to move forward on missile defense and conventional force limitations.

Although the U.S.-Russia bilateral relationship may be stronger than it has been for several years, it is questionable whether the same is true for the NATO-Russia relationship. There is still an element of deep mistrust and suspicion in the Euro-Atlantic region that undermines attempts at cooperation between NATO and Russia. Breaking down these persistent barriers to cooperation will require political will from the highest levels in Washington, Brussels, and Moscow.

As discussed in Chapters 5 and 6, a key problem for NATO is addressing the concerns of individual member states, which have their own unique histories and experience with Russia. Reassurance—particularly of Central and Eastern European (CEE) states—has therefore become a central issue for the Alliance, including with regard to the role of nuclear weapons in NATO security policy. Given that many reassurance measures focused on CEE states could be perceived negatively by Russia, NATO will need to give careful consideration to how it can balance effective reassurance within NATO and deepening cooperation with Russia—so that "reassurance" and "cooperation" can be mutually reinforcing rather than competing goals.

…NATO will need to give careful consideration to how it can balance effective reassurance within NATO and deepening cooperation with Russia…

### Linkage

As explored in Chapters 7 and 8, although conventional forces, missile defense, and nuclear deterrence are independent issues with their own unique dimensions, they are closely related—perhaps most notably in their relationship to Russia and Euro-Atlantic security. Devising a comprehensive approach within NATO (and in Moscow) that takes into account this interrelationship among issues will be vital but challenging—and as discussed in Chapter 9, this will also need to be done with an eye toward Asia.

The DDPR should work to develop a flexible and durable policy framework that recognizes these interrelationships—and can be reviewed periodically and adjusted when necessary. Rigid formulas for linkage are unlikely to improve NATO security or facilitate progress with Russia; by the same token, a policy that fails to take into account the overlap between conventional forces, missile defense, and nuclear deterrence—and Russian perceptions and interests on these issues—is unlikely to succeed.

## CONCLUSION

Each of the following chapters makes a substantial new contribution to the discussion of NATO nuclear policy. Together, they can inform further policy work within NATO and in capitals on the vital questions that remain to be answered, and provide the outlines of a new NATO nuclear policy that can significantly improve NATO security and advance the Alliance's stated global non-proliferation and arms control objectives.

FEATURED ESSAY

# The Race Between Cooperation and Catastrophe

SAM NUNN

## THE NUCLEAR THREAT, YESTERDAY AND TODAY

My first visit to NATO came during the single most dangerous moment for the United States, NATO, and the Soviet Union during the four decades of the Cold War: the 1962 Cuban Missile Crisis. I was a 24-year-old staff lawyer with the U.S. House of Representatives Armed Services Committee on an Air Force-led trip to NATO. During those tense days, President John F. Kennedy imposed a naval quarantine around Cuba—and to the world's great relief, Premier Nikita Khrushchev ordered all Soviet nuclear missiles removed from the island. During detailed daily classified briefings to our delegation during the course of 10 days, I recognized how close the world was to nuclear war. I pledged to myself to try to reduce these dangers if I ever had the chance.

I returned to NATO in 1974 as a newly elected Senator from Georgia. At that time, the concept and practice of nuclear deterrence by the United States and NATO—including the deployment of thousands of shorter-range American nonstrategic (or "tactical") nuclear weapons in Europe—played a crucial role in NATO's strategy and defense posture.

During that 1974 trip, several important points were evident to me:

a) NATO's conventional weaknesses combined with the enormous Soviet forward-based tank and artillery forces arrayed against NATO made front-line American and NATO commanders not only reliant on first use of tactical nuclear weapons, but more dangerously, *early* first use—an unspoken but grim reality. A nuclear release request by battlefield commanders was likely at the outset of any serious military conflict based on the concern that nuclear

# FEATURED ESSAY: **KEY FINDINGS**

- The Cold War is now 20 years behind us, yet the world continues to live with large strategic nuclear forces on high alert and thousands of tactical nuclear weapons located in certain NATO states and Russia.

- The global nuclear threats that are staring us in the face today—catastrophic terrorism; a rise in the number of nuclear weapon states; and the danger of mistaken, accidental, or unauthorized nuclear launch—can only be successfully prevented by cooperation between Washington, Brussels, and Moscow.

- Given NATO political and security priorities in the post-Soviet era and serious new threats to global security, the rationale for maintaining thousands of tactical nuclear weapons in Europe for another decade is out of date and dangerous for NATO and for Russia.

  - Today, tactical nuclear weapons in the Euro-Atlantic region are more of a security risk than asset to NATO. The same is true for Russia.

  - NATO's serious conventional capability gaps and resource constraints for likely contingencies (as seen in Libya) also lead to the blunt reality that, over the long-term, NATO cannot sustain a program that spends scarce defense resources on tactical nuclear weapons capabilities that are no longer militarily useful.

- Moving to a new nuclear posture in Europe will require increasing trust between NATO and Russia, as well as corresponding actions by both.

- One approach to framing a new process and dialogue on European security is to start discussions on a broad range of issues through the prism of steps designed to increase "warning and decision time" for political and military leaders—so that no nation fears a short warning conventional attack or feels the need to deter or defend against such an attack with tactical nuclear weapons.

  - Such a dialogue could lead to progress on conventional and nuclear arms, both tactical and strategic, as well as missile defense.

- Within this conceptual framework, NATO should state that it now believes the fundamental purpose of its nuclear weapons is to deter the use of nuclear weapons by others and plan for further reductions and consolidation of U.S. tactical nuclear weapons in Europe.

  - The target of completing consolidation to the United States should be within five years, with the final timing and pace determined by broad political and security developments between NATO and Russia, including but not limited to their tactical nuclear deployments near NATO's border.

  - This can be accomplished in ways that ensure that NATO will remain a nuclear alliance for as long as nuclear weapons exist; and that America's extended nuclear deterrent will continue, but in a form that is safer and more credible.

- The alternative—maintaining the nuclear status quo in Europe—runs a high cost and unacceptable risk.

release authority from Washington would be slow and that the thousands of tactical nuclear weapons on NATO's front line would either have to be used or moved back rapidly—before being overrun. I concluded that the President of the United States would have been confronted within hours with a request to use tactical nuclear weapons, with the horror of strategic nuclear escalation looming just over the horizon.

b) This early nuclear first use strategy may have served to frighten and deter our adversaries, but it was a very high-risk and dangerous policy for NATO, for all of Europe, and indeed for the Soviet Union and the Warsaw Pact. It left both Alliances reliant on a strategy of destroying the territory they were sworn to defend if conflict occurred.

c) The lack of conventional warning and decision time inherent in NATO's early first use strategy to my mind made war—indeed nuclear war—more likely, whether by intent or accident. And as could be expected, the Soviets responded over time with the deployment of thousands of their own tactical nuclear weapons, many of which remain forward deployed near NATO's borders today.

Another disturbing fact that was very clear during my 1974 trip: the tactical nuclear weapons themselves often were not well secured. While touring a NATO base that stored some of the weapons, I had been assured by commanding officers that the weapons were secure. As I shook hands with a sergeant on the way out, I felt a piece of paper crumbled in my hand. It said, "This is all a bunch of bull, Senator. If you want the real story see me and my buddies at the barracks after you get through with your tour, but don't bring any officers."

Late that afternoon, Frank Sullivan—an experienced member of the Senate Armed Services Committee staff—and I had an alarming conversation with several of the sergeants in charge of the tactical nuclear weapons at that base. We were told that we did not have good security on site, or credible plans to respond to a terrorist attack in the first few hours. The security forces also had drug and alcohol problems with considerable strain between enlisted personnel and officers—a carryover from Vietnam. The base was in a remote enough area that a terrorist group of five to 10 people could have threatened the whole base, an event that would have posed a serious threat to NATO's fragile political consensus. This was also during the era of the Baader-Meinhof gang, who were conducting regular attacks on Germans and U.S. military personnel and facilities. I was so concerned that when I returned to Washington, I went directly to then Defense Secretary Jim Schlesinger and laid out to him my concerns. To his great credit, Jim took action to strengthen security at these facilities.

Those were extremely dangerous times, when the greatest danger of the Cold War—that the Soviet Union would risk a war in Europe—were addressed primarily by confronting Moscow with the threat of early first use of U.S. nuclear weapons backed by our strategic nuclear arsenal. By the grace of God, deterrence did work, but the risk of a European or even global nuclear holocaust was very

real—and at crucial times, like the Cuban Missile Crisis, we were very lucky to have avoided what President Kennedy referred to as "the final failure."

Although relationships in the Euro-Atlantic region have dramatically improved and European military forces, including tactical nuclear weapons, significantly drawn down on both sides, many of these challenges and lessons remain relevant today—and they will be unfortunately even more relevant in the years ahead unless addressed now. NATO and Russia have a window of opportunity to move decisively and permanently away from this world of peril to a Europe of promise if we apply a sense of history, common sense, and a cooperative approach to today's obstacles and opportunities.

Since the collapse of the Soviet Union 20 years ago, no geopolitical space has undergone as dramatic a transformation as that between the Atlantic and the Urals. During the Cold War, a devastating conventional and nuclear war in Europe was a very real possibility; today, Europe does not face this type of deliberate existential threat. Instead, the global nuclear threats that are staring us in the face today—catastrophic terrorism, a rise in the number of nuclear weapons states, and the danger of mistaken, accidental, or unauthorized nuclear launch—can only be prevented in *cooperation* between Washington, Brussels, and Moscow. The need for cooperation is clear: the United States and Russia still possess thousands of nuclear weapons each—more than 90 percent of the world's nuclear inventory—and many of these nuclear arms remain deployed or designed for use within the Euro-Atlantic region. Those include small tactical nuclear weapons—a terrorist's dream—deployed in numerous states throughout the Euro-Atlantic zone.

The reduction and elimination of this Cold War nuclear infrastructure and the reorientation of security policies to address today's threats is the largest piece of unfinished business from a bygone era and should be moved to the policy front burner for the United States, NATO, and Russia. If we do not address this issue with urgency, we may wake up one day to a 1972 Munich-Olympics scenario, with a masked terrorist waving a gun outside of a nuclear warhead bunker somewhere in Europe. This time the hostages could be millions of people living close by. I believe that we are in a race between cooperation and catastrophe. Both leaders and citizens from around the world must reflect on what is at stake. On the European nuclear front, if we learn from history, we will recognize that nuclear dangers are not likely to be successfully addressed without considering conventional force deployments and perceptions of warning and decision time for all European and Russian leaders.

We may wake up one day to a 1972 Munich-Olympics scenario, with a masked terrorist waving a gun outside of a nuclear warhead bunker somewhere in Europe.

## LISBON'S UNANSWERED QUESTIONS

At last November's NATO Summit, a compromise was reached in the new NATO Strategic Concept on the role of nuclear weapons in NATO security policy. Specifically, the Strategic Concept embraces two core principles: first, NATO

is committed to the goal of creating the conditions for a world without nuclear weapons; and second, for as long as there are nuclear weapons in the world, NATO will remain a nuclear Alliance.

Although the above formula was perhaps the best Alliance consensus available at that time, it nevertheless papered over a lingering dispute between Allies on the future direction of NATO nuclear policy, stemming from a diverse spectrum of views within NATO regarding the appropriate response to existing and future threats. With respect to the first principle, the Strategic Concept states that NATO will seek to create the conditions for further nuclear reductions. There is nothing, however, approaching a blueprint for achieving this objective, other than a statement that in any future reductions, NATO's aim should be to seek Russian agreement to increase transparency on its nuclear weapons in Europe and relocate these weapons away from the territory of NATO members. The second principle leaves unanswered the central question of what it means for NATO to remain a "nuclear Alliance" as well as the "appropriate mix" of nuclear and conventional capabilities necessary for deterrence.

Recognizing that more work needed to be done, NATO tasked a review of its nuclear posture as part of a broader Deterrence and Defense Posture Review (DDPR) at Lisbon. That review is now underway; however, it is far from certain that the DDPR will result in clear answers to core issues relating to NATO nuclear policy or provide clear objectives and a strategy for action. Indeed, there is even talk about the DDPR leading to an "interim report" at next year's NATO summit—meaning that three years after work on a new Strategic Concept formally began in July 2009, NATO would return to the starting gate in order to maintain the unity of the Alliance.

Of course, NATO should strive for unity on core issues, and the role of nuclear weapons in Alliance security policy and NATO's role in reducing global nuclear dangers is a core issue; however, unity must not be achieved at the expense of a candid and open review of existing dangers and a real dialogue within NATO and between NATO and Russia. NATO members should also review what, if any, of the roles once envisioned for the Alliance's tactical nuclear weapons remain realistic today, given the dramatic changes that the continent has undergone since the end of the Cold War. Should the DDPR produce next year a "least common denominator" approach to NATO nuclear policy that simply reaffirms the uneasy consensus achieved last year at Lisbon, NATO risks foregoing a historic opportunity to make a unique and vital contribution to nuclear threat reduction for all of Europe.

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## RUSSIA AND THE BROADER STRATEGIC CANVAS

NATO nuclear policy issues do not exist in a security or political vacuum. Twenty years after the collapse of the Soviet Union, the core question remains: does NATO want Russia to be inside or outside the Euro-Atlantic security arc—and,

does Russia itself want to be inside or outside? If inside, are NATO and Russia prepared to develop the means and the will to cooperate, so as to enhance cooperative decision making and cooperative security within the Euro-Atlantic region?

In the absence of a clear answer, Russia's erosion of conventional military capability, distrust of NATO enlargement, and concerns as to its other borders has led it to increase dependency on nuclear weapons—including retaining tactical nuclear weapons greatly in excess of those deployed by the United States in Europe. Not surprisingly, many NATO nations see Russian tactical nuclear weapons as a threat directed primarily, if not exclusively, at them, and insist on Russian "reciprocity" as the price for any further changes to NATO's nuclear posture. Steps taken by NATO to "reassure" allies can look suspicious if not threatening when viewed from Moscow—especially by military professionals who believe their job is to assume the worst case. In the eyes of Russian leaders, these weapons also play a critical role as an equalizer for the weakness of the nation's conventional forces vis-à-vis China—though this perspective is often absent from Moscow's public dialogue.

This is a difficult web to untangle, but we must begin. Objectively, the common interests of the United States, Europe, and Russia are more aligned today than at any point in modern history. Building on recent progress in resetting U.S./NATO-Russian relations and reducing nuclear misunderstandings and dangers in the New START agreement, the window of opportunity is now open for a dynamic political and security dialogue on nuclear weapons and the broader opportunity for increased Euro-Atlantic security.

Fundamentally, however, that dialogue is complicated by a lingering mistrust. This lack of trust is compounded by an extremely difficult menu of security issues: missile defense, conventional forces in Europe, and thousands of tactical nuclear weapons are all vital, complex, and related topics at the core of building a peaceful and secure Euro-Atlantic community.

Russia, NATO, and the United States cannot seize this historic opportunity if solutions are required to every issue before we can move forward on any issue, or if we adopt inflexible formulas built on rigid linkages that have the effect of locking us into a prolonged status quo. A treaty-based approach should not be ruled out, but to make it the priority is likely to bog down these issues for years if not decades.

Russia, NATO, and the United States cannot seize this historic opportunity if solutions are required to every issue before we can move forward on any issue, or if we adopt inflexible formulas built on rigid linkages…

## A POLICY FRAME FOR EURO-ATLANTIC SECURITY: INCREASING WARNING AND DECISION TIME

During the 1980s, a "four basket" political and security agenda was used to shape discussions between the United States and the Soviet Union. In pursuing these four baskets, both sides decided to forego "linkage" among them, so that lack of progress on one at any given time would not mean the sacrifice of all others.

Avoiding rigid and ultimately unworkable linkages was key to moving forward. I suggest the same concept and approach is needed now.

In the Euro-Atlantic Security Initiative (EASI) I co-chair with former Russian Foreign Minister Igor Ivanov and former German Deputy Foreign Minister Wolfgang Ischinger, we—along with a distinguished group of commissioners representing 13 European nations, including Russia—are working to lay the intellectual foundation for an inclusive Euro-Atlantic security system. Unfortunately, generations of leaders have been riding the tide of confrontation for so long they have a hard time matching the rhetoric of partnership with dialogue and practical steps that will build trust and make cooperation a reality—this despite two decades of bilateral and multilateral discussions.

The reasons for this failure are rooted in NATO's and Russia's collective inability to address the fundamental question of Russia's status in a region once dominated by two opposing alliances. The EASI job then is to help our leaders find paths forward toward building a Euro-Atlantic security system that can turn words into deeds, plans into actions, and intentions into meaningful risk reduction. This will ultimately determine whether we—and generations to come—live in a world of promise or a world of peril.

One approach to framing a new and dynamic dialogue on European security . . . is to discuss a range of security issues through the prism of steps that could increase "warning and decision time."

## Where to Begin: Dialogue

Unfortunately today, there is still a divide on how each side perceives the other—fed by worst-case assumptions that look at capabilities and operational doctrines, not intentions. I suggest we begin to bridge this divide through a politically mandated process and dialogue among military leaders. For this military dialogue to be successful and sustainable, it will require a mandate set at the presidential level in Washington, Moscow and in Europe. Within this construct, all sides could confront their fears and distrusts. This would require dealing with perceptions, capabilities, doctrines, and intentions—the only way we can begin to build trust, stability, and confidence. This too would create the essential positive dynamic required for discussions between the United States, NATO, and Russia and further boost what must be a continuing effort in the years ahead to begin and then deepen cooperation.

## The Concept of Increasing Warning and Decision Time

One approach to framing a new and dynamic dialogue on European security so that Americans, Europeans and Russians can find common ground is to discuss a range of security issues through the prism of steps that could increase "warning and decision time" for political and military leaders. If no nation fears a short warning conventional attack or feels the need to deter or defend against such an attack with tactical nuclear weapons, the chances of war—including nuclear war—by accident, miscalculation, or false warning could be significantly reduced.

As Igor Ivanov, Wolfgang Ischinger, and I recently wrote: "Pursuing arrangements that increase warning and decision-making time for all countries in the Euro-Atlantic region would introduce stability into the NATO-Russia relationship" and "would constitute a giant step toward ending the relationship's militarized framework."[1]

Rather than construct a process of engagement with an explicit goal of producing a new arrangement, agreement, or treaty, the objective would be to initiate a dynamic process that would inform governments and lead to considered judgments on next steps. Leaders will need to discuss where best to initiate this new dialogue; it could begin in an existing forum involving all nations in the Euro-Atlantic region and then proceed in both concept and practice in other venues. For example, some issues relating to warning and decision time may be bilateral; others, multilateral; and others, applicable throughout Europe.

The objective would be to initiate a dynamic process that would inform governments and lead to considered judgments on next steps.

Although the issues of conventional and nuclear arms and missile defense are clearly related in European security, progress can be made separately, as long as the parties believe there is a serious dialogue underway to understand and deal with different threat perceptions. In fact, practical progress in one area will help to catalyze progress in others. It is here where the concept of increasing warning and decision time—applied to conventional and nuclear arms, both tactical and strategic, as well as missile defense—could facilitate progress on a broad range of issues, without rigid linkages.

## Missile Defense

Developing a cooperative approach to missile defense is the prime case in point. For the United States, NATO, and Russia, the stakes associated with missile defense have never been higher, following the agreement reached at Lisbon in the NATO-Russia Council to pursue missile defense cooperation. The next year—coincident with the timing of the DDPR and the next NATO summit in the United States—is crucial. If progress can be made in developing a joint approach to missile defense cooperation (the subject of an EASI Working Group chaired by former U.S. National Security Advisor Stephen Hadley, former Director of Russia's Foreign Intelligence Service Vyacheslav Trubnikov, and former German Federal Minister of Defense Volker Rühe)—it will surely create a positive dynamic for progress on broader nuclear issues and efforts to advance conventional arms control.

The concept of increasing warning and decision time applied to missile defense is not difficult to grasp. For example, pooling and sharing data and information from early warning radars and satellites in Cooperation Centers staffed by U.S., NATO, and Russian officers working together would increase warning and

1. Sam Nunn, Igor Ivanov, and Wolfgang Ischinger, "A Post-Nuclear Euro-Atlantic Security Order," Project Syndicate, December 14, 2010, http://carnegie.ru/publications/?fa=42222.

decision time by providing an enhanced threat picture and notification of missile attack. Missile defenses would also strengthen defense against conventional and nuclear missile threats, which would bolster deterrence and increase decision time for national leaders.

As my EASI Co-Chair Wolfgang Ischinger recently wrote, the realization of a cooperative approach to missile defense involving NATO and Russia "would signal a decisive change in the relationship between the West and Russia.... cooperation in this sensitive area would make it clear that the suspicion and mistrust that has traditionally characterized this relationship is finally to be buried.... the establishment of a joint missile defense system offers an opportunity to take West-East relationships to a whole new level."[2]

## Conventional Forces

Similarly, in the wake of the impasse in bringing the Adapted Conventional Forces in Europe (CFE) Treaty into force and Russia's suspension of its obligations under the existing CFE Treaty, finding a way forward that supports the interests of all states and enhances transparency, predictability, and stability would be a crucial step forward in reinforcing the independence of states in the Euro-Atlantic region, "reassuring" NATO allies, and building stronger relations with Russia.

Indeed, it is the conventional piece of the European security puzzle—the perception of relative weakness in conventional forces—that has provided the rationale for tactical nuclear weapons deployments in Europe, both historically and today. When I first became involved in these issues in 1962, the United States and NATO believed they were outgunned by Soviet tank divisions in East Germany, and thousands of U.S. tactical nuclear weapons were deployed in Europe; when the Soviet Union and Warsaw Pact collapsed and the Red Army returned home, the United States almost immediately withdrew the vast majority of its tactical nuclear stockpile back to the United States. The Russians also made significant reductions. This helped but did not solve the problem.

Today, NATO proclaims it does not consider any country to be its adversary and that NATO poses no threat to Russia. Russia, however, looks at NATO's conventional capabilities relative to its own, and when combined with NATO's geographic advance, perceives a prospective threat to its security—and the need to maintain tactical nuclear weapons as a counterbalance. And although the Russian conventional force deployments clearly do not present a near-term threat to Western Europe, there are some NATO members bordering Russia who fear Moscow could deliver a substantial blow, as they did in Georgia in 2008, and who see Russian tactical nuclear weapons deployments as threatening.

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2. Wolfgang Ischinger, "Monthly Mind June 2011—A Security Roof Over Europe?" Munich Security Conference, June 22, 2011, http://www.securityconference.de/Top-News-Detail.55+M5da94ab113e.0.html?L=1.

Here again, a NATO-Russia sustained and dynamic dialogue centered on increasing warning and decision time could pave the way for progress. For example, nations could discuss measures relating to transparency on force deployments; limits on exercises, particularly near the Russia-NATO border; constraints on reinforcements and maneuvers in sensitive areas, such as the former CFE flank regions; and understandings on the kinds of armaments that could be deployed forward. The result could lead to a series of steps, informal and formal, that cumulatively would increase warning and decision time, reduce fears of a conventional attack, and address some of our current difficulties relating to CFE. The CFE Treaty is near breakdown and must be repaired or replaced with a new dynamic concept and process that deals with both Russian and European perceptions and fears.

### Tactical Nuclear Weapons

There can be no higher priority than reducing nuclear dangers that are common throughout the Euro-Atlantic security space—specifically tactical nuclear weapons now deployed by Russia and NATO. Dialogue centered broadly on warning and decision time that lead to joint action on missile defense and conventional forces could also jumpstart what has been a frozen discourse on tactical nuclear weapons. If nations in the Euro-Atlantic region perceive a reduced threat from conventional attack and an increased ability to defend against ballistic missiles, tactical nuclear weapons become less relevant to European security. The United States, NATO, and Russia should therefore be working now to define a shared approach to nuclear threat reduction, one that can be implemented within this broad framework.

If nations in the Euro-Atlantic region perceive a reduced threat from conventional attack and an increased ability to defend against ballistic missiles, tactical nuclear weapons become less relevant to European security.

## A COSTLY STATUS QUO

Today, NATO's tactical nuclear force posture, according to published reports, consists of approximately 150–250 air-delivered nuclear weapons—gravity bombs—deliverable by NATO aircraft at a handful of storage sites in Europe.[3] NATO dual capable aircraft (DCA) are reaching the end of their original service lives. It is therefore inevitable that the question of modernization of capabilities—including costs—will arise in the next few years, and that countries that propose to retain DCA and nuclear weapons on their soil will have to explain the rationale for doing so to their parliaments and publics.

Then-Secretary of Defense Robert Gates underscored NATO's resource quandary in his June 10, 2011, speech in Brussels, where he noted that for all but a

3. Malcolm Chalmers, *Occasional Paper, March 2010: NATO's Tactical Nuclear Dilemma*, (Washington, DC: Royal United Services Institute, March 2010), 1–2.

handful of allies, defense budgets have been chronically starved for adequate funding, in an environment where total European defense spending has declined by nearly 15 percent during the past decade. Furthermore, rising personnel costs combined with the demands of training and equipping for Afghan deployments has consumed a large share of defense budgets—with the result that investment accounts for future modernization and other capabilities not directly related to Afghanistan are being squeezed out—as we saw in Libya. In the Secretary's words, "Regrettably, but realistically, this situation is highly unlikely to change. The relevant challenge for us today, therefore, is no longer the total level of defense spending by allies, but how these limited (and dwindling) resources are allocated and for what priorities."[4] Thus, resource constraints are likely to make it even more difficult for NATO to sustain its existing nuclear posture.

If U.S. tactical nuclear weapons in Europe have virtually no military utility, it is hard to argue they have any appreciable value as a real deterrent.

Taken in isolation, the imperative for achieving parliamentary and public approval of NATO modernized nuclear deployments including delivery systems will be difficult, but may be achievable. NATO governments have sustained these deployments for decades. But prospective cuts in NATO defense spending—and the inherent opportunity costs when measured against other defense priorities as NATO looks to adapt its security policies to meet new threats—are making it increasingly problematic to maintain all the fleets of DCA on which tactical nuclear weapons deployment now depends, unless they are deemed essential for NATO security. Are they?

On this point, there is scant support for the military utility of these weapons—no matter what the contingency. As then-Vice-Chairman of the Joint Chiefs of Staff General James E. Cartwright said at an April 8, 2010, briefing in Washington, U.S. tactical nuclear bombs in Europe do not serve a military function not already addressed by U.S. strategic and conventional forces.[5] Moreover, the extremely demanding scenario for conducting a nuclear strike mission (detailed in a recent essay by Dr. Karl-Heinz Kamp and Major General Robertus C.N. Remkes, USAF, Ret.)—where any attempt to employ these weapons will be "fraught with many challenges" (a mission of "seven consecutive miracles") and complicated by the visibility of the many actions required to prepare the aircraft, weapon, and crews for such an attack—further undercuts their plausible use.[6] If U.S. tactical nuclear weapons in Europe have virtually no military utility, it is hard to argue they have any appreciable value as a real deterrent.

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4. Robert M. Gates, "The Security and Defense Agenda (Future of NATO)," Brussels, Belgium, June 10, 2011, http://www.defense.gov/speeches/speech.aspx?speechid=1581.

5. Council on Foreign Relations Meeting, April 8, 2010, http://www.defense.gov/npr/docs/council_on_foreign_relation.pdf.

6. See Chapter 4 by Karl-Heinz Kamp and Robertus C.N. Remkes, "Options for NATO Nuclear Sharing Arrangements."

The bottom line: in an age of tight budgets and competing defense priorities where the threat of nuclear proliferation and nuclear terrorism are the greatest threats to NATO security, maintaining the nuclear status quo in Europe runs a high cost and high risk. The key question that NATO should be addressing: what are the real alternatives to providing genuine "reassurance" to allies, given that the military credibility of tactical nuclear weapons has eroded and they are increasingly degraded as a political symbol of Alliance resolve?

… in an age of tight budgets and competing defense priorities where the threat of nuclear proliferation and nuclear terrorism are the greatest threats to NATO security, maintaining the nuclear status quo in Europe runs a high cost and high risk.

## A RISKY STATUS QUO

Beyond parliaments, publics, and costs, the most important argument against maintaining the nuclear status quo within NATO is security. No matter what degree NATO assesses the risk of a terrorist attack against a European NATO nuclear base—and I am convinced there is a significant risk—the political and security consequences of such an attack would shake the Alliance, even if the attack failed. The security of tactical nuclear weapons should therefore be of paramount importance for NATO's current nuclear posture, and also a guiding principle for future change. This point also applies to Russian tactical nuclear weapons, including those deployed in the Euro-Atlantic region. NATO and Russia clearly have a mutual stake when it comes to terrorism and nuclear security. Even—or especially if—no progress is made in changing NATO and Russian tactical nuclear deployments, independent security improvements by both NATO and Russia are essential. If we lose focus on this, NATO and Russia may wake up one morning to a terrorist using one of our own nuclear weapons against us—just as al Qaeda used our own airplanes to attack us on September 11, 2001. Both sides are long overdue for a risk-benefit analysis, keeping in mind that nuclear terrorism would have catastrophic consequences.

## NATO'S HISTORIC OPPORTUNITY TO LEAD IN TRANSFORMING NUCLEAR SECURITY

The DDPR provides an opportunity to forge an Alliance consensus on NATO tactical nuclear weapons, including the appropriate mix of nuclear and conventional capabilities necessary for deterrence, as well as alternatives to U.S. tactical nuclear weapons now deployed in Europe as part of that mix.

Russia too must rethink its nuclear policies and posture and forge a new consensus of its own with respect to Euro-Atlantic security. Leadership by the United States and NATO is essential; but without parallel leadership from Moscow, progress on key security issues—including tactical nuclear weapons, missile defense, and conventional forces—will grind to a halt.

Both NATO and Russia have a strong incentive to escape Cold War-era paradigms—including the perception of conventional force imbalances on one side that perpetuate dangerous nuclear deployments on the other. The elephant in the room for Russia is NATO's force deployments near Russian borders. The elephant in the room for a number of NATO countries are Russian forces near NATO's borders.

There is no escaping this dynamic without a serious and sustained dialogue—at both the military and political level—between the United States, NATO, and Russia. In the absence of such a dialogue and a continuing process of engagement, it is difficult to see how we can eliminate the military option as a conceivable tool for resolving conflicts in the Euro-Atlantic region.

## Policy Context for NATO

The policy context for proceeding on a new path should be clearly understood and publicly stated next spring. Indeed, the power of the case for changing NATO nuclear policy rests in its inexorable logic.

Today, NATO faces a menagerie of threats—none of which…require the continuing deployment of U.S. tactical nuclear weapons in Europe to deter or defend against.

The original purpose of U.S. tactical nuclear weapons now deployed in Europe—to deter the massing of Soviet tanks and the threat of an invasion of Western Europe—no longer exists. Today, NATO faces a menagerie of threats—none of which, including those with a possible nuclear component, require the continuing deployment of U.S. tactical nuclear weapons in Europe to deter or defend against.

Given NATO's serious conventional capability gaps and resource constraints for likely contingencies, the blunt reality is that NATO cannot sustain over the long term continued commitment of valuable defense resources on tactical nuclear weapons capabilities that are no longer militarily useful. Indeed, to persist in maintaining U.S. tactical nuclear weapons in Europe for another decade—in the absence of any real military or political utility—is more of a security risk than asset to NATO, given the nontrivial risk of a terrorist attack against a NATO base with nuclear weapons. The same is also true for Russia.

This provides a strong argument for a dynamic process leading to parallel steps rather than a treaty-centered approach. Such a process is more likely to lead to joint actions that preclude—rather than are preceded by—a disaster. Consultations on definitions, the implementation of data exchanges and confidence building measures, and more inclusive NATO-Russia threat assessments could all take place within this framework and would help narrow the gap between Russian and Western security perceptions.

Even with substantial changes in NATO nuclear policy and the elimination of U.S. tactical nuclear weapons, NATO will remain a nuclear Alliance. America's extended nuclear deterrent will persist as a core element of NATO's overall strategy, but in a form that is safer and more credible.

## Policy Elements for NATO: "10 for 2012"

Questions related to sharing nuclear risks and responsibilities, assuring allies, and defining a strategy for engaging Russia are central. NATO should come to a consensus position on these points in order to provide the necessary guidance coming out of the DDPR in time for next spring's NATO summit. **Within this context, I suggest that NATO consider the following 10 commitments for the 2012 NATO summit to be held in Chicago in May:**

1. To deepen consultations and dialogue with Russia on the full range of Euro-Atlantic security issues—missile defense and conventional and nuclear arms—including on steps to increase warning and decision time for political and military leaders so that no nation fears a short warning conventional attack or perceives the need to deter or defend against such an attack with tactical nuclear weapons. Progress on these issues can be made separately, as long as all issues are being addressed in parallel and within a common framework. Military to military discussions are essential.

2. To affirm that the security of U.S. nuclear weapons deployed in Europe should be and must remain the highest priority for NATO and a guiding principle for further changes to that posture.

3. To seek mutual reductions of tactical nuclear weapons, beginning with enhanced transparency and security for U.S. and Russian tactical nuclear weapons. NATO and Russian political leaders should jointly state that as long as U.S. tactical nuclear weapons remain deployed in Europe, all of NATO has a stake in their security; all of NATO also has a stake in the security of Russian tactical nuclear arms; and Russia has an equal stake in the security of NATO weapons as well as their own. Reciprocal steps to improve the security of tactical nuclear weapons now should be a priority, and could include a joint threat and security assessment, a combined recovery exercise, site visits to nuclear storage sites, a shared commitment to separate nuclear weapons from operational units, and data exchanges.

4. To affirm that Russian reciprocity will be measured broadly, taking into account the full range of political and security issues relating to Euro-Atlantic security. This approach will allow the United States and NATO to take meaningful steps in nuclear risk reduction, mindful of the interrelationships with Russia but not rigidly linked.

5. To continue to adjust the appropriate mix of conventional and nuclear capabilities necessary for deterrence and defense against 21st century threats so as to strengthen common defense and deterrence and enhance nuclear security and threat reduction.

6. To proceed with further reductions of U.S. tactical nuclear weapons in Europe, with the announced target of completing the consolidation of U.S. tactical

nuclear weapons to the United States within five years, with the final timing and pace to be determined by broad political and security developments between NATO and Russia, including but not limited to their tactical nuclear posture.

7. To strengthen extended deterrence and reassurance of European Allies. NATO will seek to adapt existing arrangements relating to nuclear sharing and consultations within NATO, so that NATO will have a safer and more credible extended nuclear deterrent and remain a nuclear Alliance for as long as nuclear weapons exist. As stated in the Strategic Concept, "The supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States; the independent strategic nuclear forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies."[7]

8. To move to adopt a diverse and robust set of reassurance measures—beyond those relating to adapting existing arrangements for nuclear sharing—that will tangibly enhance confidence in NATO's capabilities to defend against existing and emerging threats both conventional and nuclear; and institute a process for periodic review and adoption of new measures. Such measures will be more effective if implemented in the context of building a more inclusive Euro-Atlantic security community, including improving NATO-Russia relations.

9. To state that NATO now believes the fundamental purpose of its nuclear weapons is to deter the use of nuclear weapons by others, further underscoring NATO's commitment to lead in transforming nuclear security.

10. To consult with countries in the Asia-Pacific region as it implements this approach.

## CONCLUSION

Over the past 60 years in Europe, thousands of men and women thought deeply and worked diligently to prevent nuclear war. We were good, we were diligent, but we were also very lucky. We had more than a few close calls, including mistakes by both sides that did not turn into fatal errors of judgment.

The Cold War is now 20 years behind us, yet NATO and Russia continue to live with Cold War-era nuclear deployments in Europe and unnecessary and unwise nuclear risks. Today, there is a compelling rationale for transforming NATO nuclear policies.

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7. NATO, "Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation," November 2010, para. 18, http://www.nato.int/cps/en/natolive/official_texts_68580.htm.

The NATO DDPR process can and must provide the necessary analytic foundation for changing the nuclear status quo. It will not, however, be sufficient by itself. NATO nuclear policy—in particular, changes to the status quo—will require engaging political leaders on both sides of the Atlantic—and substantial dialogue with Russia. Allied perceptions regarding threats and responses will never completely overlap in an alliance with 28 member states; but this cannot be permitted to drive the Alliance to a least common denominator approach to addressing today's nuclear threats.

The rationale for maintaining U.S. and Russian tactical nuclear weapons in Europe for another decade is dangerously out of date, for both countries and for Europe. The case for change is compelling; the time for change is now; and NATO, with Russia, must lead the way.

The case for change is compelling; the time for change is now; and NATO, with Russia, must lead the way.

CHAPTER ONE

# NATO Nuclear Policy

## *Reflections on Lisbon and Looking Ahead to the DDPR*

SIMON LUNN

Nuclear weapons have been seen to represent the absolute deterrent to aggression and proof of the transatlantic link and U.S. protection.

This paper sets the context for the discussions that will surround the development of the DDPR and the review of NATO's nuclear policy and posture. It provides a brief description of the development of NATO's nuclear policy, the influence of the framework of collective defense, and the continuity of concerns in the evolution of NATO's nuclear strategy; assesses the factors that influenced the treatment of nuclear policy in the new Strategic Concept; examines the documents adopted at the Lisbon Summit and the compromises necessary to reach agreement; looks at the prospects for the DDPR and the nuclear posture review; and examines the problems that lie ahead.

Nuclear weapons have always occupied a special place in NATO strategy and nuclear policy in NATO has fluctuated between periods of volatility and dormancy.[1] Nuclear weapons have been seen to represent the absolute deterrent to aggression and proof of the transatlantic link and U.S. protection.

NATO strategy underwent several adjustments to accommodate the different views concerning the stage at which NATO would be prepared to use nuclear weapons and what was required to demonstrate the willingness to do so. The systems required included so-called NSNW for use on or near the battlefield and also systems capable of striking the Soviet homeland. The modernization of the latter

1. NATO's nuclear weapons include the strategic nuclear forces of the United States, the independent nuclear forces of the United Kingdom and France—although the latter are not committed to the Alliance—and U.S. nuclear warheads at bases in Belgium, Germany, Italy, the Netherlands, and Turkey for use on the Dual Capable Aircraft (DCA) of the first four and the United States. Turkish and Greek aircraft also have DCA status but at a lower operational readiness. The reference to a "NATO nuclear capability" normally refers to these DCA arrangements. The U.S. warheads in Europe remain under U.S. control.

# CHAPTER ONE: **KEY FINDINGS**

- NATO's decision to develop a new Strategic Concept in 2010 meant that after two decades of relative inattention nuclear weapons again became an issue in Alliance politics. Nevertheless, the documents agreed upon at the November Lisbon Summit postponed rather than resolved the underlying differences.

- Questions on NATO's nuclear policy and posture will now be addressed as part of NATO's Deterrence and Defense Posture Review (DDPR) tasked at Lisbon and due to be completed for the next NATO Summit in the United States in May 2012. The DDPR gives NATO the opportunity to ensure that it has the right mix of capabilities for contemporary threats and that the various components of NATO strategy relate to each other in a coherent way.

- Missile defense will be central to these discussions, not just because of the technical and financial uncertainties surrounding its implementation, but also because of the considerable political importance it now carries; as the litmus test for cooperation with Russia and as the means to provide new glue to NATO cohesion as a consequence of its potential, but disputed, significance for the role of nuclear weapons in NATO strategy.

- The review of NATO's existing arrangements for extended deterrence, however, will remain the focus of attention. It is too early to second guess the DDPR process except to assume that it will revisit the rationale for the required posture on the basis of the guidance provided in the new Strategic Concept.

- Concern over the size and location of Russian Non Strategic Nuclear Weapons (NSNW) has become a major determinant in NATO's approach to its own requirements. The United States has indicated its intention to include NSNW in future arm control negotiations. Russia to date has shown little inclination to discuss these weapons. The U.S. Administration has also confirmed that it will consult with the Allies. This means that in defining its force posture in the nuclear review, NATO will have to take account of potential arms control outcomes, suggesting a degree of synchronization between force planning and arms control that is easier said than done.

- Taken together—with the emphasis on sharing the nuclear burden—these benchmarks could be used by proponents of the status quo to limit the room for maneuver for the posture review and point toward a continuation for the time being of the current dual capable aircraft (DCA) arrangements. There may also be suggestions that the new security conditions provide additional reasons for a NATO nuclear capability based on arrangements in Europe.

- That said, the DDPR will provide the opportunity to reassess the significance of these requirements against the questionable credibility of the posture, concerns over safety and security, and the demands of some members who will continue to press for progress in reducing reliance on nuclear weapons and for a higher profile for disarmament in NATO considerations. Movement on nuclear policy in this direction will depend on changes of attitude and approach in four key constituencies: DCA countries, defenders of the status quo; Russia; and the United States.

- These factors will themselves be influenced by the framework of collective defense and the particular sensitivities attached to nuclear weapons, by the distraction of other developments and the consequent reduction in the importance of nuclear issues in the hierarchy of Alliance priorities, and by public attitudes to nuclear weapons. Above all they will be influenced by changes in the political context that could affect national positions on the key issues that define NATO's policy. Among the diversity of views and possible outcomes, the constant factor will be the emphasis on maintaining Alliance cohesion and solidarity.

led to the controversial Intermediate-Range Nuclear Forces Treaty (INF) decision in 1979.

After 1989 the salience of nuclear weapons declined as NATO focused on adapting to the new strategic environment: taking in new members and conducting operations out of area. Nuclear weapons deployed in Europe were substantially reduced. These reductions attracted little attention, with the exception of those who continued to criticize the DCA arrangements. The small number of systems that were retained and the role of nuclear weapons in NATO strategy faded.

The decision by NATO to develop a new Strategic Concept in 2010 meant that nuclear weapons again became an issue in Alliance politics. Expectations were raised that NATO could use the opportunity to reduce the role that nuclear weapons continue to occupy in its strategy. Despite these pressures, however, the policy that has emerged from the Lisbon Summit reflects the traditional caution associated with deterrence and defense and the commitment to act together.

Nevertheless, the Lisbon documents endorsed by all NATO member states also reflect the wish to demonstrate progress on reducing reliance on nuclear weapons and on paying more attention to the potential contribution of disarmament and arms control to transparency, stability, and security. NATO's DDPR will require members to reflect further on the requirements of NATO's nuclear policy.

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## NUCLEAR WEAPONS IN NATO STRATEGY

### The Influence of Collective Defense

Any analysis of NATO's nuclear policy has to be situated first in the nature and workings of the Alliance and the commitment to collective defense. This framework of collective decision making with its emphasis on cohesion and solidarity exerts an enormous, and frequently underestimated, influence on the development of Alliance policies. The influence of the process often explains the gap between the aspirations and expectations of those who want NATO to move faster toward the goal of reducing the role of nuclear weapons in NATO security policy and the apparent conservatism of the formal NATO decisions that emerge after lengthy consultations.

Three principles are fundamental to NATO's policy making framework: the transatlantic link based on common values; the commitment to collective defense through Article 5; and respect for the sovereignty of national decisions through the principle of consensus.

The consensus process involves the reconciliation of national priorities and differences through compromise and concession. Each nation brings to the table its own particular national interests and concerns. Sometimes these are amenable to compromise. Frequently, however, they are deep rooted and longstanding, be-

coming in effect "permanently operating factors"—factors that will persistently influence the respective country's position on certain issues.

Most NATO members have national preoccupations that constrain their margin for maneuver on specific issues. Examples in the context of current discussions over NATO's nuclear policy include the following: France's fierce attachment to nuclear deterrence and the independence of its nuclear forces; the sensitivity of Turkey to developments in the Middle East and also its strained relationship with the European Union; the insistence by Germany for a greater emphasis on disarmament in Alliance policies; and the visceral mistrust and suspicion of Russia on the part of the Alliance members from Central and Eastern Europe.

These positions can result in the so-called red lines from which the nation concerned finds it difficult to move. Red lines can also be defined by external developments. For several Allies, Russia's refusal to fulfil the commitments made at the Organization for Security and Cooperation in Europe (OSCE) Summit in Istanbul to withdraw its forces from Georgia and Moldova or to modify its more recent actions against Georgia represents a serious barrier to further cooperation. This obstacle is particularly significant in view of the need to engage Russia in several areas, including NSNW.

There is also the influence of those members whose natural instincts are to ensure that arms control and disarmament are given a higher priority in NATO decisions. This loose grouping, known as the "usual suspects," constitutes an informal pressure group that in some ways offsets the informal grouping of the nuclear powers.[2] The debate on the appropriate weight to be accorded to defense and disarmament respectively will certainly run through the forthcoming DDPR.

The influence of domestic developments in determining national positions should also be taken into account. The imminence of elections in the coming year constitutes a powerful influence. Presidential elections in the United States in 2012 may lead to a cautious approach from the United States to the issue of Alliance nuclear policy, in particular if any change were viewed as affecting Alliance unity. That said, simply reaffirming the "status quo" may not be viewed as an acceptable outcome by Washington in light of President Obama's April 2009 Prague speech and his commitment to work toward a world free of nuclear weapons, and may lead to an initiative with the promise of changing the status quo.

The consensus principle is inevitably laborious and time-consuming because it involves finding areas of concession and compromise—giving in one area to gain in another. The negotiations surrounding the agreement of language for nuclear policy in the Lisbon documents, described later, provided a classic example of countries modifying their positions in one area of the nuclear debate to achieve

Simply reaffirming the "status quo" may not be viewed as an acceptable outcome by Washington in light of President Obama's April 2009 Prague speech and his commitment to work toward a world free of nuclear weapons . . .

2. This group was initially based around Belgium, Canada, Germany, Luxemburg, the Netherlands, and Norway and has been joined by more members.

goals in another. Sometimes these concessions are in unrelated areas. Participants in the Lisbon discussions commented that French officials felt able to insist on their position on nuclear deterrence because of their acceptance in other sections of the Concept that NATO should develop a civilian capability for crisis situations.

Together these considerations form the essential fabric within which NATO policies are developed and that need to be taken into account in assessments of NATO decisions.

The importance attached to nuclear policy at any one moment has to be seen against the other issues requiring attention, such as the involvement in Afghanistan and currently Libya.

Nuclear weapons add an extra layer of complexity. There are several factors that explain the innate conservatism that governs the attitudes to nuclear weapons: the natural caution attached to defense reinforced by the current emphasis on reconfirming the Article 5 commitment; the special nature and characteristics of nuclear weapons, which give them a unique role in deterrence but also paradoxically tends to inhibit discussion; and the dynamics of nuclear policy making in NATO in the Nuclear Planning Group (NPG) and High Level Group (HLG), where the voices of the nuclear powers and those directly involved in nuclear policy carry more weight.[3]

Because of the unique nature of nuclear weapons and their special status, members often defer to the "experts"—those who are involved as a full-time activity in the technical and operational side or in the making of policy. There is a tendency to refer to those at NATO with specific responsibilities for nuclear policy—either in their national delegations or on the International Staff—as the nuclear community. Because nuclear weapons are seen as the preserve of a select few countries, the priority in discussions of nuclear policy becomes the maintenance of Alliance cohesion and solidarity.

As the principal nuclear provider, the United States has always exerted leadership in NATO's nuclear policy while equally attentive to the need to consult with and involve Allies. The Allies accept this leadership but are ever sensitive to prospective changes. Today, as will be discussed later, the dialogue implicit in this relationship is as important as ever.

Finally, there is the perennial problem of competing pressures and problems. The importance attached to nuclear policy at any one moment has to be seen against the other issues requiring attention, such as the involvement in Afghanistan and currently Libya. In view of this competition for attention and the natural tendency to shy away from nuclear issues, it is not surprising that the question of nuclear weapons gets pushed to the end of the line. As one Ambassador noted in the early days of the Concept's development, "everyone hopes the question

3. Officials refer to an informal hierarchy consisting of the two nuclear powers (the United States and United Kingdom), the four DCA countries, and Greece and Turkey followed by other members who have various degrees of involvement in the support operations known as SNOWCAT (Support of Nuclear Operations With Conventional Air Tactics).

of nuclear weapons proves to be the dog in the corner that does not bark."[4] In other words, in the hierarchy of Alliance issues nuclear policy seldom occupies the position of importance many would believe and wish. This may change as the DDPR progresses.

## Extended Nuclear Deterrence and the Continuity of Concerns

The development of NATO's nuclear policy during the Cold War was marked by several features that have a certain resonance today:

- The persistent questioning of the credibility of extended nuclear deterrence and the perceived need for linkage or coupling through systems based in Europe. Linkage to U.S. strategic forces and the nuclear guarantee is still seen by some members as the rationale for the current DCA arrangements.[5]
- Europeans were always sensitive to the pressures and temptations of bilateralism in the relations between the United States and the Soviet Union and watchful that the bilateral strategic arms negotiations should not have negative consequences for European security. There are occasional echoes of this concern today. Some members have observed that although they have full confidence in the commitment of the Obama Administration to NATO, they worry that the United States may be placing too much emphasis on the "reset" of relations with Russia.
- The United States forward deployed NSNW are the descendants of the NSNW initially deployed in Europe in the 1950s. These were the most controversial element of NATO strategy. Today's systems play a very different role yet raise questions concerning their potential application.[6]

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4. This and other quotations gathered in interviews conducted at NATO during 2010–2011.

5. Linkage or coupling was achieved through deploying delivery systems in Europe with U.S. warheads capable of putting the Soviet homeland at risk—initially long-range bombers, for a short period Thor and Jupiter intermediate range missiles, then medium-range aircraft, and finally cruise missiles and Pershing ballistic missiles under the 1979 INF decision. The range of delivery platforms for current sub-strategic systems make this mission a theoretical possibility under certain circumstances—but unlikely. The linkage therefore is more political and symbolic than operational.

6. U.S. NSNW were deployed to Europe to compensate for NATO's conventional inferiority. It became evident, however, that their deployment and potential use had multiple disadvantages, not least of which was the damage to "own" territory and the "use them or lose them" pressures because of their forward deployment. They remained the most controversial element of flexible response. There is little similarity between NATO's current NSNW except in the relatively low yield of the warheads and relatively restricted range of the aircraft.

- Considerable efforts were expended to increase European participation in nuclear policy without ceding U.S. control. These included the idea of a NATO Multilateral Force (MLF).[7] Europe got involved by creating the NPG, which became the principal venue for discussions within NATO on nuclear affairs. One of the questions under discussion today is the future role of the NPG should there be a change in NATO's current policy of involving Allies through basing warheads and using DCA. Some believe that if the warheads were withdrawn the Alliance bodies for nuclear consultation would cease to function in any meaningful sense.
- Arms control was seen by several members as an essential companion to the INF modernization decision and resulted in creating the Special Consultative Group to coordinate an Alliance position for the bilateral INF negotiations.[8] Similar pressures exist today for NATO to give disarmament a higher profile and for a consultative forum in case negotiations begin between the United States and Russia.
- The HLG was created in 1977 to ensure that the INF modernization decision was handled by officials with sufficient seniority to ensure political awareness at the highest level. The United States chaired this effort. The role of the HLG and NPG in the forthcoming review of NATO's nuclear requirements is unclear but both bodies will be involved in preliminary discussions. Although this review does not carry the same sensitivity as the work in the 1970s, the NATO Ambassadors will have the responsibility for ensuring that high level attention is given to decisions on NATO's nuclear policy.
- Public and parliamentary opposition made it difficult for several countries to agree to the 1979 decision.[9] It is tricky to assess public attitudes today to the role of nuclear weapons. The nuclear issue remains sensitive in most countries both in terms of nuclear power and weapons. This sensitivity will almost certainly have been exacerbated by the disaster at Fukushima. In several countries, the resulting domestic climate could complicate the question of sustaining parliamentary support for continuing existing arrangements.

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7. The MLF proposal was aimed at preserving U.S. operational control over nuclear weapons while enabling the European Allies to participate in managing a Western nuclear deterrent assigned to NATO. As a formula trying to satisfy highly divergent aims, its chances of success were always limited; it foundered principally on the issue of command and control. See Simon Lunn, "The Modernization of NATO's Long Range Theater Nuclear Forces," Report for Congress, (Washington, DC: Congressional Research Service, December 31 1980).

8. The work of the Special Group, chaired by the United States, demonstrated the need to ensure coherence between strategic and arms control goals.

9. Both Belgium and the Netherlands joined the consensus in principle but delayed agreement on implementation.

After 1989, NATO focused on adapting to the dramatic changes in the strategic environment by creating the conditions for admitting 12 new members. As part of this adaptation and as reassurance to Russia on the non-threatening nature of enlargement, NATO announced its "three no's"—no intention, no reason, and no plan to station nuclear forces on the territory of the new members. The more recent members note that these declarations were signed without them and effectively prohibit their participation in the existing Alliance arrangements.

NATO reduced substantially its nuclear weapons based in Europe with little public fanfare, leaving a small number of warheads for use on the DCA of Allies. Little attention was then paid to NATO's nuclear forces with the exception of the specific bodies tasked to oversee nuclear affairs—the NPG, the NPG Staff Group, and the HLG.[10]

## The Strategic Concepts 1991 and 1999

The language on nuclear policy in NATO's Strategic Concept in 1991 reflected these changes. Instead of the operational focus of the previously classified document, the political nature of nuclear weapons was emphasized. Almost identical language was carried over in the 1999 Concept. NATO's nuclear forces were to deter all forms of aggression. There was no enthusiasm to narrow the circumstances under which they would be used to a "no first use" declaration or a variant thereof. Members preferred a situation in which nuclear capabilities represented a deterrent to all forms of aggression and hence left a degree of ambiguity over their potential use. It is worth noting that an effort by Canada and Germany to reassess nuclear policy was firmly rejected largely through U.S. opposition.

The Concepts included the statement that NATO will "maintain adequate substrategic forces based in Europe which will provide an essential link with strategic nuclear forces, reinforcing the transatlantic link." This emphasized that the rationales for the posture are the credibility of deterrence through linkage and the participation and sharing by Allies.

The Strategic Concepts laid out the rationale for the remaining NSNW but there is no indication of what criteria determined the size of the force. Normally operational factors, such as target coverage, penetration, survivability, and also the number of participating nations, influence the necessary numbers. As the emphasis was now on the political role of the force, however, it is not clear what factors determined the numbers required.

10. The NPG meets at the level of Ministers, or at the level of Ambassadors (the North Atlantic Council (NAC) in permanent session). The NPG staff group comprises representatives from the national delegations at NATO headquarters and is chaired by the International Staff (IS) and meets regularly. The HLG comprises representatives from national capitals, is chaired by the United States and meets regularly but less frequently.

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The emphasis on the political role of the current systems and the absence of an operational application has led inevitably to the criticism that if these systems have no operational role they cannot provide credible deterrence, based on the maxim "What cannot be used cannot deter." In other words, even the symbolic role is an empty one.

This is challenged by those who say that DCA are operationally capable and that they represent the only means for NATO to demonstrate solidarity and resolve during a crisis and the willingness to share the risks and burdens of nuclear decision making. Some observers have pointed to the decisions in the U.S. Nuclear Posture Review (NPR) to modernize the B-61 nuclear warhead and the F-35 fighter aircraft as making the mission more credible.

The changed environment and the absence of a direct threat that dominated NATO planning in the Cold War meant that references to Russia in NATO policy statements emphasise partnership and cooperation. There is, therefore, no reference to Russia in the rationale for the DCA force other than the oblique reference to the fact that "NATO nuclear forces no longer target any country."[11] The existence, however, of the substantial stockpile of Russian NSNW did not go unnoticed.

Reporting to Congress on the findings of the 1994 NPR, Deputy Secretary of Defense John Deutch noted the numbers of Russian NSNW, "located at distances which can be easily delivered against European targets," and said this disparity was a cause for concern. In justifying the maintenance of the DCA strength, Deutch pointed to the Russian NSNW arsenal as the principal rationale.[12]

However, it is only relatively recently in NATO discussions that attention has been drawn to the Russian stockpile. The Baltic States have periodically expressed concern over Russian nuclear potential in the region, including in Kaliningrad, and also to Russian statements concerning the development and potential deployment of the Iskander missile. For these and other NATO members the size, location, and safety of the stockpile have become major issues of concern. Finding ways of addressing the Russian NSNW stockpile is now a key determinant in NATO's nuclear policy, but one in which progress to date has been sadly lacking.

## The United Kingdom and France

The United Kingdom's independent nuclear deterrent has always been committed to NATO and its contribution is noted in the recent 2010 Strategic Concept. The United Kingdom has been consistently supportive of firm language on

11. NATO, *1991 Strategic Concept,* (November 7–8, 1991), http://www.nato.int/cps/en/natolive/official_texts_23847.htm

12. For further discussion see Hans M. Kristensen, "U.S. Nuclear Weapons in Europe," (Natural Resources Defense Council, February 2005).

NATO's nuclear posture. Participants in the discussions on the Declaration on Alliance Security adopted at the Strasburg Summit noted that it was the United Kingdom and France who argued most forcefully on a prominent mention for the nuclear component.

It is a reasonable assumption that this position will be continued under the new Conservative government. Conservative governments in the past have normally adopted a robust approach to the question of defense, including retaining a nuclear deterrent. Although it is also worth noting that the current U.K. government recently announced a change in the U.K. declaratory policy that more closely resembles the U.S. position than that of France or NATO. The renewal of the Trident system provides an interesting backdrop to NATO's discussions.

The French nuclear force has always been independent of NATO and France has officially stayed outside all discussions of NATO's nuclear weapons. French officials, however, have participated in the drafting of language on NATO strategic policy in key documents. The return of France to NATO's defense planning and military structures has muddied the waters. France participates in defense planning for conventional forces and the Defense Planning Committee (DPC) but remains outside the NPG and HLG.[13]

France is therefore present at the discussion of general strategic guidance in the North Atlantic Council (NAC) at 28 but absent from more detailed discussions and consultations on nuclear policy in the HLG and NPG, which meet at 27. Clearly there is an overlap between the discussions of strategic principles on the one hand and policy implementation and operational detail on the other that is not easy to separate and risks causing a degree of confusion.

French officials participated actively in developing the documents for the Lisbon Summit, including those sections dealing with nuclear policy. French officials insisted on the central role of nuclear weapons and firmly resisted moves to reduce their salience. France is also reluctant to see NATO playing a greater role in disarmament and arms control—emphasising that NATO is a defense organization, not a disarmament lobby.

As is discussed later, it is thought that French officials will participate in drafting the DDPR but not in reviewing NATO's existing DCA arrangements.

Finding ways of addressing the Russian NSNW stockpile is now a key determinant in NATO's nuclear policy, but one in which progress to date has been sadly lacking.

13. For an authoritative assessment of the French perspective on the DDPR see Paul Zagac, "NATO's Defense and Deterrence Posture Review: A French Perspective on Nuclear Issues," Nuclear Policy Paper No.7 (ACA/BASIC/IFSH, April 2011), http://www.basicint.org/sites/default/files/Nuclear_Policy_Paper_N07.pdf.

## THE NEW STRATEGIC CONCEPT, 2010

The decision by NATO to develop a new Strategic Concept in 2010 meant that nuclear weapons again became an issue in Alliance politics. The looming need for a modernization decision for the DCAs was one practical element that stimulated attention in addition to the growing momentum behind the vision of a world free of nuclear weapons. The consideration of nuclear policy during the preparatory stage of the new Concept was influenced by several factors explored below.

### Deterrence, Defense, and Reassurance

The need to satisfy the concerns of members on Article 5 will continue to dominate the debate in the DDPR on the appropriate mix of capabilities NATO requires.

The addition of 12 new members brought new perspectives and concerns and an insistence that NATO's operations away from home should not mean less attention to the traditional tasks of deterrence and defense and the Article 5 commitment. The history and geography of the new members makes them particularly sensitive to this need for security—a sensitivity exacerbated by Russian actions in Georgia. Activities aimed at providing reassurance have been initiated by the Alliance. These efforts are appreciated, however, they are seen as bolstering, not replacing, extended nuclear deterrence. The need to satisfy the concerns of members on Article 5 will continue to dominate the debate in the DDPR on the appropriate mix of capabilities NATO requires. Reassurance measures also need to be seen in the context of the efforts to improve relations with Russia.

### Disarmament and Proliferation

Ongoing proliferation concerns, the call by the U.S. "Gang of Four" (George Shultz, William Perry, Henry Kissinger, and Sam Nunn) to pursue practical nuclear threat reduction steps toward achieving a world free of nuclear weapons, subsequent statements by other "Gangs of Four" around the world, the statement by President Obama in Prague of America's commitment to seek the peace and security of a world without nuclear weapons, and the widespread support in many countries for this goal has provided a highly significant background against which the new Concept considered the role of nuclear weapons.

As noted earlier there is a group of countries that have consistently argued the need for disarmament and arms control. Balancing the twin demands of defense and disarmament is a familiar problem for NATO. However, the desire to curb proliferation through reducing and eliminating nuclear weapons has given a new impetus to those who wish NATO to play a more active role in disarmament and arms control.

The scope for a more proactive role, however, is limited by the fact that NATO itself is not party to arms control agreements. These are the responsibility of individual members. In negotiations where NATO's interests are directly involved, the role of the organization has been to provide the framework within which to

coordinate an Alliance position.[14] It remains to be seen how much the creation of a new "Disarmament Committee," discussed later, will change this situation.

## Russia

The need to develop a constructive relationship with Russia is recognized by all members. The question is on what basis and, in the view of some members, what cost in terms of principles. There are several areas where cooperation makes sense and is essential to NATO's own plans, including nuclear threat reduction. As well as being a potential partner, however, Russia is potentially problematic from a planning perspective. Russian behavior, its persistently negative attitude toward NATO, its approach to its near abroad, and the use of force in Georgia have reinforced the mistrust and suspicion of those NATO members living in close proximity. This has meant that NATO measures to reassure its members will continue to take place alongside efforts to improve relations with Russia. Almost all dimensions of Alliance security are linked to the relationship with Russia and this relationship will affect all dimensions of the DDPR, particularly the discussion of nuclear policy.

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## Publics and Parliaments

Public and parliamentary attitudes to nuclear weapons vary from country to country. In most NATO countries nuclear weapons are not normally an issue of public concern unless or until attention is drawn to them. For obvious reasons governments prefer they stay below the public radar. Although NATO's nuclear policy does not appear to arouse the same degree of public concern as during the Cold War, the proposals to reduce the reliance on nuclear weapons and work toward a world free of nuclear weapons have garnered widespread support. Moreover, the disaster at Fukushima has increased public sensitivity in several countries to the term "nuclear," whether for civil power or weapons, and could increase opposition to the presence of U.S. nuclear warheads, or a decision by NATO perceived as reaffirming the nuclear "status quo" through the modernization of Allied DCA and/or the continued stationing of U.S. nuclear weapons in Europe.

The governments of DCA countries need to be particularly attentive to the public dimension. Germany and the Netherlands are the two countries most immediately affected. In both countries further expenditure for the DCA mission—either for a new aircraft or to prolong the life cycles of the existing platforms—would require parliamentary approval that in current circumstances

14. In the case of the bilateral INF negotiations, this was done by the Special Group. For the multilateral Conventional Forces in Europe (CFE) negotiations this was done by the High Level Task Force. In both cases the Alliance position was then fed into the negotiating process as appropriate.

would seem improbable. The question of parliamentary support could lead to tension between collective commitments made within the Alliance framework and domestic pressures and priorities.

## Modernization

Although discussions of the DCA emphasize its political role, it was the practical and financial dimension of modernization that created the first flurry of interest in current arrangements. The situation is different in each of the four operationally active DCA countries. In Germany, Italy, and the Netherlands, the replacement of the aircraft for the conventional mission is either underway or under consideration. The question is whether the additional funds needed to equip the new aircraft for the nuclear role will be made available and whether parliamentary support will be forthcoming.[15] Belgium has no plans to replace its current F-16s.

Comments from German officials have suggested that a continuation of the DCA mission by Germany will require extending the life cycle of the existing Tornados through 2020. Extending aircraft life cycles is a "fudgeable" exercise depending on the operational criteria.

## The HLG Report

Working quietly in the background, the HLG prepared a series of confidential reports addressing NATO's nuclear posture in the twenty-first century. The fact that these reports were largely unnoticed is a sign of how little attention was paid to the nuclear issue. The HLG reports worked on the basis of the guidance in the 1999 Concept and therefore the requirement for NSNW based in Europe. Working on this basic assumption, the report examined a range of options for fulfilling the mission and concluded that the DCA remained the appropriate option. As one NATO official noted, "DCA ticks all the boxes." The options also included a multinational NATO wing that was generally considered to have been too complicated to implement.[16]

The HLG report was noted by Defense Ministers at their March 2011 informal meeting but will be held in abeyance pending the forthcoming review of NATO's nuclear requirements. What role the report will play in the review of NATO's nuclear requirements is unclear.

The HLG study largely predated the Obama Administration, which on taking office launched its own NPR. This led to a period of uncertainty with many Allies

15. For further discussion of the modernization issue see Malcolm Chalmers and Simon Lunn, "NATO's Tactical Nuclear Dilemma," RUSI Occasional Paper, March 2010.

16. An interesting reflection of the ideas from the 1960s for a multinational NATO nuclear force, which foundered on the problem of command and control.

wondering whether the new Administration's commitment to the Prague agenda would produce a change in U.S. policy on NATO's nuclear policy.

## The U.S. Nuclear Posture Review

The NPR strengthened the longstanding U.S. negative security assurances. A senior U.S. official remarked that the significance of this change was that nuclear policy was now part of U.S. nonproliferation policy and that it would be logical for NATO to adopt similar language.[17] This did not happen in the new Concept adopted in Lisbon and it remains to be seen whether the issue will be addressed in the DDPR.

The NPR acknowledged the importance and relevance of extended deterrence and in that context confirmed modernization of the B-61 gravity bomb that, together with the development of the F-35 strike fighter, is relevant to NATO's current arrangements.

The NPR repeated the conventional reasons for the presence of U.S. NSNW in Europe, namely the maintenance of NATO cohesion and the reassurance of Allies and stated that any change would only be taken after a thorough review within, and decision by, the Alliance. The emphasis on placing future nuclear policy firmly within the context of the Alliance has become the centerpiece of the U.S. approach toward NATO's nuclear policy.

## The Report of the Group of Experts

In the preparations surrounding the Strategic Concept, the nuclear issue received little attention, reflecting the sensitivity of the issue and the clear preference to address more pressing issues. The Report of the Group of Experts under the chairmanship of Madeleine Albright called for a change in NATO declaratory policy and supported further reductions and "possible eventual elimination" of NSNW, although suggesting the retention of some forward deployed U.S. NSNW on European soil "under current security conditions."[18]

17. Quoted in Simon Lunn, "Reducing the Role of NATO's Nuclear Weapon?" RUSI Briefing Note, June 2010.

18. NATO Group of Experts, "NATO 2020: Assured Security; Dynamic Engagement," (Brussels: NATO, May 17, 2010), http://www.nato.int/cps/en/natolive/official_texts_63654.htm. The report also recommends the reestablishment of the Special Group on Arms control. The question of NATO's nuclear policy did not feature prominently in the activities that supported the Groups work, but consisted of a two-hour briefing session and a single item conclusion in the wrap up conference in Washington.

## PERSPECTIVES ON NATO'S NUCLEAR POLICY

It is always difficult to generalize about national views, but interviews with various national representatives at NATO during the past 18 months revealed certain broad trends of thought. These of course may modify over time as a result of internal and external developments. Views of NATO's nuclear policy vary widely and depend on the degree of nuclear involvement of the country concerned. In some countries, views differ depending on whether the individuals represent the Ministry of Defense or Foreign Affairs.

Assessments also need to consider that the nuclear issue is not a top priority for many members. Views vary depending on the degree of involvement. Some countries are firmly opposed to change, others are ambivalent, and yet others are advocating a change in the status quo. The common factor for all members is emphasis on maintaining Alliance unity.

The more recent NATO members from Central and Eastern Europe (CEE) resist change because for them the presence of U.S. NSNW unambiguously couples the U.S. nuclear deterrent to Europe and symbolizes the link with the United States which was the driving force behind their desire to join NATO. One senior representative suggested that the removal of the warheads could represent a red line for his country. Some are willing to consider reductions but only if Russia reciprocates. Proposals to provide additional Article 5 reassurance through contingency planning and exercises are welcomed but are not viewed as a substitute for the deterrence provided by the presence of U.S. warheads. One national representative revealed his scepticism when he remarked that the Allies "will remove the warheads and not do the exercises."[19]

A NATO missile defense system for defense of territory has been welcomed as strengthening the transatlantic link and bolstering deterrence. Several members, however, insist that missile defense performs a different function in deterrence and should not be seen as a replacement for the existing arrangements. One national representative described missile defense as "a flimsy substitute" for these arrangements, particularly in view of the impending reductions of U.S. ground forces in Europe.

For these members, the general uncertainty in the strategic environment and in relations with Russia means that this is not the time for NATO to make changes to its strategy and to do so would be sending the wrong message—in several directions.

France is not involved in NATO's nuclear arrangements but nevertheless is firmly in the "no change" camp—opposed to any move that could be interpreted as a weakening of nuclear deterrence. French officials usually refrain from

19. Ibid.

commenting on the specific issue of NATO's NSNW. French officials, however, are known to support the existing arrangements, among other reasons, as a way of avoiding their own singularity in terms of having nuclear weapons on continental European territory. Their position on NATO force posture is best described as standing on the sidelines but encouraging those who participate in the mission.[20]

The DCA countries themselves accept the mission but for the most part without great enthusiasm. Views on the value of the mission vary—often according to whether the official asked represents the Ministry of Defense or Foreign Affairs. Some argue that it provides the country concerned additional status within NATO and a useful means of demonstrating unity of commitment. Others maintain that the mission represents a waste of scarce resources and a missed opportunity for NATO to demonstrate its seriousness about reducing its reliance on nuclear weapons.

The reticence of the DCA countries was highlighted by the decision of the German coalition to have U.S. nuclear warheads withdrawn from German territory. This roused the interest of other members and led to the request by Foreign Ministers from five NATO nations (Belgium, Germany, Luxembourg, the Netherlands, and Norway) that nuclear affairs be placed on the Agenda at the Tallinn Foreign Ministers' meeting in April 2010.

Turkish views merit specific mention because U.S. nuclear warheads are reportedly based in Turkey and Turkish aircraft continue to have DCA status at a lower level of readiness. Turkish officials also say that they would prefer a continuation of existing arrangements but refute suggestions that changes could lead to their own nuclear aspirations. In this respect, some observers claim that potential instability in the Middle East provides an additional rationale for a continuation of the DCA role as representing a crisis response tool for NATO. Critics, however, point out that the same arguments concerning the lack of credibility of DCA operational use—and therefore deterrent utility—apply equally to this situation.

Most members agree that NATO's NSNW have little military value, but most also acknowledge the political significance for other members, and the benefits provided in terms of Allied participation and sharing in nuclear affairs. Nevertheless, some ask whether these functions can be achieved in different ways. Several would support withdrawal of the warheads as long as it was an Alliance decision and involves reciprocal measures by Russia. Among several initiatives to secure progress, a "non-paper" was circulated by Germany, the Netherlands, Norway, and

Several [members] would support withdrawal of the warheads as long as it was an Alliance decision and involves reciprocal measures by Russia.

20. This is reminiscent of the position adopted by President Francois Mitterand during the "Euromissile" crisis when he spoke in favor of deployment despite the fact that France was not involved.

Poland at the NATO Foreign Ministers meeting in Berlin on April 14, 2011, which urged numerous steps to increase transparency of U.S. and Russian NSNW.[21]

The flurry of activity in favor of arms control suggested diverse views that could have proved harmful to Alliance unity. It was important to sift the various positions to identify areas of agreement that could provide the basis for an agreed framework within which future discussions of nuclear policy could take place. Identifying this common ground was what the United States achieved in Tallinn.

The diversity of views made life difficult for the United States, which faced a conundrum. On the one hand, some U.S. officials assert that in view of existing U.S. capabilities, the NSNW in Europe have no military value and are redundant.[22] Moreover, in today's environment, the security of the storage sites also represents a serious cause for concern and additional expense. U.S. officials, however, also acknowledge the different European views on the value of these systems and ever conscious of European sensitivities to changes, tread carefully. The typical U.S. approach to the question of whether U.S. nuclear warheads should stay in Europe was always, "we'll do whatever you want us to do," to which the traditional European response has been "tell us what we need." In the past, this has produced a dialogue in which neither party has been ready to clarify its position first.[23]

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## THE MEETING OF NATO FOREIGN MINISTERS IN TALLINN, APRIL 22, 2010

The decision to place nuclear weapons on the agenda in Tallinn was unusual because nuclear issues are normally the domain of Ministers of Defense. Expectations, however, that this move could presage a rapid change in NATO policy were quickly stifled by the intervention of Secretary of State Hillary Clinton and the

21. Six other NATO Allies—Belgium, the Czech Republic, Hungary, Iceland, Luxemburg, and Slovenia—also supported the paper, which among other moves recommended using the NATO-Russia Council as the primary framework for transparency and confidence building concerning NSNW in Europe.

22. This has always been the case but it has never satisfied the more nervous of the protected who always ask for visible proof. There can be of course no definitive answer to the question whether credible extended deterrence depends on the location of the retaliatory capability because this lies in the eyes of the entity being deterred. The relevance of the Asian model of extended deterrence is now frequently the topic of discussion.

23. This routine was reminiscent of the U.S. cartoon featuring two figures, Alphonse and Gaston, who continually defer to each other—each insisting the other precede him: "You first, my dear Gaston." "After you my dear Alphonse."

adoption of her five principles.[24] These principles were designed to provide an agreed framework within which NATO's nuclear policy would be reviewed and by implication, avoid a potentially divisive debate among Alliance members. Several Allies had waited for a signal that the Administration was in favor of moving away from what they view as outdated arrangements. Instead, the Administration showed that its priority at Tallinn was in maintaining NATO cohesion, particularly with an eye on the anticipated START Treaty.

There was also an explicit emphasis at Tallinn on the need to avoid unilateral actions by any individual NATO member state. Although this was not a principle as such, there was general agreement that decisions should be taken by the Alliance as a whole. This commitment to act within the family has been the unwritten rule in all subsequent discussions and is repeated in all statements by national representatives.

Tallinn established the ground rules for future discussions of nuclear policy and the development of the new Concept. It also broke the taboo surrounding the discussion of nuclear issues and confirmed that disarmament could occupy a more prominent place in NATO discussions. Furthermore, it left open the possibility that in its new Concept, NATO could demonstrate a reduced role for nuclear weapons, both in their stated purpose and the force posture required.

## THE LISBON DOCUMENTS AND NUCLEAR POLICY

The new Strategic Concept and the Lisbon Summit Declaration that accompanied it both contain language on NATO's nuclear policy and its role in disarmament

24. The five principles were as follows:
    1. As long as nuclear weapons exist, NATO will remain a nuclear alliance;
    2. As a nuclear Alliance, sharing nuclear risks and responsibilities widely is fundamental;
    3. A broad aim is to continue to reduce the role and number of nuclear weapons while recognizing that in the years since the Cold War ended, NATO has already dramatically reduced its reliance on nuclear weapons;
    4. Allies must broaden deterrence against the range of twenty-first century threats, including by pursuing territorial missile defense;
    5. In any future reductions, our aim should be to seek Russian agreement to increase transparency on non-strategic nuclear weapons in Europe, relocate these weapons away from the territory of NATO members, and include non-strategic nuclear weapons in the next round of U.S.-Russian arms control discussions alongside strategic and non-deployed nuclear weapons.

and arms control.[25] Nuclear policy and the related issue of arms control proved to be issues on which consensus was difficult to reach in both the Concept and the Declaration.

Four elements were particularly significant to these discussions: the language describing the role of nuclear weapons in NATO strategy; the continued need for deployment of U.S. nuclear warheads in Europe; adopting Missile Defense for the defense of territory; and NATO's role in disarmament, arms control, and nonproliferation. Each of these issues raises fundamental questions concerning the role of nuclear weapons in NATO strategy and each in some way raises the question of relations with Russia.

Some suggest that by saying little, the Concept in effect confirms existing arrangements and therefore the status quo. Others argue the reverse; in saying little, the Concept leaves the door open to change.

Discussions among an informal group of interested countries occurred during the summer but failed to produce agreed language. Consultations then took place between the three nuclear powers and Germany in the informal group of four frequently used to prepare the basis for consensus. These consultations produced a series of compromises and trade offs on the major differences that facilitated agreement on key language.

These compromises satisfied French concerns that the language in the Strategic Concept would not imply any reduction in the role of the nuclear weapons; allowed the French to waive their hesitations over adopting missile defense (a U.S. priority); and agreed to a higher profile for disarmament (a German priority). The demand by several countries for a nuclear posture was resolved through the French accepting a NATO nuclear posture review. This evolved, at the proposal of the United Kingdom, into a broader DDPR.

As a result of French insistence that the new Concept should not imply any reduction in the role of nuclear weapons, the language is extremely brief. Some suggest that by saying little, the Concept in effect confirms existing arrangements and therefore the status quo. Others argue the reverse; in saying little, the Concept leaves the door open to change. Which interpretation proves true will depend on future developments concerning the review of deterrence and defense and related developments in the political environment.

The question of interpretation is immediately evident in the Strategic Concept commitment, "to the goal of creating the conditions for a world without nuclear

25. The aim of a Strategic Concept is to chart NATO's course by establishing the principles and parameters that underpin its purposes and goals. The new Concept took a year to develop in an unusually transparent process involving a Group of Experts and a series of seminars with think tanks and academics. The consultation process with Alliance members, however, was more constrained. The Summit Declaration provides commentary on the current issues in which NATO is directly involved and of immediate relevance. The language is of necessity, more actual and detailed than the Concept. The Declaration also contains numerous "taskings" for follow up, most due for completion by mid-2011. Because of its immediate relevance, adopting the Declaration proved more problematic than the Concept.

weapons." Arms control supporters point to this language as committing NATO for the first time to supporting this goal. Others emphasize, however, that the goal is "to create the conditions for" a nuclear weapons free world. They also point to the next sentence, "but reconfirms that, as long as there are nuclear weapons in the world, NATO will remain a nuclear Alliance" as an important qualifier. This sentence, which is the first of the Clinton principles, now accompanies almost every declaration on NATO nuclear policy.

Nuclear weapons are located as part of the now familiar "appropriate mix" for the core element of deterrence. The language from the 1999 Concept—that the circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote—is repeated.

The new Concept no longer contains the language from the 1999 Concept that describes the purpose of NATO's nuclear forces to counter all forms of aggression. The absence of such language has led to speculation on the compatibility of NATO's nuclear policy with the language in the U.S. NPR that by strengthening U.S. negative security assurances narrows the circumstances in which the United States would contemplate use.

The new Concept no longer contains the language from the 1999 Concept that describes the purpose of NATO's nuclear forces to counter all forms of aggression.

The Concept repeats the 1999 language that the supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly by those of the United States and the independent forces of the United Kingdom and France, "which have a deterrent role of their own."

The specific reference to the need for NSNW in Europe is missing. This omission undoubtedly reflects the sensitivity of the issue, particularly given the position adopted by the German coalition. The Concept, however, states that the Alliance will:

> *ensure the broadest possible participation of Allies in collective defense planning on nuclear roles, in peacetime basing of nuclear forces and in command, control and consultation arrangements.*

The absence of a specific reference to European territory in the context of peacetime basing reflects the sensitivity of the issue. It could be argued that a reference to European territory is unnecessary because it is covered by the phrases "broadest possible participation of Allies…in peacetime basing of nuclear forces." Although interpretations of "broadest possible" and the lack of precision on the "where" of peacetime basing could be said to leave a degree of ambiguity how this could be fulfilled.[26] The absence of a reference to linkage and the emphasis on the participation of Allies would suggest that burden sharing is now the most valued element in the rationale for NSNW.

26. There are suggestions that this would allow for the removal of the NSNW to the United States while retaining the DCA.

The Concept states that NATO intends to develop the capability to defend territories and populations against ballistic missile attack as a core element of collective defense. Although NATO has long accepted the need to protect deploying forces from ballistic missile attack, this is first time NATO has agreed to protect territory and populations.

Missile defense has always been a sensitive issue for France because for some time it was seen as representing a threat to the credibility of the French independent deterrent. This position has softened over time. According to participants in the Lisbon discussions, France did not block an agreement by the Alliance on missile defense for territory as part of the compromises reached. The relationship between missile defense and nuclear deterrence, however, proved to be an issue of contention between France and Germany until the last stages and had to be settled by the two leaders. Germany argued that missile defense would reduce the nuclear component in deterrence and France, together with others, took the position that there was no such connection and that, while territorial Missile Defense could complement and even reinforce nuclear deterrence, it could not substitute for it.

In the months preceding Lisbon, several members pressed for a NATO nuclear posture review in the hope that this would address the question of extended deterrence and the continuing need for deploying NSNW. Other members who were satisfied with the existing arrangements did not see such a need. France in particular was hostile to such a review. A compromise was reached in the Concept by tasking the NAC to:

> *continue to review NATO's overall posture in deterring and defending against the full range of threats to the Alliance…*

This was further elaborated in the Declaration:

> *This comprehensive review should be undertaken by all Allies on the basis of deterrence and defence principles agreed in the Strategic Concept, taking into account WMD and ballistic missile proliferation. Essential elements of the review would include the range of NATO's strategic capabilities required, including NATO's nuclear posture, and missile defence and other means of strategic deterrence and defence. This only applies to nuclear weapons assigned to NATO.*

The Concept confirms that NATO will continue to play its part in reinforcing arms control and promoting disarmament, repeating the resolve to seek a safer world and to create the conditions for a world without nuclear weapons.

Noting the dramatic reductions in the number of nuclear weapons stationed in Europe the Concept states:

> *In any future reductions, our aim should be to seek Russian agreement to increase transparency on its nuclear weapons in Europe and to relocate these weapons away from the territory of NATO members. Any further steps must*

> *take account the disparity with the greater Russian stockpiles of short-range nuclear weapons.*

The Declaration devotes four paragraphs to arms control and disarmament, including references to the new START Treaty, and repeats the resolve to seek to create the conditions for further reductions in the role and numbers of NATO's nuclear weapons.

Several members had persistently argued for NATO to play a more active role in arms control and disarmament with France just as persistently opposing such a role on the grounds that it was not an appropriate role for a military organization. As part of the political trading over the emphasis to be given to nuclear weapons and disarmament respectively, it was agreed that the NAC be tasked:

> *to establish a Committee to provide advice on WMD control and disarmament in the context of the above, taking into account the role of the High Level Task Force (HLTF).*

The somewhat convoluted language reflects the differences surrounding its creation. According to participants, this language arrived very late in the drafting session and left many members bemused as to the exact intention. Efforts by France to limit the duration of this Committee to the life of the DDPR through the use of the term "ad hoc" were resisted. However, its precise terms of competence, its input to the DDPR and its duration remain uncertain and await further definition.

## NATO DETERRENCE AND DEFENSE POSTURE REVIEW

### Process

The decision to undertake a comprehensive review of deterrence and defense was a compromise between those who sought a specific review of the nuclear posture and those who wanted to avoid any re-examination of the nuclear posture. The result will be an overall assessment of all elements of NATO strategy—conventional forces, nuclear, missile defense, and to include any of the new threats considered relevant. It leaves open the possibility for change if members see this in their national and collective interest and dependent on developments in the international environment.

The Terms of Reference (TORs) were agreed by Defense Ministers in March and a work plan was agreed by Foreign Ministers in May. The review will have a first phase of consultations until fall 2011, which will include brainstorming sessions for the NAC and then a second drafting phase with the aim of a report by the next Summit in the United States foreseen for May 2012.

In terms of organization, there will be several layers. The NAC in permanent session—the Ambassadors—will be responsible for overall coordination and

supervision, delegating in turn to their Deputies. It is assumed that they will draw on the work of those Committees with competence in the respective areas—conventional, nuclear, missile defense, and the other security threats thought relevant—and the new Committee on WMD Control and Disarmament. Scoping papers on relevant areas, emerging threats, conventional forces, nuclear policy, and arms control will facilitate discussions by the NAC. The views of those in the academic world with relevant expertise will also be sought.

The overall aim of the DDPR must be to ensure that NATO strategy is coherent—that it has the capabilities appropriate to the range and diversity of threats, responds to the political circumstances, and takes account of resources available. A key part of the review should be to identify the interrelationships and linkages between the various planning areas including disarmament and arms control. The term "linkage" has already been the subject of division, with France resisting use of the term. France, however, was keen to have as broad a review as possible.

The overall aim of the DDPR must be to ensure that NATO strategy is coherent—that it has the capabilities appropriate to the range and diversity of threats, responds to the political circumstances, and takes account of resources available.

## Conventional Forces

NATO has a defense planning system with a regular cycle that provides guidance to nations on their conventional forces. This process was updated in 2006 to include more planning disciplines. This regular cycle has also been reinforced by the defense capabilities package agreed in Lisbon. Defense capabilities are under constant scrutiny, which means that there is no need for a separate review. Major challenges include ensuring a balance between the traditional demands of defense of territory with those of out of area and coping with severe cuts in defense budgets.

During the Cold War, the relationship between conventional and nuclear forces was clear—simply put, the weaker the former the greater the dependence on the latter. Today there is no Soviet Union, Warsaw Pact, or direct threat and the emphasis is on the political role of nuclear weapons. Nevertheless the relationship between the two components still exists. NATO's conventional forces continue to play a key role in providing reassurance of the Article 5 commitment and the degree to which they are successful means less reliance on the nuclear component. The relationship in other scenarios remains to be defined.

It is also worth noting that Russia claims NATO conventional superiority as justification for its own reliance on nuclear weapons. This assessment probably takes account of the full spectrum of U.S. capabilities, including current and possible future developments, such as advanced long-range precision conventional weapons, and Russia's geo-strategic situation. It appears that Russia's concerns are as much about the differences in quality as in quantity.

It is difficult in the European context to see how this perception can be changed. Most NATO members are below their entitlements under the Conventional Forces in Europe (CFE) and in the current economic climate, defense budgets are in

steep decline. It is obviously true that regional or local imbalances can produce threatening postures. But in this respect it is the smaller NATO members in the North that have the most to worry about. It is to provide reassurance to these members that NATO has been developing various measures, including contingency plans and activities, to increase the visibility of NATO involvement—measures that will certainly draw Russian attention and criticism.

It is precisely for these types of activities and the reactions they provoke that greater transparency could be helpful in reducing insecurities.[27] In this sense the revival of the CFE regime or a viable follow-on arrangement and greater openness and certainty in conventional forces would be a welcome development.[28] Measures that create greater transparency through information exchange, dialogue, and other cooperative activities could help dispel many of the misperceptions that permeate existing relations and build much needed, and currently lacking, mutual trust. For the moment there is no movement in this area either

The revival of the CFE regime or a viable follow-on arrangement and greater openness and certainty in conventional forces would be a welcome development.

## Missile Defense

Missile Defense is proceeding on two tracks. First, NATO is developing its own system focused on achieving synergy between the NATO system and the national system and solving the problem of command and control. Second is the issue of cooperation with Russia where the emphasis is on finding common ground between two very different interpretations of "joint." The Russian proposal for a single system is incompatible with NATO's collective defense commitment under Article 5.

Both of these tracks are fraught with difficulties and both have consequences for NATO strategy. In brief, many members believe it reinforces the U.S. link—a form of new "glue"—and provides a new way of showing solidarity. There continues to be considerable uncertainty over what contributions the Allies will be asked to make in the longer term or where the expenditure will come from.

Some countries, Germany in particular, argue that missile defense should over time reduce the reliance on NSNW. This is hotly disputed by other members, notably France. This has revived discussions concerning the respective effectiveness of deterrence by punishment or by denial. The role and consequences of missile defense will certainly preoccupy discussions in the DDPR.

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27. An initiative aimed at achieving greater transparency and improving mutual understanding could include discussions of doctrine, structure, and configuration similar to those that took place in the 1980s between NATO military and defense planners and those of the Soviet Union. Discussions took place in this context in the early 2000s in the NATO-Russia Council (NRC).

28. For a pessimistic assessment of the current status of the CFE process, see Simon Lunn, "Reviving Discussions on the Conventional Imbalance," The ELN Symposium, Reducing the Role of Nuclear Weapons in NATO-Russia Relations (Berlin, June 31, 2011).

The relevance of missile defense to relations with Russia has an even greater significance as Russian officials continually refer to cooperation on missile defense as a litmus test of the relationship with NATO. Cooperation in other areas, including on NSNW, may be hostage to progress in this field.

### New Threats

It is not clear how the DDPR will tackle new threats, such as cyber and the question of energy security.

### The Committee on WMD Control and Disarmament

It is likewise too early to say how the new "Disarmament Committee" will operate in the context of the review. It could function as the forum for the United States to consult with Allies on the prospect of negotiations on NSNW. A precedent for this exists in the creation and work of the Special Group for consultation on the INF negotiations. Beyond that, its future remains uncertain although there is a firm constituency that supports its continuation as a framework for NATO members to exchange views on disarmament issues.

Some countries, Germany in particular, argue that missile defense should over time reduce the reliance on NSNW.

## REVIEW OF A NATO NUCLEAR POSTURE

A review of NATO's nuclear requirements will be a central element of the DDPR. While the precise workings are still to be decided, it would be reasonable to assume that the NPG and HLG as the dedicated bodies will be involved in the preparatory work. "Food for thought" papers on key aspects, such as burden sharing, are being prepared by individual nations. Final responsibility, however, will rest with the Ambassadors to ensure that recommendations by the nuclear community are subject to political scrutiny.

There may be proposals to make the language on declaratory policy consistent with the language in the U.S. NPR, which would presumably mean reducing the circumstances of use and therefore the ambiguity. This is likely to arouse French objections and the question will be whether countries will feel this issue is sufficiently important to pursue and fight for—remembering that the language in the new Concept is minimal and retains its ambiguity.

The position of France remains unclear. Assuming that inputs to the DDPR are provided by the HLG and NPG, French views will not be heard. However, when the NAC considers these inputs the French Ambassador will be able to join the discussions. The question is whether he will feel free to speak on nuclear requirements as well as general policy.

The existing HLG report has been noted by Ministers but in the view of most officials, has been shelved pending the outcome of the DDPR. Senior NATO offi-

cials have said that a nuclear review should start from first principles. This would suggest revisiting the basic question on the need for the continued deployment in Europe of the U.S. nuclear warheads, looking at possible adjustments and at different ways of doing things.

It has to be assumed that the review will take as its starting point the guidance on nuclear policy contained in the new Strategic Concept. There are two references in the Concept that are of direct relevance to the discussions of NATO's future nuclear posture. First, the reference to ensuring the broadest possible participation of Allies, and second the need in any future reductions to engage Russia on its own stockpile.

## Burden Sharing

The reference to the "broadest possible participation" places a clear emphasis on the need for Allies' involvement and implicitly on burden sharing. It does not rule out looking for different methods of participation and of burden sharing. Although the most obvious interpretation would be that it points to a continuation of the existing DCA arrangements, it is also possible to stretch the language to suggest that peace time basing could mean different things.

The reference to the "broadest possible participation" places a clear emphasis on the need for Allies' involvement and implicitly on burden sharing.

Is there room for adjustments to the existing arrangements, such as reducing the number of NSNW, which would satisfy those who want NATO to demonstrate movement? Reducing numbers of NSNW could be more complicated in terms of its practical and operational implementation than appears at first sight. Furthermore, any proposal for further reductions would need to take account of the stipulation discussed below of the need for reciprocal action by Russia.

Supporters of the status quo emphasize the importance of the political principle of sharing the nuclear risk and burden and suggest that a decision by the Allies to end current arrangements could receive a negative reaction in the U.S. Congress and therefore damage the transatlantic relationship.

It is also possible that the review could consider new arguments to sustain the existing DCA arrangements. There are those who argue that a NATO nuclear capability—and by implication a European footprint—is a prudent precaution for future eventualities and is needed for uncertainties in other regions. These arguments could be seen as an effort to develop a new rationale, or "narrative," which makes the posture relevant to the new challenges. The future utility advocates are also supported by the decision in the U.S. NPR to modernize the B-61 bomb and the F-35 aircraft.

The potential application to new scenarios raises the question of the credibility of the existing arrangements. This is not a new issue. The credibility of the DCA mission is often criticized because of the absence of an evident operational application. If there were a requirement for using nuclear weapons, critics ask, would an allied DCA provide the appropriate choice given the range of options available? There is a further consideration. How likely is it that the United States

would make a decision of this magnitude the subject of agreement by 28 Allies? These are inconvenient questions because they go to the heart of NATO's nuclear policy.[29] Nevertheless, the question of credibility must have a bearing on the political and symbolic value of the current arrangements.

These are not new considerations and there are no easy answers. The credibility of deterrence lies in the eyes of those being deterred and of those who are being reassured. In current circumstances of uncertain threats attention focuses naturally on the latter and the innate tendency to remain with what is familiar. However, the DDPR provides the opportunity to reassess the credibility of a NATO nuclear capability and the benefits and disadvantages of existing arrangements.

## Russian Non-Strategic Nuclear Weapons

The size and location of the Russian stockpile—most sources suggest the stockpile could be around 3000 warheads—has become a major source of concern for Alliance members and one that dominates current NATO thinking. It is with the purpose of addressing this disparity that the new Strategic Concept seeks to engage Russia on the size and location of their systems.

Consistent with the Senate conditionality attached to the ratification of New START, the Obama Administration has said it believes NSNW should be included in future negotiations, but that reciprocal actions could be taken on the basis of parallel steps by each side in advance of a new treaty, underscoring the importance of consulting with Allies.[30] Thus far, however, Russia has shown no interest in discussing NSNW; this includes discussions in the NRC.[31] Russian willingness to cooperate on this issue will almost certainly depend on progress in other areas.

The Administration is now considering the various options for including NSNW in future negotiations. In due course it will consult the Allies. This means that in defining its nuclear posture, NATO will need to take account of the prospect of negotiations. In other words, NATO should decide what posture it needs and to what degree this posture is defined by Russian weaponry and by the results of any

29. The question of consultation with Allies was addressed in the so-called Athens guidelines in 1962. They have been summarized as "time and circumstance permitting" (see CRS report, ibid). The Athens guidelines were later reinforced by the provisional political guidelines, which remain confidential.

30. Tom Donilon, National Security Adviser to the President, Remarks at the Carnegie International Nuclear Policy Conference (Washington, DC: Carnegie Endowment for International Peace: March 29, 2011), http://www.carnegieendowment.org/2011/03/29/keynote-thomas-donilon/2s6j.

31. There is now an extensive body of literature on Russian capabilities and attitudes—none of it very encouraging. Russian sources suggest an increased reliance on nuclear weapons including sub-strategic systems to offset what is seen as NATO's advantages in conventional forces. Western analysts also suggest that the Russian navy has a particular interest in maintaining these systems and hence their location.

negotiations, so that force planning and arms control would be synchronized.[32] This alone creates pressure for continuing the DCA arrangements because of the need for something to negotiate. As a senior U.S. official noted, "arms control is the best friend of those who support the status quo."

32. This is easier said than done and raises the question of the priority afforded to defense and disarmament respectively—difficult enough in a national administration even more so in a multinational alliance. In the case of the Double Track Decision, the modernization requirements were established first, then the negotiating position. Although the zero option was always the rhetorical goal, the surprise acceptance by the Soviet Union, while welcomed by most, did not please those who considered that NATO needed some capability in that category.

CHAPTER TWO

# Words That Matter?

## *NATO Declaratory Policy and the DDPR*

MALCOLM CHALMERS

*"The circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote."* [1]

In November 2010, NATO's Lisbon summit ordered a comprehensive review of NATO's overall posture for "deterring and defending against the full range of threats to the Alliance." Essential elements of this Deterrence and Defense Posture Review (DDPR) will include examining NATO's nuclear posture, together with missile defense and other means of strategic deterrence and defense.[2]

With the main principles of NATO's "phased adaptive approach" to missile defense already agreed, the most contentious aspect of the DDPR is likely to be its review of the role of nuclear weapons. Attention is likely to focus, in particular, on two aspects of NATO's nuclear posture: first, the future of nuclear sharing arrangements, including the role of U.S. nuclear weapons based in Europe therein; and, second, possible changes in NATO's declaratory policy. Although these two aspects are interrelated, they are nevertheless distinct and separable. It is possible to imagine a DDPR outcome in which non-strategic nuclear weapons (NSNW) deployments and nuclear sharing arrangements are substantially reduced or even ended, yet declaratory policy remains unchanged. It is also possible that member states could agree to make changes in NATO declaratory policy, bringing them broadly into line with those already announced in the United States' 2010 Nuclear Posture Review (NPR), while postponing any changes in nuclear sharing arrangements to a later date.

Declaratory policy, defined as a set of public statements about the circumstances in which a state or group of states would consider using nuclear weapons,

1. *NATO, Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation*, November 2010, para. 17.

2. "Lisbon Summit Declaration Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Lisbon on 20 November 2010," *NATO Press Release PR/CP(2010)0155*, para. 30.

# CHAPTER TWO: **KEY FINDINGS**

- NATO has always had a declaratory policy—defined as a set of public statements about the circumstances in which a state or group of states would consider using nuclear weapons. This policy has played an important role in communicating both internally and externally how nuclear weapons contribute to collective deterrence and defense, as well as in supporting the Alliance's arms control and disarmament commitments.

- Now that both the United States and the United Kingdom have adjusted their declaratory policies, there would appear to be a good *prima facie* case for NATO to do the same. NATO is not a state, and possesses no nuclear weapons of its own. It cannot provide assurances to other states on how the nuclear weapons of its member states might be used, either on a legally or politically binding basis. What it can do, and what it has done in the past, is produce a declaratory policy that explains the role that nuclear weapons assigned to the Alliance play within NATO's overall deterrence and defense posture.

- A new declaratory policy could include one or both of the following elements:

  - NATO could endorse a policy of not using, or threatening to use, nuclear weapons against non–nuclear-weapon states party to the Nuclear Non-Proliferation Treaty (NPT), provided they are not in material breach of their nuclear nonproliferation obligations. This would be accompanied by a statement that member states reserved the right to suspend this commitment in the event of substantial new developments in the biological weapon capabilities of the aggressor states in question.

  - NATO could state that it now believes that the fundamental—or central or essential—purpose of its nuclear weapons is to deter others from using nuclear weapons. It could also state that it will aim to develop its nonnuclear capabilities so that, in the future, the sole purpose of its nuclear weapons would be to deter a nuclear attack. This would help provide a bridge between the nuclear, missile defense, and conventional elements of the Deterrence and Defense Posture Review (DDPR) by making clear that further moves toward a "sole purpose" posture might depend in part on further modernization of these elements of NATO's deterrence and defence posture. At the same time, it could also clarify that, in current circumstances, there remains a narrow range of contingencies in which first use of nuclear weapons against nuclear-armed states would not be ruled out.

- Changes like these would help bring stated NATO policy more into line with the reality that there are very limited circumstances in which NATO member states now believe that they would have to contemplate the use of nuclear weapons in defense of NATO's vital interests. These changes could be achieved through a new Declaratory Statement, issued by the Secretary-General on behalf of the Alliance, or as part of any public output from the DDPR.

has always been a balancing act.[3] Although it can have a key role in deterrence of potential adversaries, it can also be used to reassure those same states, together with concerned third parties and domestic public opinion, that nuclear weapons will only be used in extreme circumstances. In the case of NATO, declaratory policy has an additional dimension, helping to reassure the United States' European Allies of its willingness to incur the risks involved in extended deterrence, while assuaging their concerns that, in a future crisis, the United States might use its nuclear monopoly to privilege its own security over their own.

In addition to these deterrence and reassurance roles, NATO's declaratory policy also plays a role in supporting the Alliance's arms control and disarmament commitments. Thus the Lisbon summit committed member states to "create the conditions for a world without nuclear weapons in accordance with the goals of the Nuclear Non-Proliferation Treaty," and in this context made clear that Allies have "dramatically reduced the number of nuclear weapons stationed in Europe and our reliance on nuclear weapons in NATO strategy." Leaders went on to announce their commitment to "seek to create the conditions for further reductions in the future." As a result, a new NATO committee—the WMD Control and Disarmament Committee—has been established to provide further advice on these issues in the context of the DDPR.[4]

The DDPR is likely to involve intense debates between, and within, member states on the appropriate balance between different objectives of declaratory policy, and those of NATO's nuclear posture more generally. This is nothing new. Since NATO was founded in 1949, its strategic concept has been the subject for vigorous internal debate. It has been one of NATO's strengths as a democratic alliance that all its members have had an opportunity to contribute to these discussions. As a result, however, changes in nuclear policy have often been keenly debated for several years before being translated into alliance doctrine and operational planning.

NATO nuclear posture has often resembled a theology, a set of fundamental philosophical truths that apply in all circumstances. In practice, however, it has been more flexible. During the 1950s, NATO declaratory policy was based on "massive retaliation," the threat that NATO would respond to any aggression, even on a relatively limited scale, by the large-scale use of nuclear weapons. With Soviet nuclear capabilities making such a threat increasingly incredible by the early 1960s, however, the Alliance moved progressively toward a strategy of "flexible response," in which forward-deployed nuclear forces remained central, but in which conventional forces also played an increasingly important role. Then, as a result of the end of the Cold War, NATO moved to change its approach once again, opening the way for the sharp reductions in forward-based nuclear

3. For further discussion, see Malcolm Chalmers, "Nuclear Narratives: Reflections on Declaratory Policy," *Royal United Services Institute Whitehall Report*, 2010, http://www.rusi.org/downloads/assets/WHR_Nuclear_Narratives.pdf.

4. Lisbon Summit Declaration, para 31.

weapons in Europe that took place after 1990. At each stage, NATO nuclear policy adapted to changing strategic circumstances. Although the pace of change has often been slowed by the need to maintain consensus amongst its member states, the U.S.'s leading role in the Alliance has allowed it, when it chooses to do so, to build support for new approaches.

The 2010 Strategic Concept has continued in this tradition. When compared to the 1999 Concept, which it replaces, the 2010 document goes further in reducing the roles that nuclear weapons play in its strategy for deterrence and defense. Influenced by the "flexible response" strategy that NATO had adopted in the 1960s, member states in 1999 agreed that nuclear forces continued "to fulfil an essential role in ensuring uncertainty in the mind of any aggressor about the nature of the Allies' response to military aggression. They demonstrate that aggression of any kind is not a rational option." The 2010 Concept, by contrast, failed to endorse such a formulation. It also emphasised that NATO's reliance on nuclear weapons in NATO strategy has been "dramatically reduced," and that NATO will seek to "create the conditions for further reductions in the future."

At the level of Strategic Concept, therefore, the 2010 Lisbon Summit has already seen a significant, but partial, move in declaratory policy away from the Cold War doctrine of ambiguity, and toward an explicit acceptance that nuclear weapons are only relevant for a narrow (yet vital) set of contingencies. In relation to declaratory policy, the role of the DDPR will be to examine whether, and in what ways, this shift in the Strategic Concept should be translated into more specific formulations on what these contingencies could be, and whether there are some circumstances in which NATO is now willing to clearly rule out using nuclear weapons.

…the 2010 Lisbon Summit has already seen a significant, but partial, move in declaratory policy away from the Cold War doctrine of ambiguity…

## WHAT ARE "NATO NUCLEAR WEAPONS"?

The 2010 Strategic Concept states that "as long as nuclear weapons exist, NATO will remain a nuclear alliance."[5] Yet NATO, as an international organization, possesses no nuclear weapons of its own. Instead, its claim to be a nuclear alliance rests on the willingness of its nuclear-armed member states to make nuclear weapons available to it. Accordingly, the Strategic Concept specifies that "the supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States; the independent strategic forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies."[6]

In establishing the DDPR at the Lisbon summit, NATO leaders stated that its review of nuclear posture would only apply to "nuclear weapons assigned to

5. *Strategic Concept*, para. 17.

6. Ibid., para. 18.

NATO," a formulation that was not used in the Strategic Concept itself (and that not all NATO officials recognize as having operational significance).

As a result of the 1963 U.S./U.K. Polaris Sales Agreement (as subsequently modified for Trident and the successor to Trident), all U.K. submarine-based nuclear weapons are formally assigned to NATO. Successive U.K. Prime Ministers have stipulated that these weapons "will be used for the purposes of the international defense of the Atlantic Alliance in all circumstances," except where the U.K. Government may decide that "supreme national interests are at stake."[7]

The Strategic Concept also states that France's nuclear weapons "contribute to the overall deterrence and security of the Allies." Unlike those of the United Kingdom, these forces are not assigned to NATO. France is not a member of NATO's nuclear structures, and does not participate in collective nuclear planning.

In contrast to the forces of the United Kingdom and France, there is no consensus within NATO on the extent to which U.S. nuclear forces are "assigned" to NATO, or indeed on whether such a designation has any practical significance. U.S. nuclear weapons stored in Europe, for possible use with U.S. and European dual-capable aircraft (DCA), are often seen to be assigned. This perception has been further strengthened by the U.S. acceptance, at the 2010 Tallinn foreign ministers' summit, that decisions on their future will not be made unilaterally, but only through a collective NATO agreement.

If assigned forces were to be defined narrowly to include only those forces actually deployed in Europe, it is possible that NATO could one day be in a position in which the only forces assigned to it would be the strategic forces of the United Kingdom. This paper assumes, however, that the DDPR will take into account all those U.S. and U.K. nuclear forces that might have a role in deterring an attack on the NATO area.

Including the United States' strategic forces as available for defending its NATO Allies could become increasingly important if its NSNW are withdrawn from Europe, or dismantled altogether.

Including the United States' strategic forces as available for defending its NATO Allies could become increasingly important if its NSNW are withdrawn from Europe, or dismantled altogether. There is a historical precedent for such a substitution. When the United States withdrew Jupiter missiles from Turkey in 1963, it reassigned their targets to U.S. submarine launched ballistic missiles (SLBMs) based in the Mediterranean. To provide further reassurance, the United States also sent the relevant ballistic missile submarine (SSBN) on a port visit to Turkey.[8] More recently, the 2010 NPR pointed to the role that U.S. strategic forces, together with U.S. non-strategic nuclear systems redeployed in a crisis, had played in extended deterrence in Asia after the forward-deployed U.S. nuclear weapons in the Pacific were withdrawn. Similar capabilities could be deployed for defending the United States' European Allies.

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7. For the most recent formulation, see the letter from Prime Minister Tony Blair to President George W. Bush of December 7, 2007, reproduced in Peter Hennessy, *Cabinets and the Bomb* (Oxford University Press, 2007), 333–34.

8. I am grateful to Scott Sagan for pointing to this parallel.

## NATIONAL DECLARATORY POLICY AND THE DDPR

The consideration of possible changes to NATO declaratory policy needs to take into account the revisions of declaratory policy announced in 2010 by both the United States and the United Kingdom. For some, these announcements make a separate NATO declaratory policy superfluous because these are the only two member states that assign (at least) some part of their nuclear force to NATO. For most member states, by contrast, it makes a new NATO declaratory policy necessary, so that the policies of the Alliance reflect those already adopted by these two states.

The consideration of possible changes to NATO declaratory policy needs to take into account the revisions of declaratory policy announced in 2010 by both the United States and the United Kingdom.

### The U.S. NPR and Declaratory Policy

In April 2010, the U.S. Government published its own NPR. It contained some important shifts in declaratory policy.

First, it stipulated that "the role of nuclear weapons in U.S. national security and U.S. military strategy had been reduced significantly in recent decades, but further steps can and should be taken at this time." With this in mind, it declared that "**the fundamental role of U.S. nuclear weapons**, which will continue to exist as long as nuclear weapons exist, **is to deter nuclear attack** on the United States, our Allies, and partners." As a result of the fundamental change in the strategic situation since the end of the Cold War, "the role of U.S. nuclear weapons in deterring nonnuclear attacks—conventional, chemical and biological—has declined significantly." The NPR committed the United States to "continue to reduce the role of nuclear weapons in deterring non-nuclear attacks."

Second, the NPR announced **a strengthening of U.S. negative security assurances** (**NSAs**), declaring that the United States "will not use or threaten to use nuclear weapons against nonnuclear weapon states that are party to the NPT and in compliance with their nuclear nonproliferation obligations." It made clear that this assurance would apply even if such a state used chemical or biological weapons against the United States or its Allies and partners. Instead, it stated, such a state "would face the prospect of a devastating conventional military response—and that any individuals responsible for the attack, whether national leaders of military commanders, would be held fully accountable." The United States reserved the right, however, to adjust this security assurance in light of new developments in biological weapons, taking into account developments in the United States' capacities to counter these threats.

This strengthening of the U.S. NSAs is not legally binding, and can be amended or suspended at any time. But this could change in relation to some of the recipients of this guarantee, depending on future developments in relation to nuclear-weapons-free zones to which the United States is, or could be, a party. All five existing nuclear-weapons-free zones contain protocols that provide for legally binding NSAs from the nuclear weapon states; and the NPT RevCon encouraged all concerned states to ratify these protocols.

The new U.S. declaratory policy marks a significant change to the previous declaratory policy of "calculated ambiguity"…

At present, the United States has a legally binding NSA only with respect to states that have joined the Treaty of Tlatelolco, which covers Latin America and the Caribbean. This NSA is narrower than the one announced in the NPR, and the United States has not announced plans to amend its protocol. To do so, the United States would have to re-seek Senate advice and consent. The United States has also signed, and in May 2011 submitted for ratification, protocols to the South Pacific Nuclear Free Zone and the African Nuclear Weapon Free Zone. The NSA contained in the NPR is part of the U.S. statements that would accompany the proposed ratification. Provided the U.S. Senate agrees, therefore, the NPR NSA would become legally binding in relation to states party to these two treaties. Finally, the United States has pledged its intention to work with the signatories of the South-East Asian and Central Asian nuclear-weapon-free zones with a view to making protocol ratification possible. The working assumption in the U.S. Government is that, if such ratification does take place, it would propose to the Senate that the new NPR NSA should be used.

Third, **in the case of countries not covered by this new negative security assurance, the NPR made clear that "there remains a narrow range of contingencies in which U.S. nuclear weapons may still play a role in deterring a conventional or CBW** [**chemical biological weapons**] **attack against the United States or its Allies and partners."** As a result, it concluded, the United States is "not prepared at the present time to adopt a universal policy that deterring nuclear attack is the sole purpose of nuclear weapons, but will work to establish conditions under which such a policy can be safely adopted."

The new U.S. declaratory policy marks a significant change to the previous declaratory policy of "calculated ambiguity," in which the possibility of nuclear weapons playing a role in deterring any form of aggression was left deliberately open. It still leaves U.S. options open, however, in relation to other nuclear weapon states and states not party to the NPT, together with states (such as Iran) that do not have nuclear weapons but are believed to be in breach of their nuclear nonproliferation obligations.

Given these exemptions, the extent of the shift in declaratory policy as a result of this new NSA assurance should not be overstated. Nevertheless, it has evoked some controversy within the United States. In U.S. Senate Hearings on the NPR, for example, Senator John McCain pointed out that this means that "we are telling the American people, now, that if there's a chemical or biological attack on the United States, and it is of devastating consequences, we will rule out the option of using a nuclear weapon, even though that may be the most effective course of action, if that country is in compliance…with the NPT."[9]

Precisely because this represents a substantive shift in declaratory policy, however, the U.S. Government has commended the NPR on this point, arguing that it

9. *Nuclear Posture Review: Hearing before the Committee on Armed Services,* 111th Cong. 27, (April 22, 2010) (statement of John McCain, U.S. Senator).

provides welcome reassurance to non–nuclear-weapons states that they "are not targets of the U.S. to use nuclear weapons" and that "the bar for using nuclear weapons is extremely high."[10] A recent study of foreign reactions suggests that the United States might have had some success in this regard, not least because the new NSAs are seen in the context of President Obama's 2009 Prague speech on nuclear disarmament.[11]

## The U.K. Strategic Defense and Security Review and Declaratory Policy

Shortly after its election in May 2010, the U.K. Government announced a review of its own nuclear declaratory policy. This announcement, timed to coincide with the NPT Review Conference, was designed to show that the new Coalition Government remained committed to playing an active role in international nuclear disarmament efforts.[12] The results of the U.K. declaratory policy review were announced in October 2010, as part of the government's Strategic Defense and Security Review.[13]

The U.K. review was informed by the results of the United States' own NPR. The most important change announced was that, like the United States, the government was "now able to give an assurance that the UK will not use or threaten to use nuclear weapons against non-nuclear weapon states parties to the NPT. In giving this assurance, we emphasise the need for universal adherence to and compliance with the NPT, and note that this assurance would not apply to any state in material breach of those non-proliferation obligations."[14]

The United Kingdom reserved the right to review this assurance "if the future threat, development and proliferation" of "other weapons of mass destruction, for example chemical and biological" made it necessary. This reservation is broader than that provided by the United States, which refers only to new developments in biological weapons as a possible trigger for future NSA review.

The United Kingdom was also more circumspect in relation to the other aspects of declaratory policy covered in the U.S. NPR. There was no declaration that deterrence of nuclear attack was the "fundamental purpose" of the U.K. nuclear

10. Ibid., 28 (statement of Ellen Tauscher, U.S. Under Secretary of State for Arms Control and International Security).

11. Scott D. Sagan and Jane Vaynman, "Reviewing the Nuclear Posture Review," *The Nonproliferation Review* 18(1), 17–37.

12. The declaratory policy review was announced alongside the first declaration of the total size of the U.K. nuclear stockpile (no more than 225 warheads).

13. HM Government, *Securing Britain in an Age of Uncertainty: The Strategic Defence and Security Review*, The Stationery Office, October 2010, 37–9. The Review also announced a further reduction in the U.K. nuclear stockpile, to no more than 180 warheads.

14. Ibid., 39.

force, no commitment to reducing the role of U.K. nuclear forces in deterring nonnuclear attack, and no commitment to work toward making the prevention of nuclear attack the "sole purpose" of those forces.

This more cautious declaratory policy can be explained, in large part, because of the distinct role that nuclear weapons play in U.K. security policy. Although its nuclear weapons are formally assigned to NATO, the primary purpose of the U.K. nuclear force is to safeguard the United Kingdom's vital security interests in circumstances of "supreme national interest" where the United States has chosen not to make its own nuclear forces available for the United Kingdom's protection. Insofar as it has an operational value, the U.K. nuclear force therefore exists primarily to provide a hedge against the possibility that U.S. extended deterrence fails to deliver. In such a scenario, however, the United Kingdom may also find itself unable to call upon U.S. conventional forces for its defense, and without conventional forces of its own that can credibly deter potential opponents. The United States is able to move toward a "sole purpose" policy because of its ability to afford credible plans for using its conventional forces to deter, and if necessary respond to, chemical and biological attack. If the United Kingdom were ever to stand alone, however, it may be concerned that it could not rely on being able to replicate this capability. Any agreed NATO declaratory policy will have to take account of these concerns.

## SHOULD NATO'S DECLARATORY POLICY BE BROUGHT INTO LINE WITH U.S. AND U.K. POLICY?

Now that both the states that assign nuclear weapons to NATO have adjusted their declaratory policies, there would appear to be a good *prima facie* case for NATO to do the same. Indeed, it might appear incongruous if it did not. After all, NATO has always had a declaratory policy, and this policy has played an important role in communicating—both internally and externally—how nuclear weapons contribute to collective deterrence and defense. It might, moreover, cast doubt on the seriousness of the new U.S. declaratory policy if its main tenets were to be contradicted by the policy of an alliance in which it is the leading member.

Yet NATO is not a state, and possesses no nuclear weapons of its own. It cannot provide assurances to other states on how the nuclear weapons of its member states might be used, either on a legally or politically binding basis. What it can do, and what it has done in the past, is produce a declaratory policy that explains the role that nuclear weapons assigned to the Alliance play within NATO's overall deterrence and defense posture.

The very process of developing an agreed declaratory policy—as in the case of flexible response in the 1960s—might itself be seen as an important form of burden and responsibility sharing. With the prospect of the physical presence of nuclear weapons on European soil continuing to diminish, and perhaps ending

altogether within a decade, such collective deliberation on nuclear policy, together with the command, control, and training activities that could be associated with it, would become even more important in this regard. Without such activities, statements that NATO is a "nuclear alliance" could soon amount to little more than an acknowledgment that some of its member states possess nuclear weapons, and that they are available for collective defense.

Whether it proves possible to reach a consensus on declaratory policy in the DDPR will depend, in part, on the attitude of France. Unlike NATO's other two nuclear weapon states, France remains unconvinced of the merits of moving away from a policy of deliberate ambiguity in declaratory policy, even to the limited degree announced by the United States and the United Kingdom. But it may be satisfied by an assurance that the results of the DDPR will only apply to forces assigned to NATO, and therefore only to those of the United Kingdom and some of those of the United States. Some other NATO member states, such as Germany, may be concerned that a new declaratory policy does not go far enough in de-emphasizing the role of nuclear weapons. Their support may depend on whether they believe that NATO has moved at least some way in this desired direction.

Whether it proves possible to reach a consensus on declaratory policy in the DDPR will depend, in part, on the attitude of France.

One of the most widely supported arguments in favor of a new NATO declaratory policy is that it would help bring stated NATO policy more into line with the reality that there are very limited circumstances in which NATO member states now believe that they would have to contemplate their use in defense of NATO's vital interests. By saying so more clearly, it is argued, NATO might help to discharge the NPT Article VI responsibilities of its member states (both nuclear and nonnuclear).

It is possible to construct long-term scenarios in which U.S. power weakens dramatically compared to rising powers, and new technologies alter the nonnuclear balance to NATO's disadvantage. In an extreme case, the NATO alliance could collapse, leaving Europe—or indeed individual European states—to make their own security arrangements in the face of these rising threats. For the purposes of developing a NATO declaratory policy, however, it is reasonable to assume that NATO continues to exist, and that member states continue to be committed to their mutual security guarantees.

Some additional reassurance could also be provided by stating that, whatever changes in declaratory policy are agreed in the DDPR, they will be subject to periodic review as strategic circumstances change. NATO declaratory policy changed in the 1960s in response to the growth in Soviet nuclear capability, and changed again when the Soviet threat disappeared in the early 1990s. It could change again if major new strategic threats emerge in future. Rather than being seen as a set of eternal principles, therefore, declaratory policy should be seen as part of the intellectual architecture that allows NATO to respond prudently to likely risks as best it can, helping to shape its operational planning as well as communicate its policies to other interested parties and states. Such a declaratory policy would,

like the U.S. NPR, allow for the possibility that benign developments might allow NATO to move further toward reducing the roles of nuclear weapons, for example through future adoption of a "sole purpose" or "No First Use" policy. But it could also allow for the possibility that more malign developments—for example, in relation to new biological weapons—might lead it to rethink its restrictions on the circumstances in which a threat to use nuclear weapons might have a role to play.

NATO could endorse a policy of not using, or threatening to use, nuclear weapons against non–nuclear-weapon states party to the NPT, provided that they are not in material breach of their nuclear nonproliferation obligations.

## POSSIBLE ELEMENTS OF A NEW NATO DECLARATORY POLICY

If the DDPR were to adopt a new declaratory policy, drawing primarily on the outcomes of the U.S. NPR, it might include one or both of the following elements:

### Reassuring Nonaligned Non–Nuclear-Weapon States

First, NATO could endorse a policy of not using, or threatening to use, nuclear weapons against non–nuclear-weapon states party to the NPT, provided that they are not in material breach of their nuclear nonproliferation obligations. Such a step was recommended by the 2010 Albright Group of Experts.[15] Mirroring the United States' own NPR, it could be accompanied by a statement that noted that member states reserved the right to suspend this commitment in the event of substantial new developments in the biological weapon capabilities of the aggressor states in question.

A new declaratory policy along these lines would be in keeping with the wording in the 2010 Strategic Concept, which states that "the circumstances in which any use of nuclear weapons might have to be contemplated are extremely remote." It would further underline that NATO no longer supports the policy of "deliberate ambiguity," first adopted during the Cold War, and still in place as late as the 1999 Strategic Concept.

Current strategic circumstances are relatively favorable for adopting such a policy. Potential opponents about whom NATO member states are most concerned—such as North Korea, Iran and (potentially) Pakistan—almost all either have nuclear weapons or have active nuclear weapons programs. It is hard to imagine that removing the threat of nuclear use against less well-armed states of concern, such as Libya, Venezuela, or Zimbabwe, will undermine deterrence, because such a threat is already widely thought to be incredible.

It is possible that a new nonnuclear aggressor state might emerge in the future, possessing biological capabilities so powerful as to call NATO's policy of nuclear abstinence into question. The emergence of such a state would constitute such a

15. *NATO 2020: Assured Security, Dynamic Engagement,* NATO Public Diplomacy Division, May 2010, p. 43.

major shift in the strategic environment as to justify revising NATO's deterrence and defense posture in its own right. In the absence of such a threat, however, there is some value in providing additional assurance to nonnuclear states in compliance with the NPT that NATO will not use nuclear weapons against them. Such an assurance might be largely redundant for NATO's Allies and partners. There remain, however, a significant number of other states for whom, given the recent history of U.S. and European interventions and their own colonial past, conflict with NATO states remains a real concern. Such states will not take U.S. or NATO statements at face value. But they may welcome negative security assurances as a further confirmation of the growing strength of the international taboo against nuclear use.

There potentially could be some questions regarding the process through which NATO judges whether a state is in "material breach" of its NPT obligations. Some NATO member states might argue that the appropriate adjudicator should be an international organization, such as the United Nations Security Council (UNSC) or the International Atomic Energy Agency (IAEA). For the purposes of NATO declaratory policy, however, the best answer to this question probably will be that NATO will use the same procedures as are used for authorizing the actual use of nuclear weapons. This means that the decision to use any nuclear weapons will remain a matter for the states that possess these weapons, but that, if time allows, they will seek to consult NATO Allies as fully as possible. In this arrangement, member states will reach their own judgments on the compliance state of potential aggressors, and can draw on UNSC and IAEA determinations in doing so. But, as in current arrangements, no member state will have veto power over the use of nuclear weapons by another member state.

In practice, a determination as to whether any particular state is not in compliance with the NPT will often (albeit not always) take place long before all-out conflict became a real possibility. In the case of Iran, for example, a long and troubled history of IAEA inspections, together with the relevant decisions of the UNSC, has progressively established the case that it is in material breach of its NPT nonproliferation obligations. If NATO were to enter into an armed crisis with Iran in the coming period, therefore, its noncompliant status will already be well-established.

There are dangers in this approach. It might heighten the perception that designating a particular state as non-NPT-compliant is tantamount to putting that state on a nuclear target list and thereby providing an additional incentive and public rationale for that state to continue with noncompliant activity, even if (as in the case of Iran at present) noncompliance does not involve any immediate threats to NATO territory. In such cases, the main rationale for withdrawing a nonuse security assurance is related to arms control (a desire to deter noncompliance activity) rather than to operational requirements (the change in strategic circumstances as a result of the actual acquisition of useable nuclear weapons). For, it is argued, such an arrangement provides an additional incentive for states

not in compliance with their nonproliferation commitments (such as Iran) to do more to meet their commitments.

## Moving toward Sole Purpose

Second, NATO could state that it now believes that the fundamental—or central or essential—purpose of its nuclear weapons is to deter the use of nuclear weapons by others. It could also state that it will aim to develop its nonnuclear capabilities so that, in the future, the sole purpose of its nuclear weapons would be to deter a nuclear attack.

NATO could state that it now believes that the fundamental—or central or essential—purpose of its nuclear weapons is to deter the use of nuclear weapons by others.

Such a policy would be consistent with the statement in the 2010 Strategic Concept that NATO has "dramatically reduced the number of nuclear weapons stationed in Europe and our reliance on nuclear weapons in NATO strategy," as well as its commitment "to create the conditions for further reductions in the future." It would also mirror parallel statements on "fundamental purpose" and "sole purpose" in the U.S. NPR.

A new NATO declaratory policy along these lines would help provide a bridge between the nuclear, missile defense and conventional elements of the DDPR by making clear that further moves toward a "sole purpose" posture might depend in part on further modernization of these elements of NATO's deterrence and defense posture. At the same time, it could also make clear that, in current circumstances, there remains a narrow range of contingencies in which first use of nuclear weapons against nuclear-armed states would not be ruled out.

Such a move toward a "sole purpose" declaratory policy would, arguably, do no more than accept the reality of what has actually happened to the role of NATO nuclear weapons since the end of the Cold War. During the last 20 years, no NATO member state has come close to considering using nuclear weapons, far less the first use of nuclear weapons. The last decade has illustrated the limitations of U.S. conventional military power, especially against nonstate actors. Nevertheless, given the extent of conventional military capabilities that the United States could bring to bear (given sufficient time and political will), it is hard to imagine circumstances in which the United States would be prepared instead to resort to nuclear use, not least because of the wider reputational costs that would be involved in being the first power to do so since 1945.

Even second use of nuclear weapons against an opponent who could be rapidly defeated by conventional means is becoming less credible, given the massive civilian casualties that such retaliation would likely cause. The U.S. NPR acknowledged that "the prospect of a devastating conventional military response" is likely to provide the most effective, and most credible, deterrent to future use of chemical and biological weapons by nonnuclear states. But such a prospect could also, in many scenarios, be the most credible response to a CBW attack by a nuclear-armed state, or indeed a nuclear attack from such a state. The main exception to this rule, in circumstances of massive Alliance conventional superiority, would

be a scenario in which only nuclear weapons can provide a prompt counter-force option against enemy WMD forces, including forces that might be used in a follow-on to an initial nuclear strike. It remains to be seen whether planned improvements in U.S. conventional strike and missile defense capabilities can further reduce (although probably not end entirely) the operational advantages of resorting to nuclear use in these circumstances.

## CONCLUSION

Both the United States and the United Kingdom announced new declaratory policies in 2010, and together these policies "provide the declaratory policy context for the Alliance (France not being a member of NATO's nuclear structures)." It can be argued, therefore, that a separate NATO policy "might provide little in the way of additional reassurance" and could carry the risk that "given the inevitable challenges of agreeing equally strong language across 28 countries…it might weaken the message."[16]

Since its early days, however, NATO has always had a nuclear declaratory policy, which has evolved over time as strategic circumstances and national policies have altered. It would not be appropriate for NATO, as an international organization, to issue a legally binding NSA. But, in the wake of the changes announced in the U.S. NPR, it may now be appropriate for NATO to look again at its nuclear declaratory policy, and consider whether to bring this more into line with that of its most important nuclear guarantor. This could be done through the mechanism of a new Declaratory Statement, issued by the Secretary-General on behalf of the Alliance, or as part of any public output from the DDPR.

Were NATO to adopt a declaratory policy that was clearly less restrictive than that of the United States, it would raise questions as to whether the United States' own declaratory policy had been diluted. On the other hand, if NATO adopted a more restrictive declaratory policy than the United States, for example by endorsing an unqualified "sole purpose" policy, it might be seen as creating a distinction between U.S. policies appropriate to the Euro-Atlantic area and those appropriate for deterring aggression in other parts of the world, such as East Asia. It is hard to see the United States being prepared to accept either option. Given this, a consensus within the Alliance is perhaps most likely to develop around the adoption of a nuclear declaratory policy that is close in spirit, if not in precise formulation, to the one adopted by the United States in the 2010 Nuclear Posture Review.

16. Letter from Lord Strathclyde, Leader of the House of Lords, to Lord Browne of Ladyton, 25 November 2010. Available on http://toplevelgroup.files.wordpress.com/2010/12/letter.pdf. Last accessed 26 April 2011.

CHAPTER THREE

# The Security of NATO Nuclear Weapons

## *Issues and Implications*

MAJOR GENERAL ROBERTUS C.N. REMKES (USAF, RET.)

At the Lisbon Summit in November 2010, NATO confirmed that as long as there are nuclear weapons in the world, NATO will remain a nuclear Alliance, and that deterrence based on an appropriate mix of nuclear and conventional capabilities remains a core element of NATO's overall strategy.

NATO is now reviewing its nuclear posture as part of a broader Deterrence and Defense Posture Review (DDPR) tasked at Lisbon. A key question for that review should be: What are the security concerns and related risks associated with NATO's existing nuclear posture? Of course, this begs the following question: How can these concerns and risks be reduced?

## CURRENT U.S./NATO NUCLEAR POSTURE AND RECENT NUCLEAR SECURITY CONCERNS

Estimates from various nongovernmental sources indicate that the United States currently deploys approximately 150–250 air-delivered nuclear weapons (B-61 gravity bombs) that are deliverable by NATO aircraft (F-15Es, F-16s, and Tornados) at a handful of storage sites in Europe.[1]

A combined force of U.S. and European NATO personnel assigned to the storage sites retains the custody and provides security of these nuclear weapons. The B-61 weapons are stored in underground hardened storage bunkers at undisclosed locations around each storage site. Custody, repair, and improvements to the weapons and the storage bunkers are the responsibility of the U.S. Air Force.

1. Malcolm Chalmers, *Occasional Paper, March 2010: NATO's Tactical Nuclear Dilemma,* (Washington, DC: Royal United Services Institute, March 2010), 1–2.

# CHAPTER THREE: **KEY FINDINGS**

- NATO is now reviewing its nuclear posture as part of a broader Deterrence and Defense Posture Review (DDPR) tasked at the November 2010 Lisbon Summit. Several core issues surrounding non-strategic nuclear weapons (NSNW) now deployed in Europe are expected to receive prominent attention, including nuclear sharing, reassurance of Allies, NATO's relationship with Russia, and the appropriate mix of nuclear and conventional capabilities required for deterrence. The security of NSNW is central to each of these core issues, and thus must be treated as a core issue in the DDPR process.

- The risk of a terrorist attack against a European NATO base with U.S. nuclear weapons is real, and the political and security consequences of any infiltration of the site would be potentially severe for the Alliance, whether or not the attackers gained access to a nuclear weapon. The security imperative should therefore be at the forefront of NATO's current nuclear posture, and also a guiding principal for further changes to that posture.

- Within the past three years, the U.S. Air Force has publicly expressed concerns regarding the security of U.S. nuclear weapons—B-61 bombs—currently deployed in Europe.

- Security concerns exist against the global backdrop of an increasing threat from terrorism, and more specifically, a planned attack against a U.S. Air Force facility. Based on publicly available information, it is reasonable to surmise that the threat from a terrorist attempting to damage, destroy, or steal a nuclear weapon from a NATO nuclear weapon storage site is real; and that site security needs to be under constant review.

- The security of U.S. nuclear weapons deployed in Europe must remain the highest priority for the United States and all NATO member states. Any NATO nation that possesses or stores nuclear weapons on its territory must be committed to responsible stewardship. Indeed, if security at NATO nuclear storage sites has not been or cannot be corrected quickly and completely, consideration should be given to immediately removing all remaining B-61s from Europe as an urgent measure to improve NATO security.

- Even with enhanced site security, the continuing terrorist threat, the inherent security risks in storing B-61s in Europe, and the questionable military utility of the B-61 in a NATO context demands that alternatives to NATO's current nuclear posture should be given high priority—alternatives that are more credible and secure as a deterrent and consistent with NATO remaining a nuclear alliance.

- NATO should also seek to make security with respect to NSNW the highest priority with Russia, and move without delay to adopt a series of reciprocal steps that will improve the security of nuclear weapons now. As stated recently by former U.S. Senator Sam Nunn, "As long as U.S. tactical nuclear weapons remain deployed in Europe, all of NATO has a stake in their security; all of NATO also has a stake in the security of Russian tactical nuclear arms; and Russia has an equal stake in the security of NATO weapons as well as their own."

Perimeter security (fences, monitors, and motion detectors) and access to the storage sites is the responsibility of the host nation. Training, exercises, inspections, maintenance operations, and related activities are coordinated between the United States and host nation forces at each site.

There have been several security concerns raised regarding U.S. nuclear weapons deployed in Europe. In the wake of two nuclear security lapses in the United States when six nuclear weapons were flown from North Dakota to Louisiana without authorization and four Intercontinental Ballistic Missiles components were mistakenly shipped to Taiwan, the Chief of Staff of the U.S. Air Force commissioned a Blue Ribbon Security Review of all Air Force nuclear forces. The 30-member review team conducted an "enterprise-wide" investigation of nuclear operations in the United States and Europe. In a public report, the review concluded that most sites in Europe "require additional resources to meet [DoD] standards." The report also found "inconsistencies in personnel facilities and equipment provided to the security mission by the host nation." In particular, the report noted that areas in need of repair at several of the sites included "support buildings, fencing, lighting and security systems." The report recommended that U.S. nuclear assets in Europe be consolidated.[2]

NATO has not been clear whether [security] concerns have been addressed in the near term, or whether NATO nations have committed to the estimated hundreds of million of dollars required for improvements . . .

NATO has not been clear whether and how these concerns have been addressed in the near term, or whether NATO nations have committed to the estimated hundreds of millions of dollars required for improvements in nuclear storage facilities. The U.S. Air Force has developed an implementation plan for security improvements at the storage sites and is executing the plan in 2011 (a precise description of the plan and its elements are classified).

In June 2008, following the Blue Ribbon Review, Secretary of Defense Robert M. Gates commissioned former Secretary of Defense James R. Schlesinger and eight distinguished former and retired members of government and the military to address the nuclear mission. Phase I of this effort focused on the Air Force's nuclear mission and Phase II addressed the nuclear enterprise across the DoD. The Task Force was commissioned to "recommend improvements necessary to ensure that the highest levels of accountability and control are maintained in the stewardship and operation of nuclear weapons, delivery vehicles, and sensitive components." The Task Force was also charged with "recommending measures both to enhance and sustain public confidence in the Defense Department's ability to handle its nuclear assets safely and to foster a clear international understanding of the continuing role and credibility of the U.S. nuclear deterrent."[3]

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2. Hans Kristensen, *Most Nuclear Weapon Sites in Europe Do Not Meet US Security Requirements* USAF Report, (FAS Strategic Security Blog, June 19, 2009), http://www.fas.org/blog/ssp/2008/06/usaf-report.

3. *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management—Phase I: The Air Force's Nuclear Mission,* September 2008, 13–14, http://www.defense.gov/pubs/phase_i_report_sept_10.pdf.

The Task Force visited several command headquarters in the United States and Europe and operational nuclear facilities in the United States, but did not visit operational nuclear sites in Europe.

The Task Force prepared a formal report for Secretary Gates at the end of each phase of the investigation. Although the two reports addressed concerns regarding the organization, personnel management, inspections, inventory control, storage, and security of all weapons in the DoD-wide nuclear enterprise, neither report addressed shortcomings at the nuclear storage sites in Europe.

In the Phase II report, in the discussion subtitled "Deterring Terrorists," the report acknowledged that the acquisition by a terrorist of a WMD capability "is a very high priority—in Osama bin Laden's words: 'a sacred duty.'"[4] Yet, the report offers little discussion and no acknowledgment of the security lapses at NATO's nuclear storage sites. Finally, the two reports offer a combined total of 115 recommendations; however, not a single recommendation was offered to address security problems at the storage sites in Europe.

In the section titled "The Special Case of NATO," the report cites five "benefits" of deploying B-61s in Europe: (1) they provide cohesion within the Alliance and assure U.S. commitment to NATO security; (2) they serve as an "anti-proliferation" tool, preventing Allies from building their own nuclear capability; (3) they require all members of NATO to share in the enterprise while all members benefit from the weapons' presence; (4) they are spread out across Europe and thus, less vulnerable; and (5) NATO Dual-Capable Aircraft contribute to the deterrence mission and increase the value of the weapons.[5] Each of these points should be subject to further scrutiny in the DDPR; in particular, the perceived benefits of locating nuclear weapons at several locations throughout Europe to make them less vulnerable to a Cold War-era preemptive attack must be viewed in a broader context: that is, in today's threat environment, locating nuclear weapons at several locations throughout Europe is precisely what makes them more vulnerable to a terrorist attack.

In today's threat environment, locating nuclear weapons at several locations throughout Europe is precisely what makes them more vulnerable to a terrorist attack.

## AN IMAGINATIVE AND DEADLY ADVERSARY

Several publicly documented incidents associated with the security of NATO bases have rightly led to questions regarding the potential threat of a terrorist attack on NATO nuclear storage sites. A brief review of several terror plots and

4. *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management—Phase II: Review of the DoD Nuclear Mission,* December 2008, 10, http://www.defense.gov/pubs/pdfs/PhaseIIReportFinal.pdf.

5. *Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management—Phase II: Review of the DoD Nuclear Mission,* December 2008, page 14, http://www.defense.gov/pubs/pdfs/PhaseIIReportFinal.pdf.

successful attacks over the past two decades underscores the terrorist threat, and may provide insights as to the "who, what, when, where, and how" of a future terror plot.

Before September 11, 2001, there were several terror plots and successful attacks that illuminate the new threat. The first attack on the World Trade Center (WTC) occurred in February 1993. This attack, where a truck bomb was driven into the parking garage of Tower One, was designed to take Tower One down and have it crash into Tower Two, killing thousands. The template for this attack came from the barracks bombings in Beirut in 1983 and plans for an attack on New York skyscrapers that were revealed in 1990 after an FBI raid of the New Jersey home of El Sayyid Nosair, the man ultimately convicted in connection with the WTC bombing and the murder of Rabbi Meir Kahane. The Beirut bombings (two separate barracks bombings just two minutes apart) also served as a template for the U.S. Embassy bombings in Nairobi, Kenya, and Dar es Salaam, Tanzania (two separate embassy bombings just 10 minutes apart). The attack on 9-11 followed this same pattern.

. . . we are facing adversaries that are clever, committed, and not deterred by failure.

The 1994 hijacking of Air France Flight 8969 (by the Armed Islamic Group, or GIA) also served as a template for the 9-11 attack in that the airliner in this hijacking was intended to be flown over the Eiffel Tower and then to explode, killing hundreds on the ground in Paris. The Bojinka Plot of 1995 provided even more insight into the planning for the 9-11 attack and the 2006 transatlantic airline plot that followed. The Bojinka plot was designed to bring down a dozen airliners returning to the United States from the Far East over a period of a few hours after bombs placed on board these aircraft were detonated. This plot required suicidal terrorists on board for the plan to succeed.

Between March and September 2001, several separate intelligence warnings from overseas were passed to U.S. intelligence agencies regarding a "massive strike involving airplanes." These included that 20 Al Qaeda jihadists were in the United States, that four of them were receiving flight training, and that a massive attack was imminent.[6] In fact, the President's Daily Brief of August 6, 2001, prepared by the CIA, included this prescient statement: "Although bin Laden has not succeeded, his attacks against the U.S. Embassies in Kenya and Tanzania in 1998 demonstrates that he prepares operations years in advance and is not deterred by setbacks."

Taken together, these examples underscore that we are facing adversaries that are clever, committed, and not deterred by failure. Moreover, they have a track record of planning and conducting high profile attacks with a high prospective payoff. It is certain that these adversaries will continue planning these attacks despite (or even emboldened by) Osama bin Laden's death. Although many plots

6. Carl Cameron, "Clues Alerted White House to Potential Attacks," *Fox News* (May 17, 2002).

have been foiled before their execution, the most common methods to combating terror have been largely reactive and not proactive; an attack takes place and is followed by actions to prevent a similar attack from happening again.

## CONNECTING THE DOTS: TERRORIST INTEREST IN NATO NUCLEAR STORAGE SITES

In summer and early fall 2001, U.S. intelligence monitored calls between an Al Qaeda hub in Yemen and an operative in Europe. These communications revealed several operatives were involved in a plot to attack the U.S. Embassy in Paris. Two days after 9-11, Nizar Trabelsi was apprehended and questioned regarding this plot. Trabelsi was eventually linked to two "shoe bombers," Richard Reid and Saajit Badat. Reid's suicide attack on December 22, 2001, on American Airlines Flight 63 was foiled and he was arrested, tried, and sentenced to life in a federal prison in Colorado; Badat failed to go through with his attack and was arrested in November 2003 and subsequently sentenced to 13 years in jail in England.

During Trabelsi's questioning and subsequent trial, he revealed that he was to be the first suicide bomber in a plot to attack a U.S. Air Force dining facility at an air base in Europe. In May 2003, Trabelsi revealed the details of the bomb plot at the air base. Trabelsi told the court that he was sent by Osama bin Laden to conduct a truck-bomb attack at the base (Trabelsi met with bin Laden during a trip to Afghanistan in 2001). Trabelsi also revealed that he was helped by an American service member stationed at the base who sold him pictures of the facility. It was also publicly asserted during the trial that the air base housed nuclear weapons. Trabelsi was convicted on September 30, 2003, and sentenced to 10 years in prison.

In 2009, Naima Trabelsi, Trabelsi's wife, claimed on an Islamic web-based TV broadcast that her husband "had plotted to carry out an attack on the U.S. military base after he returned from Afghanistan to destroy the weapons arsenal located on the base."[7]

For exhibiting such great interest in the air base, it can be hypothesized, if not assumed, that the weapons of interest to Al Qaeda were the B-61 nuclear bombs publicly asserted during the Trabelsi trial to be stored there. Thus in this instance, one could plausibly connect Trabelsi, who was aided by an American service member, to Osama bin Laden, to other Al Qaeda operatives, to publicly available information on the supposed locations of the weapons, to weaknesses in security at the sites publicly disclosed by the U.S. Air Force, and ultimately to an attack against the weapons. Moreover, even if in this case all the dots did

. . . it can be hypothesized, if not assumed, that the weapons of interest to Al Qaeda were the B-61 nuclear bombs . . .

7. CBS News Investigates, *Naima Trabelsi Says Her Husband Sought to Destroy Weapons Arsenal at U.S. Base in Belgium*, (March 18, 2009), http://www.cbsnews.com/8301-502684_162-4877845-502684.html.

not connect and there were no nuclear weapons stored at the air base, it should underscore that there are credible scenarios relating to terrorism and NSNW in Europe that require the highest possible standards of security at all NATO nuclear storage sites.

Security arrangements at NATO bases have been challenged on several occasions since 9-11. The most significant recent event occurred in January 2010 when a handful of nuclear activists breached the perimeter fence at an air base. They were arrested after nearly an hour on the base and had their cameras confiscated; nonetheless, they had removed the memory cards and smuggled them out of the base. These videos and photos contained on the memory cards are available on line on YouTube and at the Federation of American Scientists (FAS) website.

Indeed, information on NATO bases in Europe is available on several websites, including detailed satellite images.[8] We must then presume that terrorists already have access to plenty of information to plan and conduct an attack at NATO bases in Europe—and with their recent history of high profile, high consequence attacks, may already be planning to do so.

. . . there are credible scenarios relating to terrorism and NSNW in Europe that require the highest possible standards of security at all NATO nuclear storage sites.

## SCENARIOS FOR A TERRORIST ATTACK ON A NUCLEAR STORAGE SITE

For the scenarios provided below, terrorists are presumed to be located over an underground storage vault before they are detected.

- **THEFT OF A NUCLEAR WEAPON.** The most serious event imaginable would be the theft of one or more nuclear weapons. Although this is not likely given safeguards built into the vault system making the timely theft of a B-61 extremely difficult, it is still possible to imagine a well-armed and well-informed team eventually gaining access to a bomb inside the vault. This team would have to fight off defenders for a considerable time and their ability to get away with the bomb is negligible, but still possible.

- **DESTRUCTION OF A NUCLEAR WEAPON.** Next down the list of serious events would be the destruction of one or more weapons within the vault; this type of attack would trigger a radiation event. This event is more likely than the theft of a weapon and is easier to imagine. In this scenario, a well-armed team would access the top of the vault and set off an explosive charge on the lid of the vault. The right-size shaped charge could open a large hole in the lid of the vault and damage the B-61s within. The time of access over the vault required for such an attack can be measured in just a few seconds versus many minutes.

8. FAS Strategic Security Blog, *Kleine Brogel Nukes: Not There, Over Here!*, http://www.fas.org/blog/ssp/2010/02/kleinebrogel2.php.

- **DAMAGE TO A NUCLEAR WEAPON.** Next down the list but no less serious would be damage to a weapon with no radiation event. The problem is that it would take some time to determine that no radiation has leaked from a damaged weapon; moreover, it would take an additional time to convince the nearby public that there was no health risk.
- **DAMAGE TO FACILITIES; NO WEAPONS COMPROMISED.** This scenario might include damage to a vault, a hardened aircraft shelter, or any of the facilities on a nuclear storage site that result in no damage to any nuclear weapon.
- **FOILED OR THWARTED ATTACK.** Finally, this scenario has already occurred: the attack planned by Nizar Trabelsi that was thwarted by his arrest in September 2001.

## THE CONSEQUENCES OF AN ATTACK

It should be assumed that any attempt to attack a nuclear site in Europe storing U.S. B-61 bombs will have operational and political consequences, whether or not terrorists were to gain access to a nuclear bomb. For example, the operational consequences of an event involving the actual theft of a nuclear weapon would likely include the immediate withdrawal of all B-61s stored in Europe. One could also surmise that the political consequences might go so far as the outright rejection of U.S. military forces—not just nuclear weapons—in some or all NATO countries.

The consequences of an event involving the destruction of or damage to a nuclear weapon most immediately would be cordoning a nuclear radiation leak and consequence management by local authorities; most countries in Europe are not equipped to address this type of disaster and it would take hours, or perhaps days, to handle such an event. Here too, the political consequences could lead to a partial or full withdrawal of nuclear weapons from Europe.

Even in a less severe event involving damage to facilities with no compromise of a weapon, political pressure could be brought to bear against the continued storage of weapons in Europe, leading to a partial or full withdrawal.

## SERIOUS IMPLICATIONS FOR NATO

The combination of the known terrorist threat and publicly acknowledged security challenges require the United States and NATO to be more imaginative and proactive in preventing an attack on nuclear storage sites. If such an attack can be imagined, it must be addressed. As an immediate issue, the security of nuclear weapons deployed in Europe should be and must remain the highest priority for NATO. Indeed, if security at NATO nuclear storage sites has not been or cannot

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. . . if security at NATO nuclear storage sites has not been or cannot be corrected quickly and completely, consideration should be given to pulling all remaining B-61s from Europe . . .

be corrected quickly and completely, consideration should be given to pulling all remaining B-61s from Europe as an urgent measure to improve NATO security.

NATO should also seek to make the issue of security with respect to NSNW the highest priority with Russia, and move without delay to adopt a series of reciprocal steps that will improve the security of nuclear weapons now in the context of enhancing Euro-Atlantic security. This is the argument posed by former Senator Sam Nunn, co-chairman of the Nuclear Threat Initiative, in a recent article published in the *International Herald Tribune*.[9] Nunn argues for Russia to become a partner in combating the threat of a terrorist attack on nuclear weapons in Europe and Russia. Russia is as vulnerable to terrorism as NATO is, perhaps even more so because of the size and dispersal of its nuclear arsenal and the demonstrated intent of its terrorist adversaries. Nunn offers several steps that can be taken by NATO and Russia together and serve both sides equally:

- A threat assessment focused on how terrorists might seek to penetrate sites where tactical nuclear weapons are located and gain access to a nuclear bomb;
- A security assessment that identifies vulnerabilities and build improvements to nuclear storage;
- A combined recovery exercise where NATO and Russian forces work together to recover stolen nuclear material or weapons;
- Site visits to NATO and Russian nuclear storage sites to encourage security and build confidence;
- A shared commitment to separate nuclear weapons from operational units; and
- A declaration of the exact total number of tactical nuclear weapons located in NATO and Russia.

Both Russia and NATO face the threat of terrorism on their soil; combining forces against this dangerous and persistent threat makes great sense.

## CONCLUSION

As NATO proceeds with its DDPR in the months ahead, it must give a serious and realistic assessment of the benefits derived from maintaining its present nuclear posture and the potential costs, including a successful terrorist attack at a NATO nuclear site. The B-61 bomb serves more as a "symbol" of deterrence and reassurance rather than an instrument of such. Given the demonstrated terrorist threat

9. Sam Nunn, "NATO, Nuclear Security and the Terrorist Threat," *The International Herald Tribune*, November 16, 2010.

and the inherent and possibly unavoidable security risks in maintaining the deployment of B-61s in Europe, it would seem that alternatives to NATO's current nuclear posture—alternatives that are more credible as a deterrent and consistent with NATO remaining a nuclear alliance—should be given high priority.

CHAPTER FOUR

# Options for NATO Nuclear Sharing Arrangements

DR. KARL-HEINZ KAMP AND
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## NATO'S EXTENDED DETERRENCE AND NUCLEAR SHARING

Since 1991, debates about NATO's nuclear weapons[1] in Europe have been largely confined to small expert circles. The emergence of nongovernmental and governmental support for working toward the vision of a nuclear weapons free world and last year's debate over the role of nuclear deterrence in crafting NATO's new Strategic Concept, with some NATO members doubting the wisdom of the continued deployment of U.S. nuclear weapons on European soil, has sparked a renewed debate on requirements of nuclear deterrence in the twenty-first century.

At the Lisbon Summit in November 2010, NATO confirmed that as long as there are nuclear weapons in the world, NATO will remain a nuclear Alliance, and that deterrence based on an appropriate mix of nuclear and conventional capabilities remains a core element of NATO's overall strategy. Although the question of whether NATO will remain a nuclear alliance is largely resolved, NATO continues to grapple with the subject of extended nuclear deterrence and how to harmonize

1. The term "NATO's nuclear weapons" is a misnomer. What is meant are U.S. nuclear weapons stationed in European NATO countries partly to be employed by aircraft owned by the host countries.

# CHAPTER FOUR: **KEY FINDINGS**

- NATO's nuclear question, which is "*how* to deter *whom* with *what,*" is back on the agenda. All 28 NATO Allies agree there is a need to maintain nuclear deterrence and particularly "extended" nuclear deterrence, which means preserving the U.S. nuclear commitments for the European Allies.

- NATO's nuclear posture in Europe today—U.S. B-61 nuclear bombs to be delivered by U.S. and Allied dual-capable aircraft (DCA)—is a relic from the Cold War and disconnected from the security requirements of the twenty-first century. These weapons were once foreseen to threaten targets in Eastern Europe—West of the Soviet Union. For today's and tomorrow's potential political and military challenges to NATO, they seem hardly suited.

- The mismatch between NATO's stated commitment to remain a nuclear Alliance and its present nuclear posture can neither be solved by a modernization of the nuclear hardware—U.S. B-61 bombs and NATO DCA—nor by nuclear arms control agreements with Russia.

- Frequently used arguments that the nuclear "status quo" should be maintained despite the conceptual weaknesses in order to serve political purposes, like being a means of escalation in a crisis or to be "placeholders" for future replacements should nuclear modernization become politically feasible, are flawed. The B-61 is not credible as an actionable threat no matter where it is stationed; thus, having the B-61 in Europe serves hardly any purpose as a political symbol of nuclear resolve. Instead, a credible extended nuclear deterrence for Europe can be provided by the U.S. strategic nuclear arsenal (as NATO's new Strategic Concept clearly states that the supreme security guarantee is provided by U.S. strategic nuclear forces).

- Moreover, the statement that the credibility of NATO's extended nuclear deterrence would necessarily require a physical U.S. nuclear presence on the European territory is contradicted by the situation in Asia. The United States has extended its nuclear umbrella over Japan, South Korea, and Australia for two decades without having stationed nuclear weapons on the soil of these countries. This is not to argue that the situation in Asia can be transferred at its face value to the deterrence context in Europe. Still it provides lessons for the question of what makes a nuclear commitment credible.

- It is not the physical stationing of U.S. nuclear weapons in Europe that will determine the future credibility of extended nuclear deterrence and the nuclear cohesion of the Atlantic Alliance. Much more important is credible nuclear sharing—the readiness of the United States to keep the Allies informed about nuclear issues and the willingness of the Allies to contribute to the common deterrence effort.

- NATO in the past had very elaborate sharing agreements focusing on four areas: (1) information sharing; (2) nuclear consultations; (3) common nuclear planning; and (4) common execution. These sharing agreements all stem from the Cold War and need to be adapted for existing and future security challenges. If NATO can further evolve the system of nuclear sharing, it will have a safer, more secure, and more credible extended nuclear deterrence without U.S. nuclear bombs being stationed in Europe.

the different views within the Alliance on how to implement NATO's credo of remaining "a nuclear Alliance."[2]

The current nuclear discourse is full of inconsistencies and paradoxes. President Obama's support for a nuclear weapons free world (NWFW) in his Prague speech in April 2009 was frenetically acclaimed in most capitals of the world. At the same time, the Obama administration allocates enormous budgets for its military nuclear activities. France and the United Kingdom have agreed on a defense pact with a strong nuclear element that should last for at least half a century. Russia supports the proposal of a NWFW rhetorically but at the same time regards its nuclear weapons as compensation for its deteriorating conventional forces—suggesting the goal of a NWFW can hardly now be in Moscow's interest. Despite the Alliance commitment in NATO's new Strategic Concept "to the goal of creating the conditions for a world without nuclear weapons" and a similar commitment in UNSC Resolution 1887,[3] France remains skeptical of the concept arguing, not without logic, that it is illusionary to believe that countries like Israel, India, Pakistan, Russia, or China really *want* to give up their nuclear weapons. Germany and others are opposing the nuclear weapons deployed on their soil but fail to answer the question of how to maintain nuclear deterrence, U.S. nuclear commitments, and Alliance cohesion without them. NATO declares in its new Strategic Concept that it has no enemies; at the same time the Alliance calls for an "appropriate mix" of conventional and nuclear weapons—begging the question, "appropriate for what?"

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Each of these positions might have its merits. However, taken together, they present a contradictory picture of the future of nuclear weapons. Thus, a debate that brings the various elements of the deterrence problem together is urgently needed.

This analysis will focus on a few aspects of NATO's nuclear question: Should U.S. nuclear weapons remain stationed in Europe and if they are withdrawn, how can NATO members continue to share nuclear responsibilities? How to sustain NATO's proven principles of nuclear sharing, which means burden sharing of those countries under the American nuclear umbrella and information sharing of the U.S. with their nonnuclear Allies, without American nuclear weapons in Europe?

The logic of nuclear deterrence is to change the risk calculation of a potential aggressor by threatening unacceptable damage through nuclear retaliation. In that sense, a nuclear posture sends the political message to an opponent or potential attacker that they cannot expect any gain or benefit from their aggression being

2. See NATO, New Strategic Concept, "Active Engagement, Modern Defense," (Brussels: NATO, November 2010), http://www.nato.int/cps/en/natolive/official_texts_68580.htm.

3. See United Nations Security Council Resolution 1887 (2009), http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N09/523/74/PDF/N0952374.pdf?OpenElement.

sufficient to justify the nuclear devastation they will suffer on their own territory. Hence, it would be better for them not to attack in the first place. To make this political message credible, the use of nuclear weapons must be a plausible option. The popular statement that nuclear weapons are purely "political weapons" is not credible. Instead, they have to be militarily usable to fulfil a political effect—or more catchy: one has to be ready to use them in order not to be forced to use them.

NATO has always defined deterrence in the broader sense that the United States expanded their nuclear umbrella over the territory of their nonnuclear Allies. In this concept of "extended deterrence," the United States took the commitment to retaliate with nuclear weapons not only in case of an attack on its own homeland but also in case of an aggression against other NATO members. Again, the signal was political—a potential opponent (the Soviet Union) could not hope to escape nuclear devastation by limiting their aggression only to parts of Europe. However, this concept entails some dilemmas. The nonnuclear countries cannot be sure whether the nuclear protector will really fulfil their commitments in the case of need, given that they also might suffer retaliation against their own territory. This dilemma was encapsulated in the famous question of whether or not the United States would risk San Francisco to save Cologne. There is no a-priori answer to this question, but for decades there was agreement in NATO that extended deterrence would be more credible if U.S. weapons were forward based in Europe. In that sense, they should not only send a message of resolve to an opponent but also a message of credibility of the U.S. commitments to the Allies.

Nuclear weapons in Europe during the East West conflict, albeit requested by the European Allies, led to another dilemma. Due to the short range of most of the weapons (artillery shells, missiles), they would mostly have detonated close to or even on the territory of the Allies had war broken out between East and West. Thus, countries under the American nuclear umbrella had a vested interest in nuclear relevant information from the United States: which types of weapons are stationed where, in which quantities, and why? Moreover, they tried to influence U.S. nuclear strategies and target plans for Europe, because this would immediately affect their own security.[4] Last, most NATO members had a strong desire to be consulted should the U.S. contemplate the use of nuclear weapons in Europe in case of a crisis. In consequence, the Nuclear Planning Group (NPG) was founded in 1967 as a forum for consultation, information sharing, and common planning. Up to the end of the East-West conflict, the United States used the NPG to provide its Allies with a remarkable level of information and influence on its nuclear plans and posture in Europe.

The popular statement that nuclear weapons are purely "political weapons" is not credible. Instead, they have to be militarily usable to fulfill a political effect.

4. For instance, the Federal Republic of Germany in its ongoing hope for German unification had a strong interest that NATO nuclear weapons would not detonate in East Germany.

## NATO'S INCONSISTENT NUCLEAR POSTURE

### Force Posture

NATO's current nuclear posture consists primarily of air delivered nuclear bombs (Type B-61) stationed in Europe.[5] Some of them are foreseen to be used by U.S. aircraft; for others the stationing countries provide the aircraft as a special form of sharing nuclear responsibilities.

The remaining B-61 bombs in Europe were part of an entire spectrum of nuclear weapons of different types and ranges (missiles, cruise missiles, artillery shells, mines) deployed in large numbers in many NATO countries. The key purposes of these weapons were political, namely deterrence, war prevention, and war termination in a Cold War context. To make this deterrence message credible, NATO needed a number of nuclear and nonnuclear options to react to any foreseeable contingency. Even if deterrence had failed and Soviet troops had launched an attack, NATO's nuclear forces were supposed to have a role within what strategists named a "Continuum of Deterrence." Using them as a form of deliberate escalation would send a sign of resolve that would convince the aggressor of their miscalculation and pressure them toward a ceasefire at the lowest possible level of destruction. Even in war, the purpose of nuclear weapons was not victory on the battlefield but the political goal of war termination.

In that sense, the B-61 bombs were one link in a long chain of nuclear forces, ranging from the intercontinental strategic systems in the United States to intermediate-range missiles (deployed in Europe but able to reach the Soviet homeland) and to short-range nuclear weapons to be targeted against attacking formations in the Warsaw Pact satellite states. This mix of types and ranges were meant to signal strategic flexibility and thereby alter the cost-benefit analysis of military planners in the Soviet Union who might contemplate military options against NATO. Moreover, the American weapons in Europe should reassure the European NATO Allies of the credibility of U.S. nuclear commitments. In turn, by being a natural target for Soviet nuclear attacks, they would symbolize the readiness of the Europeans to share the nuclear risks within the Atlantic Alliance.

The reasons for retaining a small air-delivered nuclear component deployed in Europe following President Bush's decision in September 1991 to withdraw all other nuclear weapons on European soil following the fall of the Berlin Wall and the demise of the Soviet Union were manifold: they were meant to deter a residual threat from the East, as the Soviet Union still existed but was in the process of dissolution. Moreover, bombs on aircraft were regarded as flexible, had enough range to reach Russian territory, allowed the Allies to participate in NATO's nuclear missions by providing the means of delivery and could, unlike missiles, up

5. During the 1974 Ministerial Meeting in Ottawa, the Alliance stated that the French and British nuclear forces would contribute to NATO's overall deterrence. This statement has been constantly repeated since then, including in the most recent Strategic Concept of November 2010.

to a point be called back in the case of a false alarm or a fundamental change in the situation. In the NATO jargon at that time, B-61 bombs delivered by fighter-bombers combined in the best possible way the requirements of flexibility, reliability, and survivability. There was also the political or psychological motive of retaining some nuclear capacities in Europe for the reasons of Alliance cohesion and continuity. If some weapons were to remain to avoid complete denuclearization (at least with regard to U.S. weapons in Europe), the bombs on aircraft seemed to be the best suited ones.

Today, 20 years later, the strategic situation in Europe has fundamentally changed. Since the fall of the Berlin Wall, NATO has enlarged by 12 countries and three NATO members have a common border with Russia. In classic terms of force comparisons, NATO's conventional forces today are highly superior to the military capabilities of Russia. Moreover, NATO and Russia are engaged in an intense partnership, which might not be free of frictions but has permitted fruitful cooperation on various common concerns. All this does not exclude regional tensions or aggressive behavior by Moscow and the threat perceptions by Poland or the Baltic Countries, for example, cannot be simply dismissed—particularly as Russia remains one of the two largest nuclear powers in the world.

At the same time, NATO is now facing new threats, including terrorism, cyber threats, limited conflicts outside of Europe, and civil wars or violent action by nonstate actors, which can no longer be countered by nuclear deterrence. Thus, the power of the "nuclear" currency has lost much of its value, not only in a European context but also far beyond.

## Strike Planning

The day-to-day nuclear mission in NATO is extremely demanding in peacetime. This complicated enterprise requires sophisticated planning, extensive preparation, intricate procedures, finely tuned equipment, and reliable people in all levels of the effort. The real challenge for NATO's DCA is successfully accomplishing a nuclear strike. Once the decision to carry out a nuclear strike is made, such a mission is fraught with many challenges. The sequence of events for such a mission would look something like this:

- **RECEIVE ORDERS TO PREPARE FOR A NUCLEAR STRIKE MISSION.** The bases involved would immediately increase their security measures and cordon off the strike aircraft and spares. The maintenance and flight crews would be sequestered to review procedures and begin the process of preparing the aircraft and weapons. U.S. personnel would pull the nuclear weapons out of their vaults and prepare them for the aircraft. All of this preparatory activity is difficult to hide from the public; NATO's intent to go nuclear would be obvious during this period.
- **AUTHORITY TO CONDUCT THE MISSION.** Flight and maintenance crews would proceed to the loaded aircraft and await authorization from the U.S.

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President to enable the weapons for the mission. At the designated time, the strike crews would take off for their assigned targets.

- **COMMAND, CONTROL, AND AIR REFUELING.** The only imaginable targets would have to be outside of European airspace, which would put them at ranges that would require air refueling for the strike. In addition, command and control would need to be available up to a certain "point of no return," when the strike aircraft fly out of radio range. All of this activity is hard to mask, compromising success even further.
- **THE NUCLEAR STRIKE.** NSNW of any yield still require accurate delivery. What's more, B-61s are not "smart" weapons; they are simple gravity bombs. Crews must be able to identify the target using a combination of eyesight, infra-red imaging, and/or radar imaging. The delivery becomes even more complicated when the target is masked by smoke or clouds, is decoyed and heavily defended.
- **THE RECOVERY.** Once the nuclear weapon is delivered on its target, the strike crew will recover to their home base or to an allied or friendly runway if available within the remaining range of the aircraft. Here again, command and control, and perhaps aerial refueling, will be important to a successful operation. Once an aircraft and its crew have been exposed to the radiation of a nuclear strike, proper handling and recovery are necessary to avoid exposing others.

It is essentially a mission of "seven consecutive miracles."

This description of the strike mission underscores how difficult such a mission would be. It is essentially a mission of "seven consecutive miracles": (1) surviving a first attack by an adversary; (2) receiving the authority from the President of the United States to arm the weapons and conduct such a mission; (3) take-off and proceeding to the target; (4) rejoining with a tanker and getting enough fuel to make it to the target; (5) surviving air and surface defenses along the way; (6) locating and correctly identifying the target; and, (7) dropping the weapon and it works as designed.

In sum, any attempt to use the B-61 will be challenged by the visibility of the many actions required to prepare the weapon and the crews for such an attack. The intended target nation of such an attack under the current planning scenarios will likely have many hours and even days to prepare its defenses and complicate matters for NATO target planners.

If NATO's nuclear deterrence today has no longer to cope with the huge military force of an opposing empire and if instead a nuclear crisis is likely to emerge in East Asia or in the Middle East—both regions thousands of kilometers away from the former "Central Front"—then the core questions become: assuming that a severe crisis that requires a deterrence message from NATO materializes in one of these areas, is it plausible that NATO would agree to take a B-61 bomb from a storage vault in Europe, mount it under an allied aircraft and then fly it to the

crisis region in order to drop the bomb over the pre-defined target? Would NATO ever consider a mission that would imply a flight over thousands of kilometers with a nuclear freight, crossing NATO and non-NATO airspace, with the severe legal implications this entails, needing air refueling and requiring the nuclear aircraft to overcome the potential heavy air defenses of the target country? Would it not be much more plausible to have this nuclear task fulfilled by a U.S. strategic nuclear weapon like a cruise missile,[6] a strategic bomber (B-52 or B2-A), or an intercontinental ballistic missile?

Given the above-mentioned insight that nuclear weapons have to be militarily usable (in a plausible manner) in order to have a political deterrence effect, the conceptual plausibility of NATO's nuclear bombs on European soil in today's security environment is close to nil. Thus, NATO's current nuclear posture does not match the political and military challenges ahead and thus cannot satisfy NATO's deterrence needs in a cohesive and credible manner. NATO should therefore either assess the option of adapting/changing its nuclear posture or develop concepts on how to preserve deterrence and nuclear sharing without stationing U.S. nuclear weapons in Europe.

NATO's current nuclear posture does not match the political and military challenges ahead and thus cannot satisfy NATO's deterrence needs in a cohesive and credible manner.

## OPTIONS FOR GETTING THE POSTURE RIGHT

Each of these options would be implemented consistent with domestic legislation and international agreements, including the Nuclear Non-Proliferation Treaty.

### Option 1: Status Quo

To maintain the status quo, U.S. nuclear force deployments would remain in Europe and upgrades to NATO DCA would proceed in all basing countries as necessary. This option presupposes that no agreement is reached with Russia on reciprocity of reductions of NSNW or other confidence building measures.

The main argument in favor of this approach is that existing arrangements reflect a delicate balance of responsibilities, and that changes to these arrangements could risk Alliance unity. Most supporters of this option concede that U.S. NSNW deployed in Europe no longer serve a military purpose. But they are skeptical of intermediate "consolidation" options (see below), and argue that removing all U.S. nuclear weapons from Europe could be seen as signaling a step too far in the denuclearization of NATO security policy, especially at a time when Russia maintains large numbers of its own NSNW in Europe, and new nuclear-armed states could emerge on Europe's periphery.

6. Nuclear air launched cruise missiles, which have been around since 1982, have received a life extension program and will be operational until 2020.

If NATO defaults to the status quo posture . . . it must do something to improve security of these weapons at existing nuclear storage sites, and to extend their service lives through costly life extension programs . . .

Those who oppose maintaining the status quo argue that the maintenance of nuclear forces for which there is no longer a viable military role is inconsistent with NATO member states' commitment to contribute to reducing the salience of nuclear weapons in security policy. They are concerned with continuing risks of theft or accident associated with these forward deployed weapons, together with the financial costs that would be incurred in an effort to limit these risks. Given the opposition in some NATO nations to their deployment, maintenance of the status quo is untenable in the long run, and poses short-term risks of its own to Alliance unity.

Although this is the current arrangement, it should not be confused with a "Do Nothing" option. If NATO defaults to the status quo posture through its own inaction or inability to overcome the political misgivings of some of its partners, it must do something to improve security of these weapons at existing nuclear storage sites, and to extend their service lives through costly life extension programs, or in the case of the DCA, to procure new nuclear capable aircraft.

## Option 2: Replace B-61 with a More Modern, Capable Bomb or Cruise Missile

If the B-61 nuclear weapons currently deployed are not in line with deterrence requirements, a theoretical option would be to replace them with state of the art technology. Modern, precision-guided standoff weapons or nuclear cruise missiles could be launched way ahead of the targets and would not require the aircraft to overcome the opponent's air defense systems. Indeed, the modernization of NATO's nuclear posture was intensively discussed in the late 1980s until the demise of the Soviet Union in 1991.

Today, however, any notion of forward deploying more modern nuclear weapons in Europe, regardless of the technical feasibility, is politically impossible. None of the governments in any of the current hosting countries would be willing to risk a public debate on nuclear deployments at a time when no immediate nuclear threat could be brought forward as a justification. Sophisticated arguments on conceptual deterrence requirements or nuclear sharing agreements would hardly suffice to convince the public in any of the old NATO member states of the wisdom of such a step. Moreover, beyond the weapon itself, countries would also need to provide the delivery capacity. Some of the new NATO members in Central and Eastern Europe might theoretically be willing to host modern U.S. nuclear weapons on their soil, but NATO's promise of the so called "Three Nos" precludes such a possibility.[7] In sum, unless the strategic landscape in Europe

7. In 1996, NATO's foreign ministers declared that the Alliance had no intention, no reason, no plan to station nuclear forces on the territory of new members. See Warren Christopher, U.S. Secretary of State, Press Conference, December 10, 1996, http://www.nato.int/cps/en/natolive/opinions_25112.htm?selectedLocale=en.

dramatically worsens, the option of nuclear modernization is only a theoretical one that de facto does not exist.

## Option 3: Consolidation of U.S. Non-Strategic Nuclear Weapons (NSNW) to Two Sites or One with Fewer Bombs and Fewer European DCA

**1. CONSOLIDATION ("DOWN TO TWO").** This option would consolidate all of the remaining B-61s in Europe into two sites. This option would decrease the cost of storage considerably because it eliminates the requirement for the other sites; this would yield a savings in the hundreds of millions of dollars. Some of these cost savings would be applied to security upgrades for the remaining two sites. The immediate benefit would be realized in several ways. The first benefit is that operational focus would be improved for the remaining sites. Perimeter security could be provided by the participating nations; or, a multinational security force could be established with costs shared by a larger number of burden-sharing nations. The requirement for DCA would remain the same with those aircraft from participating NATO nations flying to the two remaining sites for exercises, training, and nuclear operations, if necessary.

**2. CONSOLIDATION AND PARTIAL WITHDRAWAL ("DOWN TO ONE").** This option withdraws most, but not all of the B-61s from Europe. This option would consolidate the weapons to a single nuclear weapons storage site. Here again, operational focus would be further improved; the burden-sharing arrangement could be continued for those DCA nations that choose to participate. Again, costs are reduced considerably, with some of the savings going toward important security upgrades.

This option could also include the notion of a multinational DCA wing that would conduct nuclear training exercises in peacetime and execute nuclear strike during wartime; this idea is similar to the current arrangement for NATO AWACS or the C-17 Strategic Airlift Capability (SAC). Weapons and security personnel from the participating nations would remain at this location permanently to secure and maintain the nuclear stockpile. At other times of the year, the flight crews, maintenance personnel, and aircraft would return to their respective nations for conventional training and normal operations. Leadership roles would be shared among the participants and could rotate every other year or so.

Because this option would result in a net decrease in the number of U.S. NSNW stationed in Europe, it could be linked to expectations for a corresponding Russian withdrawal. Although complicated, this withdrawal would best be linked in terms of percentages, with the United States reducing its forces by 80 to 90 percent and Russia doing the same.

The most obvious way to reduce the weapons in Europe would be via arms control with Russia, which stores a disproportionately higher amount of what

Unless the strategic landscape in Europe dramatically worsens, the option of nuclear modernization is only a theoretical one that de facto does not exist.

Moscow calls "tactical nuclear weapons" in its European territories.[8] The major problem that renders nuclear arms control in Europe a highly unlikely scenario is the fact that Russia does not seem truly interested in reducing its NSNW. Instead, Moscow has assigned them as a replacement for the conventional capabilities that it now lacks. Shrinking defense budgets over many years, corruption, and failed military reforms have reduced the efficiency of the Russian armed forces dramatically. For the foreseeable future, nuclear forces are regarded as compensation for absent conventional strength.[9] Scrapping its nuclear weapons in Europe would therefore counter Russia's need to balance NATO's conventional superiority. At the same time NATO has maneuvered itself into a difficult situation because the new Strategic Concept has linked any future decision on reducing NATO's nuclear weapons to parallel measures taken by Moscow to reduce the vast amount of Russian NSNW in Europe.

Although reductions would certainly help to reduce potentially insecure Russian nuclear warheads, they would hardly solve NATO's conceptual problem of the role of the remaining U.S. nuclear weapons.

Not to be misunderstood—nuclear talks with Russia might help to increase mutual transparency on numbers, types, and locations of nuclear weapons and might thereby help to alleviate reciprocal threat perceptions. Taken in isolation, however, they are not likely to lead to significantly lower amounts of nuclear forces in Europe absent progress on other threats perceived by Russia (such as conventional force imbalance).

Even if Russia agrees on a step-by-step approach of reducing its NSNW, the success would only be partial. Although reductions would certainly help to reduce potentially insecure Russian nuclear warheads, they would hardly solve NATO's conceptual problem of the role of the remaining U.S. nuclear weapons. And a consolidation of U.S. nuclear weapons in Europe—be it bombs, aircraft, or nuclear—will not solve NATO's fundamental problem of sustaining a nuclear posture, which does not match today's deterrence requirements.

## Option 4: A True NATO Nuclear Force

Another option that is occasionally presented as a way to deal with at least some difficulties of NATO's current nuclear structure would be to create a true NATO nuclear force (including the strategic forces of the United States, United Kingdom, and France). Instead of the bilateral arrangements between the United

8. NATO's new Strategic Concept calls in a slightly cryptic way for nuclear arms control with Russia stating that NATO will seek Russian agreement to relocate their weapons away from the territory of NATO members. See NATO, New Strategic Concept, "Active Engagement, Modern Defense," (Brussels: NATO, November 2010), Paragraph 26, http://www.nato.int/cps/en/natolive/official_texts_68580.htm.

9. The two Russian maneuvers, Zapad 09 and Layoda 09, which where sharply criticized by NATO's Eastern members for exercising attack options, actually displayed the shortcomings of the Russian forces (no all weather capabilities, no network-centric warfare, no major conventional operations). Some observers conclude that due to these weaknesses, Russia might be inclined to refer to nuclear weapons even in regional conflicts.

States, providing the warheads, and European Allies, providing the stationing ground and the means of delivery, there could be a wing of NATO aircraft under the command of the Supreme Allied Commander Europe. Comparable to NATO's Airborne Warning and Control System (AWACS), the nuclear capable aircraft would be manned by personnel from many NATO countries. In such a system, the nuclear burden would be shared by as many shoulders as possible and all member states could visibly contribute to the common deterrence effort.

Apart from the political signals of burden sharing and mutual commitments, however, the benefit of such a model would be very limited. Leaving aside the technical question of the choice of the aircraft and the nuclear certification by the United States as the provider of the nuclear weapons, which could lead to serious disputes, many other key problems would not be tackled. Where should the aircraft and the American nuclear weapons be stationed—in only one country or widely dispersed? Which country would volunteer to host nuclear weapons while others get rid of them? Furthermore, regardless of the stationing mode, the issue of aircraft having to cross long distances and enter heavily defended airspace to drop the nuclear bombs would remain unsolved.[10] Hence, the credibility of the deterrence message would be as doubtful as it is under the present regime. The idea of a NATO nuclear air wing seems more an intellectual exercise than a politically realistic or practical option.

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## Option 5: Full Withdrawal, Return If and When Required

This option withdraws all remaining B-61s from Europe to the United States with an open caveat for their return in the event they are needed. This option does not eliminate the need for a nuclear storage site in Europe; such a site will need to be maintained in the event the weapons need to return.[11] The burden-sharing arrangement would continue as described in Option 3b "Partial Withdrawal" and the DCA responsibilities would continue for those nations that choose to participate. There are cost savings to be enjoyed because any upgrades to the weapons would now take place in the United States and avoid the necessity of a team traveling to Europe to do the upgrades. Although they would be stored in the United States, these B-61s would be earmarked for NATO use. NATO could deploy personnel to

10. NATO has so-called SEAD capabilities (Suppression of Enemy Air Defenses); however, it seems doubtful that NATO would risk a nuclear-armed aircraft to be shot down.

11. It is worth noting that the U.S. 2010 Nuclear Posture Review comes close to describing such a posture. According to the Review, the United States will: "Retain the capability to forward-deploy U.S. nuclear weapons on tactical fighter-bombers (in the future, the F-35 Joint Strike Fighter) and heavy bombers (the B-2 and B-52H), and will proceed with full scope life extension, including surety—safety, security, and use control—enhancements, for the B-61 nuclear bomb, which will be able to be carried by the F-35 and B-2. These decisions do not presume what NATO will decide about future deterrence requirements, but are intended to keep the Alliance's options open and provide capabilities to support other U.S. commitments."

nuclear storage sites in the United States with the specified task of maintaining and securing those weapons earmarked for NATO. Here again, this option could be linked to a corresponding full withdrawal of Russian NSNW. If successful, this would be the first time since the 1950s that Europe has been without U.S. nuclear weapons on its soil.

## Option 6: Nuclear Replacement

This option withdraws all B-61s from Europe and replaces this nuclear capability by alternate means. This option eliminates the nuclear storage sites in Europe along with the requirements for DCA. The alternate means can take on three forms: intercontinental ballistic missiles (ICBMs) earmarked for NATO; submarine launched ballistic missiles (SLBMs) earmarked for NATO; and/or, B-61s delivered by B-52s or B-2s. This option is similar to the arrangement provided for Australia, Japan, the Republic of Korea, and U.S. Allies in the Pacific, with one notable exception. Whereas Japan and Korea have limited visibility on the exact workings for this arrangement, NATO would continue to enjoy full partnership through the NPG. Each of these alternate concepts comes with certain challenges, but they are no more difficult than maintaining the current arrangements.

- **ICBMs.** Even though the United States would fund most of this option, some burden-sharing responsibilities could continue in several ways. Multinational ICBM crews composed of participating NATO forces and U.S. Air Force personnel would operate NATO-earmarked missile silos. The NPG would be consulted for targeting priorities and would be responsible for target folders. A combined U.S./NATO team would inspect personnel reliability, nuclear certification, and nuclear exercises.
- **SLBMs.** As above, the U.S. would fund most, if not all of this option. Multinational SLBM crews would be assigned tours aboard U.S. Navy nuclear submarines. The NPG and the combined U.S./NATO team would have the same responsibilities described in the ICBM option.
- **NUCLEAR BOMBERS.** This option would allow for NATO to share the nuclear burden financially and operationally. Multinational crews would train for this mission and be put on nuclear alert when required. These crews would have nuclear strike as their only mission and would never operate in a conventional role. NATO participation could also involve command and control roles, maintaining and securing the weapons storage areas, and nuclear-designated bombers.

## Option 7: The Asian Model

If NATO's currently deployed nuclear forces seem inappropriate for the future deterrence requirements of the Alliance, and if neither the modernization nor the reduction of the arsenal is realistic or apt to solve NATO's deterrence problem, the option of a complete (and even possibly unilateral) withdrawal of these

If NATO's currently deployed nuclear forces seem inappropriate for the future deterrence requirements of the Alliance, and if neither the modernization nor the reduction of the arsenal is realistic or apt to solve NATO's deterrence problem, the option of a complete (and even possibly unilateral) withdrawal of these weapons has to be carefully assessed.

weapons has to be carefully assessed. The weapons could either be removed to the United States to be kept in reserve (several B-61 bombs are already kept in this status) or they could be dismantled.

By doing so, the Alliance could eliminate not only the nuclear weapons themselves but also the very expensive infrastructure (nuclear capable aircraft, storage vaults, security systems, custodial teams, etc). Moreover, such a unilateral step by NATO could be presented to Moscow as an advance effort to encourage similar Russian steps on nuclear disarmament in Europe—which might or might not happen. Even if Moscow would not respond totally or even partially in kind (and indeed, the likelihood might be low) NATO would at least adjust the mismatch between its nuclear hardware and the deterrence needs.

This holds all the more true as the United States has a vast and modern nuclear arsenal at hand—strategic bombers, intercontinental missiles, nuclear submarines—to fulfill all the tasks of the NATO nuclear aircraft and beyond in a much more credible manner.

Moreover, NATO includes two other nuclear powers—the United Kingdom (whose nuclear forces are explicitly committed to supporting collective security through NATO for the Euro-Atlantic area) and France—with nuclear weapons postures that contribute to NATO's overall deterrence, as noted most recently in the November Strategic Concept adopted by NATO. Any potential aggressor would have to count both U.K. and French nuclear forces into their cost-benefit analysis of risking a conflict with NATO, regardless of France's claim for nuclear independence.

Not always noticed by European NATO Allies, there is an example of U.S. nuclear commitment without a forward basing of nuclear weapons: the "Asian Model." Countries like Japan or South Korea (and also Australia) are under the American nuclear umbrella; however, their way of implementing "extended deterrence" differs in four points from the European model.

- The United States underpins its commitment to Asia with nuclear weapons, which are forward deployable but not forward deployed, which means that none of the countries in the region hosts U.S. nuclear weapons on their soil. Instead, they could be moved from the United States close to the region or into the region in case of a crisis.
- There are no nuclear weapons–related exercises conducted between the United States and the military forces in these countries.
- There is no burden sharing by the countries in the region, neither by providing bases or nuclear infrastructure nor by providing nonnuclear support. There is also no nuclear risk sharing in the sense that places in South Korea or Japan become nuclear targets for a potential aggressor because they host U.S. nuclear infrastructure.

- There are no mechanisms for nuclear consultations, common nuclear planning, or sharing nuclear related information.

Apparently, for a long time none of the countries under the U.S. nuclear umbrella in Asia had a credibility problem with a U.S. commitment without a physical presence of American nuclear weapons. They defined the combination of U.S. explicit verbal commitments and the availability of a wide spectrum of American nuclear options (to be executed by strategic and non-strategic nuclear weapons) as sufficient to deter any vital threat against their territory.[12]

These countries are more concerned about the question of nuclear sharing and information than they are about the physical presence of nuclear weapons on their territory. Apparently the trust in the credibility of U.S. commitments depends much more on the knowledge of how the United States intends to execute its nuclear options in case of need than in the immediate visibility of the weapons themselves. Thus, there has been a strong push from the governments, particularly in South Korea and Japan, for more information sharing on U.S. nuclear plans and postures. In late 2010, Washington and Seoul agreed on a U.S.-South Korean Nuclear Deterrence Policy Committee. However, South Korean voices criticize that the consultation issue has a very low profile on the American side. Thus, the request for nuclear sharing remains a key interest for the Asian countries under the U.S. nuclear umbrella.

Of course, the Asian Model cannot be simply transferred at face value to the European political and strategic context, where, among other differences, two other European nuclear states are members of NATO. It does, however, demonstrate that the credibility of extended deterrence is still feasible with appropriate sharing of relevant information with nonnuclear Allies.

If the Asian Model suggests anything for the current nuclear debate in NATO, then it is the notion that even without U.S. forward based nuclear weapons, the "nuclear sharing" arrangements are paramount to assure the credibility of extended deterrence and the cohesion of the Alliance.

## NUCLEAR SHARING WITHOUT FORWARD BASING

If the Asian Model suggests anything for the current nuclear debate in NATO, then it is the notion that even without U.S. forward based nuclear weapons, the "nuclear sharing" arrangements are paramount to assure the credibility of extended deterrence and the cohesion of the Alliance. Unlike Asia, NATO has a long experience in the various aspects of nuclear sharing and maintains the necessary instruments. Thus, before deciding on or implementing a possible withdrawal of B-61 bombs from Europe, there has to be agreement on how to proceed with NATO's

12. Following the more recent North Korean activities, debates began about a possible forward basing of U.S. nuclear weapons. In South Korea, for instance, almost 69 percent of the population could imagine that South Korea had their own nuclear weapons. However, this is the result of having an aggressive and hostile nuclear power in the immediate neighborhood. See *Space Daily,* March 23, 2011, http://www.spacedaily.com/reports/Majority_of_S_Koreans_want_atomic_bomb_survey_999.html.

nuclear sharing mechanisms and how to adapt the instruments accordingly. To adapt Cold War experiences to the nuclear realities of the twenty-first century, elaborations on new forms of nuclear sharing have to focus on four dimensions: nuclear information sharing; nuclear consultations; common planning; and common execution.

## Nuclear Information Sharing

As mentioned earlier, NATO's prime forum for nuclear sharing, particularly for the exchange of nuclear relevant information, is the Nuclear Planning Group. It was founded at a time when the European Allies were highly concerned about the purpose of the U.S. nuclear weapons on their soil and about their potential employment should the Cold War become a hot one. This coincidence has led to two myths about nuclear sharing in NATO: first, nuclear sharing in the NPG depends on the presence of U.S. nuclear weapons in Europe; and second, the United States would share information simply because the NPG existed. In fact, today all members of NATO (except France) take part in NPG meetings or send representatives to the so called "NPG Staff Group," regardless of whether they are stationing countries for B-61 or nuclear capable aircraft.[13] Moreover, U.S. governments have traditionally been ready to share nuclear issues with their NATO Allies because they *wanted* to do so and not because there was a NATO forum for that purpose. The core question of whether the United States will still *want* to do so—even if no nuclear weapons are forward based any more—can only be answered by the U.S. Administration.

As a result, nuclear information sharing in NATO will take place as long as Washington is prepared to do so and the European Allies have an interest in it, regardless of the existence of the NPG and even without B-61s on European soil.

Following a withdrawal of B-61 bombs from Europe, a reform of the nuclear information sharing procedures might be inevitable, provided that the desire for nuclear discussion further exists on both sides of the Atlantic. For various reasons, the NPG in its present form could hardly be the appropriate forum any more. France has never participated in the NPG, which was established in 1966–1967. Although Paris under President Sarkozy returned to most NATO structures, it still remains outside the NPG and does not seem willing to change this position soon. Thus, a new format for nuclear consultations in NATO would have to be found to include all three NATO nuclear states. Moreover, even today the NPG does no nuclear planning in the strict sense of targeting anymore; in a NATO without U.S. nuclear weapons, this would be even less the case. Even the name of the forum is no longer suitable because it would raise memories of Cold War scenarios.

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13. In practical terms, though, there is an unwritten rule that only the stationing countries speak up in NPG meetings.

To deal with these shortcomings, NATO could create a new forum along the lines of the current Deterrence and Defense Posture Review (DDPR). In conjunction with the discussions on a new Strategic Concept, the question of how to address U.S. nuclear weapons in Europe had been hotly debated between Germany and other NATO Allies. To solve the issue in the long term, the 2010 summit meeting in Lisbon had agreed on a thorough review of NATO's deterrence and defense posture, which should be presented at the next NATO summit in spring 2012.[14] Although the NPG is described as the "ultimate authority within NATO with regard to nuclear policy issues,"[15] NATO members chose a different forum for the review process. As the NPG was lacking French membership and because the review should not be confined strictly to nuclear planning, an alternative was necessary. Since January 25, 2011, the DDPR has taken place on the level of all Deputy NATO Permanent Representatives, chaired by the Deputy Secretary General. The support does not come from the Nuclear Forces Directorate (as in NPG issues) but from NATO's Defense Policy Planning Division. By using an ad-hoc arrangement, NATO was able to overcome political sensitivities that existed given the delicacy of the topic and still grant a debate on an appropriate political level.

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## Nuclear Consultations

Even before the NPG was founded, NATO took on the crucial issue of nuclear consultations. The need for nuclear consultations within the Alliance stemmed from the fact that, given the immediate threat of the Warsaw Pact, NATO's nuclear deterrence concepts were always plagued by a collision of interests between the United States and its Allies. In case of an attack from the East, which required nuclear escalation, the Allies, for good reasons, wanted to be consulted *before* the U.S. president would authorize a nuclear weapon to be detonated on European soil to at least have the option to express an opinion on the wisdom of such a step. However, there might be the need to escalate very quickly without time for a long discussion process among member states. Moreover, there was always the desire of the U.S. Administration not to be entangled by any objections of its Allies if it comes to vital issues like using nuclear forces. Trying to bridge this gap in views and interests, NATO developed detailed regulations for consultations within NATO, starting with the "Athens Guidelines" in 1962, if using nuclear force should become necessary.

14. Actually, the deterrence review was the only tasking by the heads of states and governments in Lisbon that did not have a strict deadline. Still, there is a common understanding that some consensus has to be presented by the next summit meeting.

15. NATO Homepage, Topics: The Nuclear Planning Group, http://www.nato.int/issues/npg/index.html.

The need for nuclear consultation in NATO was particularly highlighted by the vast amount of U.S. nuclear weapons in Europe—more than 7,000 in the early 1970s. Still, the need for such consultations would remain, even if all nuclear bombs were withdrawn. In NATO, relevant nuclear contingencies continue to exist far beyond Europe—in the Middle East or in East Asia—and NATO members would like to be consulted before Washington decides on the use of nuclear weapons to protect its European Allies.

NATO's old consultation guidelines would hardly be applicable to today's security environment, particularly if there were no B-61s in Europe any more. A NATO that claims to be a "Nuclear Alliance" as long as nuclear weapons exist would have to restart the process of developing political guidelines for nuclear consultations. This could be done in the successor forum for the NPG and could include numerous related questions, depending on, for instance, how France defines its future role as a European nuclear power.

## Common Planning

Closely intertwined with nuclear consultations was the element of common nuclear planning. NATO Allies were not only interested in the "when" of a U.S. nuclear employment in Europe but also in the "where." Nuclear planning, which was also done on the framework of the NPG, was related to the U.S. nuclear weapons in Europe and to the nuclear capable aircraft owned by the European Allies (as—at least theoretically—allied states could veto using a U.S. nuclear bomb by not providing the aircraft as the means of delivery.)[16] Moreover, a few sea launched ballistic nuclear missiles stationed on U.S. submarines were "assigned" to NATO and included into NATO's nuclear plans.

In a future NATO without forward deployed U.S. nuclear weapons, the Allies would still have a strong interest in remaining engaged in American nuclear planning, at least with regard to the NATO-related contingencies. Again, any form of a common nuclear planning first and foremost depends on the willingness of the United States to grant its Allies access to such a highly sensitive area of national security. Should this be the case, different models would be possible.

Washington could permit NATO representatives a presence in American national nuclear planning processes and grant them a say in NATO related issues. In a very rudimentary form, such a liaison system already exists. There is one British officer (Captain's rank) present at U.S. Strategic Command (STRATCOM) in Nebraska who functions as a liaison officer; a second one is an American citizen. It seems doubtful that they have a real impact on planning questions. The British officer serves in a double role as NATO and U.K. liaison officer and seems therefore to be more a symbol of the special U.K.-U.S. nuclear relationship. His

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16. In such a case, though, the United States could have used their own aircraft or employed other types of weapons that are not under so-called "dual key arrangements" with the allies.

American colleague can hardly be regarded as a true NATO voice in the U.S. nuclear planning system either.

To establish a mechanism that comes close to a true common planning, NATO's representation in U.S. planning processes would have to be increased in numbers and in ranks to have a real effect and to have an appropriate link to NATO's political and military leadership.

A second angle of common nuclear planning could be confined to a set of U.S. strategic nuclear weapons earmarked for NATO missions. Along the lines of the Cold War assignment of U.S. submarine missiles, a few U.S. nuclear warheads could be "reserved" for targets or contingencies that all 28 NATO members could agree upon. Probably of limited military value (as the U.S. disposes of a huge nuclear arsenal to execute any mission, whether it would be in line with NATO or not) it would be a highly symbolic step epitomizing transatlantic cohesion. Moreover, such a NATO earmarked force could mitigate the concerns of those NATO members, who still support the current stationing of U.S. nuclear weapons in Europe.

## Common Execution

Executing nuclear strikes where the Allies provide the means of delivery and the United States supplies the warhead will no longer exist as soon as the B-61 bombs have been withdrawn to the American homeland. Theoretical options of keeping the storage sites in Europe for occasional redeployments to Europe or having the NATO nuclear aircraft fly to the U.S. to load the nuclear bombs are perhaps unrealistic. Such procedures to keep up the illusion of a NATO nuclear force would be extremely costly and would be of limited political value. Moreover, they would not be necessary, as NATO with three nuclear members, including the largest nuclear power on earth, would not lack nuclear options to convey a credible deterrence message.

Still, even without U.S. forward based systems, NATO Allies could contribute to nuclear operations if necessary and desired. Already today, 15 nonnuclear NATO member states provide support to, as the NATO jargon says, SNOWCAT missions (Support of Nuclear Operations with Conventional Air Tactics). Should a nuclear-armed NATO aircraft be sent on an attack mission, they would grant nonnuclear support like air refueling or search and rescue operations. These missions are regularly exercised and symbolize the willingness of nonnuclear Allies to burden sharing beyond stationing nuclear weapons on their territory.

Even if the U.S. strategic bomber force has all support elements available, allied support along the lines of SNOWCAT might be a welcomed contribution and might symbolize NATO's cohesion.

## CONCLUSIONS

Extended deterrence is a highly political concept that depends first and foremost on the willingness of the nuclear power to give a commitment to the Allies and on its capabilities to employ nuclear weapons in the case of need. The credibility of the nuclear commitment, though, is primarily defined by the Allies under the nuclear umbrella (and of course by the potential opponent). For many decades, the physical deployment of U.S. nuclear weapons on European soil was to a large degree requested by the European NATO Allies and had a dual function: it should send a signal of resolve to the opponent and a sign of protection to the Allies.

In today's security environment, NATO's current nuclear posture can no longer fulfill this dual function. Because U.S. forward deployed weapons have lost most of their functions and are increasingly losing the support of NATO Allies, they can be withdrawn and either stored in the United States or dismantled. This holds particularly true as the logic of U.S. extended deterrence does not necessarily require nuclear deployments to be forward deployed in Europe. Instead, there are examples where the nuclear umbrella is maintained without the forward presence of U.S. nuclear weapons.

Sustaining the status quo . . . for another decade or two is no longer an option.

Much more important for NATO's cohesion and the credibility of its nuclear deterrence concepts is a dense network of nuclear information and consultation mechanisms—subsumed under "nuclear sharing." As NATO's nuclear sharing principles still stem from Cold War times more than two decades ago, a reassessment would be necessary anyway. Withdrawing the B-61 bombs would make such a nuclear review even more pressing. Provided that nuclear sharing is intended by both sides, by the United States and by their nonnuclear Allies, ways can be found to align the different requirements: the American requirement for the freedom of action and the European requirement for information and influence. Sustaining the status quo, that is, leaving NATO's nuclear weapons where they are, and papering over all the risks and inconsistencies of doing that for another decade or two is no longer an option.

*The views expressed in this paper are the responsibility of the author and do not necessarily represent those of the NATO Defense College or the North Atlantic Treaty Organization.*

CHAPTER FIVE

# NATO Reassurance and Nuclear Reductions

## *Creating the Conditions*

HANS BINNENDIJK AND
CATHERINE McARDLE KELLEHER

The first point in the preface of NATO's Strategic Concept reconfirms the bonds between NATO nations to defend one another under Article 5. This was a response to the requirement by some Central and Eastern European (CEE) states that reassurance of Article 5 remains fully operative. The fourth point in the preface commits NATO to the goal of creating the conditions for a world free of nuclear weapons.[1] This would include further reductions of U.S. nonstrategic nuclear weapons (NSNW) deployed in Europe. It also implies mutual reductions and closer cooperative relations with Russia.

In this paper we undertook an ambitious research effort to examine Article 5 reassurance and creating conditions for further NSNW reductions. This research effort included a series of interviews with critical leaders in Washington, NATO capitals, and Moscow.[2]

The task for NATO we argue will be to find the right mix of reassurance for the Allies and reset with Russia to create the conditions for additional NSNW reductions on the part of both NATO and Russia. Measures to reassure NATO Allies might be seen by Russia as assertive and requiring Russian military preparation, including maintenance of their NSNW systems. Measures to build confidence with

1. NATO, *Strategic Concept: Active Engagement, Modern Defense,* (November 19–20, 2010), 4–5, http://www.nato.int/cps/en/natolive/official_texts_68580.htm.

2. Interviews conducted in Washington and in Europe from February to May 2011, including at the February 2011 Munich Security Conference.

# CHAPTER FIVE: **KEY FINDINGS**

- NATO's Strategic Concept reconfirms the bond between NATO nations to defend one another and the commitment that Article 5 remains fully operative. The Strategic Concept also commits NATO to the goal of creating the conditions for a world without nuclear weapons and states that NATO will seek to create the conditions for further reductions in NSNW. A key issue in making progress toward further reductions will be to reassure NATO Allies that future NSNW reductions will take place in a context that will enhance the security of all NATO member states.

- NATO reassurance of CEE Allies includes ensuring that the conventional part of the NATO Article 5 commitment remains valid; maximizing the safety, security, and effectiveness of any remaining NSNW; and modifying Russian NSNW deployments.

- Future NATO NSNW reductions and reassurance can be undertaken if they are carefully orchestrated, which would involve three steps:

  - First, NATO should undertake a set of balanced steps designed to reassure CEE states while limiting negative Russian responses.

  - Second, NATO should continue to promote opportunities to reset relations with Russia with an eye to creating mutual and reciprocal steps designed to address the remaining NSNW systems.

  - Third, if this process results in continued deployment of some U.S. NSNW in Europe for a period of time, some additional steps would be needed to make those systems safe, secure, effective, credible, and sustainable for as long as they remained deployed.

- The task for NATO will be to find the right mix of reassurance for the Allies and reset with Russia to create the conditions for additional NSNW reductions on the part of both NATO and Russia. Cooperative efforts and confidence building measures between NATO and Russia could make a positive contribution to both reassurance and further NSNW reductions.

Russia and mutually reduce NSNW systems might be seen by some Allies as weakening Alliance capabilities or resolve and hence undermining Article 5 reassurance.

## THE CHANGING NATURE OF NUCLEAR REASSURANCE

At the heart of the problem lies an identity crisis of NATO.

Reassurance has been at the core of NSNW deployments in Europe since the mid-1950s. NSNW—ground, air, and sea based—were introduced to Europe to offset what was seen as overwhelming Soviet/Warsaw Pact conventional force superiority, and thus to demonstrate reassurance that Europe would not be left defenseless or subject to the dreaded replay of the occupation/liberation cycle of 1940–1945. These weapons were intended to be triggers of escalation. Increasingly after the 1960s, however, they were also a critical part of the politics of Western security and U.S. efforts to control nuclear weapons use and further proliferation of nuclear weapons, even among friends. Allies were expected to participate in the deployment of NSNW through designated delivery systems and hosted bases, with warheads still under strict U.S. control.[3] But through NATO institutions like the Nuclear Planning Group (NPG), the Allies were also to play a direct role in the thinking and planning for their possible use. By the early 1980s, there was a further transformation; for certain NATO Allies NSNW deployments also represented a subtle, more symbolic notion of American commitment, engagement, and willingness to offset Soviet nuclear and conventional intimidation.

With the end of the Cold War in the early 1990s, NSNW appeared to play a less central role, both politically and operationally. The threat of conventional attack against Europe declined significantly as both NATO and Russia cut conventional forces and the Soviet Union and Warsaw Pact dissolved. Through a series of unilateral measures, the United States and Russia also retired or destroyed thousands of NSNW—warheads and launchers designed for European missions.

Currently, according to an unofficial estimate by Anthony and Janssen, the number of NSNW in Europe ranges between 150 to 200, deployed in five countries and delivered by dual capable aircraft (DCA) from many European nations.[4] Some Allies argue that they are no longer important to European defense and that it is time for them to be removed. Other Allies, especially the newer CEE members still see them as symbolic of the U.S. commitment and as such, important to the deterrence guarantee under Article 5. At the heart of the problem lies an identity crisis of NATO. Certain members, in particular the CEE countries, have placed an increasing emphasis on reassurance and Article 5 functions of the Alliance, including the role of the remaining U.S. NSNW. However, for many other

3. The United Kingdom also deployed NSNW that were committed to NATO under U.K. control.

4. Ian Anthony and Johnny Janssen, "The Future of Nuclear Weapons in NATO," (Berlin: Friedrich Ebert Stiftung, April 2010), http://library.fes.de/pdf-files/id/ipa/07151.pdf.

members while NATO remains important there is no clear consensus on NSNW as a means of reassurance.

## REASSURANCE AND CEE STATES

In July 2009, 22 former leaders from CEE states, including Vaclav Havel and Lech Walesa, wrote an open letter to President Obama stating their concern about Russian behavior. Within the Alliance, this contributed to a major debate about the need for reassurance that the Article 5 commitment remained fully valid. The immediate trigger for this concern was Russia's incursion into Georgia and a cyber attack on Estonia coupled with the Obama Administration's reset policy toward Russia and the fear that "reset" would come at the expense of the security of CEE states. But several other factors were at play, including the Medvedev doctrine[5] (which intended to lessen the ability of the United States to engage in unilateral action, and de facto, appeared designed to weaken NATO) and energy cut-offs that affected Ukraine, Belarus, and other parts of CEE. The February 5, 2010, Russian Defense Doctrine also reiterated language from previous documents by listing NATO geographical expansion and NATO's global projections as a danger to Russia.[6]

As NATO prepared to write its new Strategic Concept in 2010, there was therefore concern in CEE states that Russia was already in the midst of an assertive campaign to use ambiguous means, such as cyber attacks, energy cut-offs, and local ethnic unrest to intimidate and even attack its neighbors. With regard to the Alliance, the CEE states in particular were concerned that such measures would not reach the Article 5 threshold or that NATO decision making and response would be too slow to be effective.

There is a clear nuclear element to these demands for reassurance. Senior leaders in the Baltic States, Poland, and the Czech Republic interviewed for this paper expressed, in the main, deep opposition to unilateral NATO nuclear reductions, although the Poles have been vocal in supporting the elimination of NSNW in

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5. "Интервью президента Российской Федерации российским телеканалам 'Первый', 'Россия', НТВ." (Interview with the President of the Russian Federation on Channel One TV, in Russian). (August 31, 2008), http://www.kreml.org/interview/190774493. The second point of the doctrine states, "the world should be multipolar. Unipolarity is unacceptable. Domination is unacceptable. We cannot accept a world order where all decisions are taken by one country, even one as serious and as influential as the United States of America. This world is unstable and threatened by conflict."

6. *The Military Doctrine of the Russian Federation*, (February 5, 2010), http://www.carnegieendowment.org/files/2010russia_military_doctrine.pdf.

exchange for matching reductions in Russia.[7] These leaders highlighted that Russia's NSNW in Europe outnumber U.S. NSNW systems deployed there by some order of magnitude. Russia's conventional force weakness had also led to a Russian "first use" nuclear doctrine, not unlike NATO's Cold War policy of flexible response. They also pointed to Russian military exercises (Lagoda and Zapad) conducted in 2009 near the Baltic States, which ended with a simulated nuclear attack on Poland.[8] Moreover, when Poland made the decision to host 10 U.S. Ground Based Interceptors as part of the Bush Administration's Third Site missile defense program, Russian officials responded by threatening to target Poland with Russian nuclear systems in Kaliningrad.[9]

Although the views of CEE countries are not monolithic, many CEE officials believe that U.S. nuclear systems in Europe provide them with reassurance in at least two ways: they offset some of the weight of potential Russian nuclear intimidation and they symbolically represent America's commitment to use the full range of its military strength to defend all of its Allies.

Although the views of CEE countries are not monolithic, many CEE officials believe that U.S. nuclear systems in Europe provide them with reassurance in at least two ways: they offset some of the weight of potential Russian nuclear intimidation and they symbolically represent America's commitment to use the full range of its military strength to defend all of its Allies. The old Cold War notion of NATO deterrence through rapid escalation and the prospect of large-scale use of NSNW is no longer valid. It is, however, once again being replaced for some NATO members by an important symbol of American commitment.

The various components of extended deterrence, including, the role of strategic and NSNW, conventional forces, and missile defense is now an open issue in the ongoing NATO Deterrence and Defense Posture Review (DDPR). Although a consensus has yet to emerge, no matter how extended deterrence is dealt with by NATO members, it is different, albeit related to reassurance. If extended deterrence is seen to fail, reassurance will obviously fail as well.

## REASSURANCE BEYOND CEE STATES

Outside of the CEE sphere there are different Allied concerns and reassurance needs. NATO Allies in Southern Europe primarily seek reassurance against the proliferation of nuclear weapons and missiles in the Greater Middle East, and particularly in Iran. A nuclear Iran, plus the potential for even greater instability in the region, could enhance the risks of further proliferation to Europe's south.

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7. See footnote 2. See also Non-paper Submitted by Poland, Norway, Germany, and the Netherlands on Increasing Transparency and Confidence with Regard to Tactical Nuclear Weapons in Europe, http://www.fas.org/programs/ssp/nukes/nuclearweapons/nato-nonpaper041411.pdf (This April 2011 paper was signed by10 states (including the BENELUX countries) and delivered at the Berlin Foreign Minister's Meeting).

8. See reports from August 2009, including *Army Times*, August 19, 2009.

9. For example see *Sunday Times of London*, August 16, 2008. Also see *The Telegraph*, August 15, 2008. General Anatoly Nogovitsyn was quoted, "By hosting these (US missiles) Poland is making itself a target. This is 100 per cent certain. It becomes a target for attack. Such targets are destroyed as a first priority."

This may be of particular concern for the countries that host U.S. NSNW and that might feel greater insecurity if those systems were removed, in addition to losing a perceived special status within NATO that U.S. NSNW convey to these states.

Some NATO Allies in Western Europe take a different view of U.S. NSNW deployments. They see the U.S. weapons in Europe as anachronistic, a source of accidental risk, a destabilizing element in popular eyes, and a possible terrorist security risk. During the George W. Bush Administration, U.S. NSNW were removed from Greece and the bilateral arrangements with the U.S. were quietly suspended.[10]

German Foreign Minister Guido Westerwelle and other senior German officials have publicly advocated withdrawing the remaining NSNW from Germany—a position adopted by the German coalition government in 2009—while accepting that NATO should remain a nuclear alliance. Westerwelle was joined in February 2010 by Foreign Ministers from Belgium, Luxembourg, the Netherlands, and Norway[11] in a call to discuss nuclear arms control as part of the NATO Foreign Ministers' meeting in Tallinn in April 2010.[12] Certain NATO states, including these five countries, have been pushing to reconsider these issues with an eye toward changing policies. In a June 2010 speech in Berlin, Norwegian Foreign Minister Jonas Gahr Støre stated "it would make good sense [for NATO] to find a means of withdrawing all sub-strategic nuclear weapons from Europe and subsequently eliminating them."[13]

All NATO members agreed in the November 2010 Strategic Concept to work toward further reductions of NSNW and that "any further steps must take into account the disparity with the greater Russian stockpiles of short-range nuclear weapons," and that NATO was "committed to maintain, and develop as necessary, appropriate consultations among Allies on these issues."[14] An April 15, 2011, non-paper signed by 10 Permanent Representatives to NATO (including Germany,

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10. Tom Sauer and Bob van der Zwaan, *U.S. Tactical Nuclear Weapons in Europe after NATO's Lisbon Summit: Why Their Withdrawal Is Desirable and Feasible*, Belfer Center Discussion Paper Series (May 2011), Harvard College, http://www.belfercenter.ksg.harvard.edu/files/U.S.%20Tactical%20Nuclear%20Weapons%20in%20Europe.pdf. Sauer and Zwaan also note one possible reason for Greece's call for withdrawal as having to do with choosing a new fighter plane without having a nuclear capability.

11. Johan Bergenäs, Miles A. Pomper, William Potter, and Nikolai Sokov, *Reducing and Regulating Tactical (Non-Strategic) Nuclear Weapons in Europe: Moving Forward?*, The James Martin Center for Nonproliferation Studies (April 2010), http://www.cns.miis.edu/opapers/pdfs/reducing_tnw_april_2010.pdf. See also Alex Valeriyovych Fenenko, "После перезагрузки Итоги 2010 года в российско-американских отношениях" (After the Reset: Progression of Russian-US Relations in 2010) January 17, 2011, http://www.ng.ru/courier/2011-01-17/9_reload.html.

12. An interview with an official from one of the countries involved said that their participation was an effort to move Westerwelle away from a unilateralist position.

13. Norwegian Minister of Foreign Affairs Jonas Gahr Støre (Speech, Friedrich-Ebert-Stiftung, Berlin, June 22, 2010).

14. NATO *Strategic Concept*. 7–8.

the BENELUX countries, and Norway) delivered at the Berlin Foreign Minister's Meeting, also stated that NSNW reductions "should not be pursued unilaterally or be allowed to weaken the transatlantic link."[15]

The United Kingdom and France have not pressed for removing U.S. NSNW, and France in particular has urged that NATO retain a strong nuclear deterrent posture (in part due to concerns over the possible effect of U.S. NSNW withdrawal on the broader issue of nuclear deterrence and France's force de frappe).[16]

## NATO'S CURRENT POSITION

At the NATO Foreign Ministers meeting in Tallinn, NATO ministers agreed to a five-point formula suggested by Secretary of State Clinton, which sought to meet the concerns of all Allies. The five points are:

- As long as nuclear weapons exist, NATO will remain a nuclear alliance.
- As a nuclear alliance, sharing nuclear risks and responsibilities widely is fundamental.
- NATO's broad aim is to reduce the role and number of nuclear weapons.
- Allies must broaden deterrence against the range of twenty-first century threats.
- NATO's aim should be to seek Russian agreement to increase transparency on NSNW, relocate weapons, and include NSNW in the next round of arms control.[17]

The NATO Group of Experts chaired by Madeleine Albright concluded in May 2010 that "as long as nuclear weapons exist, NATO should continue to maintain secure and reliable nuclear forces, with widely shared responsibilities for deployment and operational support, at the minimum level required by the prevailing security environment."[18] The NATO Group of Experts also called for a change in

15. The April 15, 2011, non-paper to Secretary General Rasmussen was signed by representatives from Belgium, the Czech Republic, Germany, Hungary, Iceland, Luxembourg, the Netherlands, Norway, Poland, and Slovenia. It said: "The inclusion of NATO's tactical nuclear weapons in any arms control process should be subject to consultations within the alliance. The process should furthermore be based on the principle of indivisibility of security within the alliance and on the assumption of reciprocity between NATO and the Russian Federation."

16. See Chapter 1 by Simon Lunn, "NATO Nuclear Policy: Reflections on Lisbon and Looking Ahead to the DDPR."

17. NATO Group of Experts, "NATO 2020: Assured Security; Dynamic Engagement," (Brussels: NATO, May 17, 2010), http://www.nato.int/cps/en/natolive/official_texts_63654.htm.

18. Ibid., 11.

NATO declaratory policy and supported further reductions and "possible eventual elimination" of NSNW, although suggesting the retention of some forward-deployed U.S. NSNW on European territory "under current security conditions."

The NATO Group of Experts' report and the Tallinn principles became the basis for the Strategic Concept's nuclear formula, which was agreed by all member states in Lisbon in November 2010, and which "commits NATO to the goal of creating the conditions for a world without nuclear weapons but reconfirms that as long as there are nuclear weapons in the world, NATO will remain a nuclear alliance."[19] To implement this aspect of the Strategic Concept, NATO has undertaken a DDPR to identify the appropriate mix of nuclear and conventional capabilities needed by the Alliance. NATO Defense Ministers also agreed, in principle, to establish a new Weapons of Mass Destruction (WMD) Arms Control Committee. Members have not yet agreed on its task but it is expected to provide arms control and disarmament input into the Review and also offer a forum for consultations among NATO members on nuclear and conventional arms control more generally.

Adopting reassurance measures to create the conditions for further NSNW reductions will involve both the conventional and strategic arena, including a critical role for cooperative measures in European missile defense.

## SEVEN PATHS TO REASSURANCE IN ARTICLE 5

Numerous measures to help reassure CEE and Southern Allies have been taken and more are under consideration. These are discussed and evaluated below. Adopting reassurance measures to create the conditions for further NSNW reductions will involve both the conventional and strategic arena, including a critical role for cooperative measures in European missile defense. The underlying purpose, however, should be creating adequate reassurance to address the perceived challenges and concerns of Allies. All NATO members would nevertheless draw significant confidence and reassurance from a U.S.-Russian arms control agreement that would provide transparency, a clear timetable for NSNW reductions, and a set of reciprocal, verified levels on NSNW. The nature of those reciprocal measures is a key issue now before the Alliance.

This section reviews seven sets of measures designed to enhance confidence in Article 5 and assesses the positive contribution that they might make to create the conditions for further nuclear reductions.

### Building Confidence through Operational Success and Declaratory Statements

One of the most important ways to reassure NATO Allies that the Alliance will meet its Article 5 obligations is a combination of success in current military operations and clear statements of intent with regard to Article 5 (backed up by credible preparations, such as an improved early warning, planning, and crisis

19. NATO *Strategic Concept*, 4–5.

management capacity discussed below). These two seemingly different points have a common foundation: confidence that the Alliance can and will deliver on its commitments. NATO is currently conducting military operations in Afghanistan (International Security Assistance Force, ISAF) and Libya, (NATO will end its operations in Libya at the end of October, though NATO will continue to fulfill its UN mandate to protect civilians) providing stability deployments in Kosovo, training security forces in Iraq, flying air policing operations over the Baltic countries, and operating counter-piracy and counter-terrorism missions at sea. Despite political differences and operational caveats in Afghanistan and Libya—including notable deficiencies in capabilities and stocks for the Libyan mission—the Alliance remains fully engaged in both. Success, however defined, in these missions is critical to the health of the Alliance itself. CEE Allies understand the linkage between current operations and Article 5, and that has prompted them to contribute significantly to ISAF.

The success of NATO operations in Afghanistan remains uncertain with ongoing debates about level and duration. If operations end less than successfully, that will raise questions about political will within the Alliance.

Success in operations could reassure Allies further if they were to be coupled with strong statements of intent with regard to Article 5. The Alliance has taken a major step to do this. The first substantive point in the new Strategic Concept is that the Alliance "reconfirms the bond between our nations to defend one another against attack, including against new threats to the safety of our citizens."[20] The first Alliance core task in the new Concept is collective defense: "NATO members will always assist each other against attack; in accord with Article 5 of the Washington Treaty…the commitment remains firm and binding."[21] The Alliance should seek every opportunity in summit and ministerial meetings to reconfirm this commitment.

The success of NATO operations in Afghanistan remains uncertain with ongoing debates about level and duration (progress is evident in Libya). If operations end less than successfully, that will raise questions about political will within the Alliance. However, as with the Bosnia conflict more than 15 years ago, the Alliance has demonstrated the ability to adapt to the changing shapes of political consensus.

## Enhancing Conventional Plans, Exercises, and Decision-Making Procedures

As the Strategic Concept was under development, a major concern of NATO's CEE Allies was that NATO did not have adequate contingency plans for defensive operations in their territory. NATO has subsequently taken remedial steps.[22] A new contingency plan for the defense of Poland now exists, which has recently been expanded to the Baltic States. These plans should be broad in scope, focusing

20. NATO *Strategic Concept*, 4.

21. NATO *Strategic Concept*, 7.

22. Baltic Reports, January 16, 2010, and private interviews with NATO officials.

not just on major tank attacks but also on smaller scale incursions and other more ambiguous means of intimidation. Should NATO itself be unable to act, presumably the United States with others might seek a more limited coalition to mount a response. It may therefore also be useful to explore whether the United States European Command (EUCOM) should develop its own contingency plans for defending this region.

These Article 5 contingency plans need to be exercised at the usual levels—command post exercises, tabletop play, simulations adapted to changing circumstances, and occasionally exercises in the field. Some European NATO nations have been reluctant to fully exercise Article 5 responses for fear of offending Russia. However, Russia's Lagoda and Zapad exercises are perceived by some Allies as justification for NATO to do so if all Allies concurred.[23] Another major cause for reluctance is cost and other more critical force constraints; commitments to ISAF, for example, have reduced the availability of resources and forces for such exercises. As ISAF withdrawals take place, these conditions might change and such exercises could potentially increase.

Such exercises are important to certain CEE Allies. For example, a senior Polish official recently suggested live fire exercises in Poland for the NATO Response Force's (NRF) Article 5 mission.[24] As with planning, however, NATO exercises should not be limited to major joint operations but should also include ambiguous scenarios where more debate is needed. NATO is currently deciding how robust its next major exercise, Steadfast Jazz 2013, will be.[25]

Although creating contingency plans should not be seen as provocative by Russia, exercising these plans might be. Transparency and dialogue in the NATO-Russia Council and its working groups should therefore be an important first step.

Although creating contingency plans should not be seen as provocative by Russia, exercising these plans might be. Transparency and dialogue in the NATO-Russia Council and its working groups should therefore be an important first step.

There is also concern that even with proper contingency plans and exercises, NATO will not be able to make decisions quickly enough to respond to provocations. These do not primarily concern NSNW although the nuclear bodies within NATO could benefit from updating and a greater degree of transparency about their planning assumptions and operational arrangements. Two steps can help to reassure these conventional concerns. First, NATO has already created a new strategic assessment capability in its international staff. This capability is intended to provide NATO with early warning of potential incidents. It currently focuses only on new emerging threats; however, members could consider broadening its mandate to include strengthening NATO's readiness for limited conventional conflict (designed in such a way as to ensure that NATO preparations are not aimed at any particular country and cover all possible threats).

23. NATO also has had exercises involving NSNW in response to attack; perhaps the best known, the Able Archer exercise, was conducted in November 1983.

24. Interview with defense official in Washington, D.C., at National Defense University, 2010.

25. NATO, https://transnet.act.nato.int/WISE/NATOACTRes/CY2011NATO/STEADFASTJ4.

And second, NATO should also exercise its Article 5 decision making responsibilities using robust scenarios and simulations with both NATO members and NATO political leadership. By identifying problem areas of decision making in advance, Allies can gain greater confidence that, if necessary, NATO would respond to provocations in a timely manner. Some of these reassurance goals were pursued in the March preparatory CMX 2011 in Tallinn.[26]

## Strengthening Conventional Forces and the Article 5 Mission

Despite perceived and publicly stated concerns regarding Russia and the need for further reassurance, only a handful of European nations now spend more than 2 percent of their GDP on defense…

NATO needs to strengthen its conventional forces to support fully the Article 5 mission. The economic recession and reduced sense of threat have led most NATO nations to reduce their defense budgets significantly. Despite perceived and publicly stated concerns regarding Russia and the need for further reassurance, only a handful of European nations now spend more than 2 percent of their GDP on defense and manpower levels have decreased significantly and seemingly will continue to do so after withdrawals from Afghanistan.[27] The U.S. contribution to overall NATO defense spending has risen since a decade ago from about half the total budget to nearly three quarters today.

Most of these European national reductions have been taken unilaterally without much consultation with the alliance. The effect of these reductions on NATO's overall capabilities is uncertain and within NATO there is little will to take on nations that are cutting too deeply in critical areas because all are cutting deeply. In addition, operations in Libya have demonstrated that without the United States, European nations have critical materiel and significant operational shortfalls, including communication gaps, low stocks of precision munitions, and difficulty in providing enabling equipment, such as refueling aircraft. These factors led U.S. Secretary of Defense Robert Gates to recently declare that unless these trends are reversed, NATO's future is "dim if not dismal."[28]

The United States recently has also announced force posture revisions for EUCOM, to be implemented in 2015. The United States will retain three brigade combat teams (BCT) (one heavy, one Stryker, one airborne) in Europe, down one from the current deployment but up one from the 2004 withdrawal decision. The

26. NATO, https://www.nato.int/cps/en/natolive/news_71062.htm

27. See spring 2011 speeches by NATO Secretary General Rasmussen. See also Lawrence F. Kaplan, "Open Wide: How Libya Revealed the Huge Gap between U.S. and European Military Might," *The New Republic* (April 26, 2011), http://www.tnr.com/article/crossings/87377/libya-nato-military-power-europe-us.

28. U.S. Secretary of Defense Robert M. Gates, "The Security and Defense Agenda (Future of NATO)", (Speech, Brussels, Belgium, Friday, June 10, 2011), http://www.defense.gov/speeches/speech.aspx?speechid=1581 During this speech he also declared, "I've worried openly about NATO turning into a two-tiered alliance: Between members who specialize in 'soft' humanitarian, development, peacekeeping, and talking tasks, and those conducting the 'hard' combat missions."

effect of these changes is somewhat mitigated by the fact that in the past one or two of the four BCTs assigned to Europe have often been forward deployed, especially to Afghanistan, along with some of the designated nuclear DCA. Therefore, there may be a greater number of U.S. ground forces actually deployed in Europe.[29] These three BCTs will be complemented by missile defenses on land (Poland and Romania) and Aegis ships at sea, forward stationed special operations aircraft, and a long-duration small aviation detachment in Poland.

Recognizing the need particularly to reassure the CEE Allies, NATO members agreed at the 2010 Lisbon Summit to a Lisbon Critical Capabilities Commitment that included several capabilities related to Article 5 missions. NATO members also agreed to a new Command Structure Reform designed to make senior commands more deployable, including to the eastern part of the Alliance.

Overall, the relatively uncoordinated European defense cuts, including substantial cuts by CEE countries, and projected American manpower reductions could negatively affect reassurance of Allies. This could be offset somewhat, however, by what NATO Secretary General Rasmussen has called "smart defense."[30] This would include an array of measures to spend remaining defense Euros and dollars wisely. Examples of smart defense might include regional multinational forces, regional equipment and facility sharing, pooling funds for enablers like the C-17 consortium, niche capabilities and division of labor, fencing funding for top priority missions, ensuring that rapid reaction capabilities like the NRF are automatically reconstituted for Article 5 missions, earmarking at least one U.S. BCT for the Article 5 mission and having it exercise with the NRF, and considering new roles for conventional prompt strike and other U.S.-based capabilities for defense in Europe. A well-constructed smart defense policy that is accepted by the NATO Chicago Summit in 2012 could have a sound reassuring affect for all Allies.

## Enhancing Support for Training and Installations

CEE Allies have consistently called for a higher level of permanent NATO involvement in their region. The U.S. decision to locate some missile defense deployments in Poland and Romania, forward deployed special operations aircraft, and a longer-term aviation detachment (for training purposes and to assist with rotational F-16 deployments) in Poland provide a measure of reassurance.[31] A permanent U.S. Patriot deployment in Poland is now considered unnecessary. But there

29. NATO Source (Alliance News blog), January 11, 2011, http://www.acus.org/natosource.

30. NATO, "NATO Secretary General Calls for 'Smart Defense' at Munich Conference," February 4, 2011, http://www.nato.int/cps/en/natolive/news_70327.htm?selectedLocale=en.

31. See also Marcin Sobczyk, and Carol E. Lee, "Obama to Announce Permanent Stationing of U.S. Air Force Detachment in Poland," *Wall Street Journal,* May 28, 2011, http://www.blogs.wsj.com/emergingeurope/2011/05/28/obama-to-announce-permanent-stationing-of-u-s-air-force-detachment-in-poland/.

Russian political and military leaders have consistently expressed particular concern about NATO moving installations nearer to its borders…

are limits to how far NATO can go with forward deployment of forces because NATO promises made in the context of the NATO-Russia Founding Act of 1997 constrain both nuclear deployments and permanently stationing any "significant combat" forces on former Warsaw Pact territories.[32]

Several additional steps have been suggested, particularly by leaders in the Baltic States. These include extending and making the NATO Baltic air policing role permanent, using a second Baltic airfield for those air policing operations, restoring NATO Security Investment Program funding for military installations, making the NATO Center of Cyber Excellence in Estonia more of a regional command headquarters, creating new NATO transport and logistics centers, and enhancing port facilities for military use.[33] Some of these suggestions are under consideration and all are intended to pull NATO installations and NATO "boots on the ground" in their direction in order to maximize their trip wire effect.

Few non-CEE allied states have taken these suggestions and some leaders have indicated their opposition in private.[34] Several suggestions, such as expanding NATO infrastructure, will be expensive, especially in an era of declining defense budgets. There is also some risk involved in implementing all of these suggestions. Russian political and military leaders have consistently expressed particular concern about NATO moving installations nearer to its borders (either because they are concerned over NATO military capabilities close to Russia, or they simply want an unfettered ability to pressure their neighbors if required). Therefore, each of these suggestions will need to be weighed carefully based on cost and political effect. The NATO-Russia Council might serve as a forum in which to discuss these measures.

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32. For the details and conditions of these promises, see James M. Goldgeier, *Not Whether But When,* (Washington, D.C.: Brookings Institution, 1999), Chapter V. Russia in 2010 claimed multiple infractions. See Ministry of Foreign Affairs of the Russian Federation *The Facts of Violation by the United States of its Obligations in the Sphere of Nonproliferation of Weapons of Mass Destruction and Arms Control,* Information & Press Department, August 7, 2010. The 1997 statement says: "NATO reiterates that in the current and foreseeable security environment, the Alliance will carry out its collective defense and other missions by ensuring the necessary interoperability, integration, and capability for reinforcement rather than by additional permanent stationing of substantial combat forces. The member States of NATO reiterate that they have no intention, no plan and no reason to deploy nuclear weapons on the territory of new members, nor any need to change any aspect of NATO's nuclear posture or nuclear policy—and do not foresee any future need to do so." This also parallels the promise made in the German unification treaties that no nuclear deployments will ever be made on former East German Territory.

33. Based on interviews in Washington with senior Baltic officials.

34. Based on interviews in Brussels, April and May 2011.

## Broadening Deterrence to Meet New Challenges

Strengthening reassurance and creating the conditions for further NSNW reductions may also require NATO responses to three new challenges: missile attacks from the Middle East, cyber attacks from multiple sources, and interruption of energy flows. Some progress has been made on all three.

The future of missile defense cooperation will be a major determining factor in Russia's willingness to consider further NSNW reductions.

**MISSILE DEFENSE.** The missile threat from Iran continues and efforts to prevent Iran from developing a nuclear weapon may fail. At the Lisbon Summit, NATO agreed to embrace the Obama Administration's European Phased Adaptive Approach (EPAA), which relies on sea-based Aegis deployments and upgraded land-based Standard Missiles (SM-3s). The United States will finance the Aegis and SM-3 interceptors, other nations are expected to finance their own interceptors, and NATO will fund the common command and control system. Radars will be deployed and their data fused to provide common and timely warning. Deployments are already underway and this step has provided some reassurance for Allies. The decision was negotiated carefully with Turkey; however, many decisions remain and discussions continue within NATO.

The United States and NATO are now discussing missile defense cooperation with Russia. Russia has sought a single, interoperable system, whereas the United States and NATO have insisted on two separate systems. Russia has asserted the need for mutual treaty limits on missile defense numbers, location, interceptor velocity, and deployments. Initially, Russia proposed both system integration and a "sectoral approach" that would have given Russia responsibility for the defense of some NATO territory close to its borders. NATO has firmly rejected the "sectoral approach." The United States has proposed a center or centers to fuse launch and other data to build a common operating picture, to allow for common training in operations and other cooperative arrangements to give Russia a greater sense of comfort without necessitating a common system.[35] The future of missile defense cooperation will be a major determining factor in Russia's willingness to consider further NSNW reductions.

Despite NATO's decision to deploy EPAA, there is the possibility that in the future NATO members may need to decide on whether additional steps are necessary to deter Iran from using nuclear tipped missiles against NATO.

**CYBER ATTACKS.** Other measures can be taken to reassure Allies regarding cyber attacks. NATO has already created a cyber response center and a center of

35. See NATO Secretary General Anders Fogh Rasmussen (Speech, RUSI Missile Defense Conference, London, June 15, 2011), http://www.rusi.org/events/ref:E4CF77C90E3362/info:public/infoID:E4DF8CB5F15F42/. In the speech he said, "We could envisage setting up a joint centre where we could look at the ballistic missile threat together, share early warning data, exchange information and share assessments. We could also envisage setting up a joint centre where we could coordinate our responses."

excellence in Tallinn, but thus far NATO's mandate for cyber security is focused primarily on defending NATO's own network and infrastructure. The recent Strategic Concept has sought to broaden NATO's mandate to "prevent, detect, defend against and recover from cyber attacks."[36] NATO is currently debating its role in supporting national systems that NATO relies on for its operations. Greater efforts should be taken to provide individual NATO nations with cyber security for their defense establishments, to set common standards for critical infrastructure protection, and to coordinate national efforts. NATO cyber awareness and warning could also be better coordinated and integrated, responses to attacks could be better coordinated, and the center of excellence in Tallinn could be strengthened. These activities should take place parallel with activities within the European Union and Organization for Security and Cooperation in Europe. For example, EUCOM could provide a cyber range to the alliance to test various defensive arrangements.

**ENERGY SECURITY.** Another area where greater reassurance can be achieved is energy security. The new Strategic Concept calls for greater protection of critical energy infrastructure and transit areas. It also calls for greater consultation and contingency planning among Allies. The Concept does not directly address the question of a united NATO response to the use of energy cut-offs to intimidate or pressure individual Allies.[37] The new future promised by the shale gas sources discovered in northern Europe is yet to be explored, as are the implications of energy dependency and increased market demand competition implicit in Germany's decision to halt exploitation of nuclear power and to accept continued dependence on external gas and oil supplies. There does not appear, however, to be any active proposals for multilateral responses or guarantees; arrangements with Russia and other suppliers are almost entirely bilateral and market driven.

Broadening deterrence to these three categories of new challenges will provide a considerable degree of comfort to all Allies. Implementing the Lisbon missile defense decision and reaching agreement with Russia on missile defense cooperation is perhaps most important.

## Maximizing Deterrent Capabilities of Remaining U.S. NSNW

The conditions for further NSNW mutual reductions could be made more palatable if the nuclear systems that do remain maximize their credibility for deterrence.[38] The current NSNW posture in Europe suffers from several deficiencies, not least that the B-61 gravity bombs and the DCA to deliver them are aging.

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36. NATO *Strategic Concept,* 16–17.

37. NATO *Strategic Concept,* 17.

38. See "Report of the Secretary of Defense Task Force on DoD Nuclear Weapons Management," December 2008, 1417 (otherwise known as the Schlesinger Report).

**READINESS LEVEL.** Under current NATO nuclear policies and procedures, the overall readiness of the force is measured in months.[39] This is due to NATO's assessment of the current strategic environment. If the strategic situation deteriorates and NATO members were prepared to undertake the necessary measures, this readiness level could be dramatically improved.

**WEAPONS SECURITY.** Some have raised issues about NSNW security (e.g., the break-ins by protestors at the Kleine Brogel site in Belgium).[40] Continued improvements will be needed to maintain a safe, secure, and effective system. The 2008 USAF Blue Ribbon Review of Nuclear Weapons Policies and Procedures concluded that "several European nuclear storage sites require additional resources to meet security standards" including with regard to support buildings, fences, lighting, and security systems.[41] These shortfalls do not necessarily pose an imminent threat of loss to a terrorist group, but NATO urgently needs to address these problems.

**WEAPONS LIFE EXTENSION.** Another set of improvements relates to the remaining B-61 gravity bombs deployed in Europe. A life extension program is now funded and underway. This issue can be managed by the United States alone and is on track, although in spring 2011, there seemed to be Congressional opposition.[42] Officials and nongovernment experts in certain European countries have also requested a broader review about the longer-run utility of these bombs.

**DUAL CAPABLE AIRCRAFT.** Perhaps the most difficult question relates to the DCA owned by European Allies. U.S. F-15s and F-16s are dual capable as will be the Joint Strike Fighter (JSF). But the F-15 and F-16s are aging and only a few European nations have firm plans to buy the JSF (at this time it is questionable whether particularly Belgium, but also the Netherlands, would find the funds for JSF

…the F-15 and F-16s are aging and only a few European nations have firm plans to buy the Joint Strike Fighter…

39. NATO, "NATO's Nuclear Forces in the New Security Environment," January 24, 2008, http://www.nato.int/issues/nuclear/sec-environment.html "In 2002, in a second step, the readiness requirements for these aircraft were further reduced and are now being measured in months."

40. Robert S. Norris, and Hans M. Kristensen, "U.S. Tactical Nuclear Weapons in Europe, 2011," *Bulletin of the Atomic Scientists* (December 2010). See also Hans M. Kristensen, "U.S. Nuclear Weapons Site in Europe Breached," (FAS Strategic Security Blog), February 4, 2010, http://www.fas.org/blog/ssp/2010/02/kleinebrogel.php.

41. U.S. Air Force, *2008 USAF Blue Ribbon Review of Nuclear Weapons Policies and Procedures*, February 12, 2008, http://www.airforce-magazine.com/SiteCollectionDocuments/TheDocumentFile/Current%20Operations/BRR020808ExecSummary.pdf. See also Associated Press, "Panel Urges Air Force to Unify Nuclear Command," *New York Times*, September 12, 2008, http://www.nytimes.com/2008/09/13/washington/13military.html?partner=rssnyt&emc=rss.

42. Tom Z. Collina, "Pentagon to Revise Nuclear Guidance," (Arms Control Association, June 2011), http://www.armscontrol.org/act/2011_06/NuclearGuidance.

in a nuclear role). Germany has opted for the Eurofighter, which would require modifications to become dual capable and may raise issues associated with sharing design information with the United States. Moreover, Germany's recent decision to opt out of civil nuclear power raises the question of whether, politically, Germany could approve a new military nuclear program. Germany's aging Tornado fleet will be downsized significantly, but with life extension programs, enough Tornados could be available to perform the DCA role for at least another decade.[43]

**ALTERNATIVE DELIVERY SYSTEMS.** NATO has conducted a detailed study of eight alternative delivery systems and eliminated most as either too costly or impractical politically. One option that deserves more consideration is creating a NATO nuclear air wing, which could be consistent with the pooling and sharing arrangements that NATO is promoting as part of its "smart defenses" initiative. Many European nations, however, may view this option as agreeing to pursue a new NATO nuclear program and therefore upgrading the existing DCAs appears the most likely outcome. For those not purchasing the JSF, life extension programs are a possible short-term solution, whereas adapting the Eurofighter to characteristics of the reconstituted B-61 may be a longer-term solution.

**DEPLOYMENT OPTIONS.** Various deployment options are under consideration by defense analysts, including a "crisis-reconstitution" DCA posture and consolidating sites from five to two or three. Both of these options carry risk. Under the first option, U.S. nuclear weapons would be withdrawn from Europe and in accordance with continuing consultations and continuous planning among the Allies, reintroduced into agreed sites in time of need. According to this reconstitution proposal, measures such as information sharing, nuclear consultations, common planning, and common execution might provide deterrence without a U.S. nuclear presence in Europe in the interim.[44] Nuclear sharing has merits, but the fundamental challenge is that the reconstitution of nuclear weapons might not be approved if they are needed, either by European host nations or by the United States itself. More importantly, some argue that reintroducing nuclear weapons into a theater in time of crisis might be destabilizing for crisis management. In addition, certain officials have argued that implementing this option in East Asia has reduced the degree of reassurance among U.S. Allies in that region.[45]

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43. Based on interviews with European analysts.

44. Karl Heinz Kamp, "NATO's Nuclear Posture Review: Nuclear Sharing Instead of Nuclear Stationing," Research Paper no. 68 (NATO Defense College, Rome, May 30, 2011).

45. Meetings with Korean and Japanese officials in recent months revealed concern about U.S. defense commitments in the face of Chinese assertiveness. See also Michito Tsuruoka, GMF Policy Brief, October 8, 2010, in which he argues that a Nuclear Planning Group approach would strengthen extended deterrence for Japan.

The second option—consolidating sites—runs the risk of creating a slippery slope. If these weapons are consolidated and in the process removed from Germany, at least two other countries would follow. The last two would thus be under intense political pressure to remove the weapons as well, and are not uniformly supported for this role by the Allies.[46] If a consolidation agreement is part of an overall arms control approach with Russia, this slippery slope might be mitigated.

**COMMAND AND CONTROL.** Additional modifications need to be made to command and control (C2) capabilities and readiness. NATO's nuclear C2 need a reliable and resilient "dual" system that avoids "single point of failure" breakdowns. Such a system is available at limited cost. And the readiness of today's deployment is in need of dramatic improvement.

**DECLARATORY POLICY.** Finally, both NATO nuclear guidance and its declaratory policy can be updated to give them more credibility and palatability. NATO's current nuclear guidance dates back to the 1990s. Although the United States is not ready to declare that the sole purpose of nuclear weapons is to deter nuclear attack, the declaratory policy in the Nuclear Posture Review (NPR) is close to that position, leaving a narrow range of other purposes related primarily to other WMD attacks conducted by states not in compliance with, or party to, the Nuclear Non-proliferation Treaty. Adopting the NPR language as NATO declaratory policy could also make remaining deployments more palatable to European public opinion, although France reportedly has continued to resist any change in NATO declaratory policy, even after the 2010 Strategic Concept.

If NATO's strategy is to negotiate with Russia for parallel efforts at transparency, removing NSNW from the NATO-Russia border areas, and some mutual reductions, then the NSNW that remain—no matter for how long, or under what deployment or operational configuration—will need to be safe, secure, effective, and credible. Steps have been taken and more are needed to create these conditions.

## Modifying Russian Deployments and Doctrine

NATO's new Strategic Concept focused on Russian deployments and doctrine stating that "in any future reductions, our aim should be to seek Russian agreement to increase transparency of its nuclear weapons in Europe and relocate these weapons away from the territory of NATO's members." If this policy is to be sustained, it is hard to envision future NATO nuclear reductions without parallel and reciprocal Russian actions relating to transparency, location, and numbers of NSNW. The question is how to engage with Russia on NSNW.

46. Interviews in Brussels, May 2011.

The United States today has suggested the possibility of a new global follow-on to the New START treaty with comprehensive warhead ceilings and has also proposed informal transparency measures on NSNW; however, a detailed approach and strategy have yet to be adopted.

The "Follow-on to New START" is likely to be a bilateral negotiation on a global ceiling for U.S. and Russian deployed and nondeployed strategic and nonstrategic warheads, with a common ceiling and possibly freedom to mix within that ceiling.[47] Such a negotiation would be an important step for global stability, but it would take considerable time to negotiate. It would also have significant verification issues to resolve and it remains to be seen how NSNW would be specifically addressed if there is freedom to mix warheads under a common ceiling.

Interim steps need not be packaged in a traditional arms control treaty format. They could consist of more flexible reciprocal steps, building upon the confidence created by previous steps.

Further arms control steps either between the United States and Russia or NATO and Russia could include issues of relocation to specified geographical limits (e.g., a nondeployment zone on either side of the NATO-Russia border), mutual or reciprocal reductions, and/or consolidating deployment or storage sites. Each has advantages and disadvantages. Relocation to Russia's east would comfort NATO Allies but could create concerns for Japan and China as well as undercut Moscow's hopes for a global INF ban to parallel the agreement with the United States.[48] Reciprocal reductions (e.g., 30 percent each) would lead to larger numerical cuts for Russia but would leave NATO with very few remaining U.S. weapons on European soil. And, consolidating NATO sites could lead to the "slippery slope" for NATO deployments discussed earlier. Russian leaders also stress the need for more comprehensive negotiations that include conventional weapons, missile defense, and space weapons, all of which would drastically complicate NSNW talks.

Interim steps need not be packaged in a traditional arms control treaty format. They could consist of more flexible reciprocal steps, building upon the confidence created by previous steps. They might even take the form of paired unilateral initiatives, similar to the U.S. and Russian pledges on shorter range NSNW systems of the early 1990s. A good starting point would be transparency measures. U.S. officials have called for increased NSNW transparency on a reciprocal and parallel basis through data exchanges as a first step; and verification could be

47. See NSC Senior Director Gary Samore, (Speech, Czech Republic, April 12, 2011), 4.

48. Russia and the United States issued a statement in 2007 reaffirming their support for the 1987 INF Treaty and calling upon other governments to renounce and eliminate their ground-launched missiles with ranges banned by INF. The statement declared U.S. and Russian intentions to "work with all interested countries" and "discuss the possibility of imparting a global character to this important regime." This may be a harder case to make, in particular to China, if Russian NSNF are moved closer to China's borders.

added.[49] Most European Allies appear to support the concept of implementing parallel transparency measures as a step toward further arms control. This has been explored in the recent German-Swedish "Food for Thought" paper, which was signed by 10 Allies,[50] and also the April 15, 2011, non-paper that was signed by 10 European Permanent Representatives and which suggested that a transparency process could take place in the NATO-Russia Council.[51]

NATO and Russia might also by national decisions exchange information on safety and security of weapons and storage sites, along the lines of the successful U.S.-Russian exchanges on strategic weapons that began in spring 2011. Officer exchange programs could be established, which focus on nuclear issues. High-level seminars similar to the Vienna Doctrine Seminars of the 1990s could be held on nuclear doctrine and strategy. Exercises could be held to practice responses to nuclear accidents and improve nuclear forensics.

Developing an approach designed to address Russian NSNW would require close consultation with Allies and careful negotiations with Russia. But it, along with further reassurance measures discussed above, presents perhaps the most promising path to "create the conditions" for further NSNW reductions.

## CONCLUSIONS

As NATO members engage in the ongoing DDPR, national deliberations are deepening on the issue of NSNW. All members remain committed to the compromise reached in the new NATO Strategic Concept on the role of nuclear weapons and most appear willing to discuss NSNW in the context of further reductions and assess the broader effects for Alliance security, solidarity, and global nonproliferation. Most recently, the non-paper signed by 10 member states (including several host countries, "old NATO" members, and CEE countries—Czech Republic, Hungary, Poland, and Slovenia) stressed the need for "more systematic dialogue between NATO and Russia" on achieving greater transparency, mutual trust, and confidence relating to NSNW.[52]

In this context, reassurance of Allies is a core issue, as is NATO's evolving relationship with Russia. A plan to create the conditions for future NSNW reductions could benefit from all seven reassurance measures discussed in this paper.

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49. On March 29, NSC Advisor Thomas Donilon spoke at the Carnegie Endowment saying, "In advance of a new treaty limiting tactical nuclear weapons, we also plan to consult with our Allies on reciprocal actions…as a first step, we would like to increase transparency on a reciprocal basis concerning the numbers, locations and types of nonstrategic forces in Europe."

50. Background for Foreign Affairs Council, Defense Ministers and Development Ministers, Brussels, December 8–9, 2010, December 8, 2010. The paper advocated "enhanced cooperation, with a view to spending resources in Europe more efficiently and to maintain a broad array of military capabilities to ensure national objectives as well as Europe's ability act credibly in crises."

51. See Non-paper Submitted by Poland, Norway, Germany, and the Netherlands on Increasing Transparency and Confidence with Regard to Tactical Nuclear Weapons in Europe, http://www.fas.org/programs/ssp/nukes/nuclearweapons/nato-nonpaper041411.pdf, proposals 1 and 2.

52. Ibid.

In this context, reassurance of Allies is a core issue, as is NATO's evolving relationship with Russia. A plan to create the conditions for future NSNW reductions could benefit from all seven reassurance measures discussed in this paper.

The first five measures all have a significant positive effect on reassuring Eastern Allies that the conventional part of the NATO Article 5 commitment remains valid. Moreover, declaratory statements and broadening deterrence to include missile defense also have a relatively positive affect on reassurance with regard to nuclear deterrence.

Of these first five measures, enhanced exercises, greater installation support in the Baltic States, and missile defense deployments might have a negative effect on NATO-Russia relations. This could, however, be mitigated through enhanced cooperative efforts and confidence building measures with Russia.

Steps pertaining to the sixth measure—maximizing the safety, security, effectiveness, and credibility of NSNW—are necessary to retain confidence in NATO's deterrence and defense posture throughout the alliance.

Finally, the seventh measure—involving approaches to achieve Russian actions relating to transparency, location, and numbers of NSNW—will be central to reassurance of Allies.

Future NATO NSNW reductions and reassurance measures will need to be carefully orchestrated and would involve three steps for NATO: (1) focus on balanced steps designed to reassure Allies and limit negative Russian responses; (2) continue to promote improved relations with Russia, including mutual and reciprocal steps relating to NSNW; and (3) ensure NATO's deterrence and defense posture, including nuclear deterrence, remains credible.

*The views expressed in this chapter are the authors' own and do not reflect the views of institutions with which the authors are associated.*

## APPENDIX: **SUMMARY OF IMPACT OF SEVEN MEASURES**

HANS BINNENDIJK

The chart below summarizes in an admittedly subjective analysis of the effect that each of these seven sets of measures might have on four different outcomes: conventional reassurance, nuclear reassurance, contributions to future nuclear reductions, and negative impact on U.S.- Russian relations. Each part of this matrix is rated based on the above analysis.

| **SEVEN REASSURANCE MEASURES** | Importance to Conventional Reassurance | Importance to Nuclear Reassurance | Contribution for Further Nuclear Reduction | Negative Effect on NATO-Russia |
|---|---|---|---|---|
| 1. Building confidence through operational success and declaratory statements | ▲ | ■ | ▽ | ▽ |
| 2. Enhancing conventional plans, exercises, and decision-making procedures | ▲ | ▽ | ▽ | ▲ |
| 3. Strengthening conventional forces and the Article 5 mission | ▲ | ▽ | ▽ | ▽ |
| 4. Enhancing support for training and installations | ▲ | ▽ | ▽ | ▲ |
| 5. Broadening deterrence to meet new challenges | ▲ | ■ | ■ | ■ |
| 6. Maximizing deterrent capabilities of remaining U.S. NSNW | ▽ | ▲ | ■ | ■ |
| 7. Modifying Russian deployments and doctrine | ▽ | ▲ | ▲ | ▽ |

**KEY:** ▲ = High Impact ■ = Medium Impact ▽ = Low Impact

CHAPTER SIX

# Interlinked:

## *Assurance, Russia, and Further Reductions of Non-Strategic Nuclear Weapons*

CATHERINE McARDLE KELLEHER

The internal NATO debate on the future of the remaining U.S. forward deployed non-strategic nuclear weapons (NSNW) inevitably turns to the question of reassurance and the political links these weapons have to a U.S. pledge to use all its powers to preserve European security against attack. Extended deterrence is a construct developed in the 1950s, when there were many nuclear weapons in Europe, an ongoing arms race with Russia, and a common perception among Allies and the United States on threats. Since the end of the Cold War, the number of NSNW has reduced dramatically from the original thousands to an estimated 200 warheads to be delivered by dedicated aircraft of the United States and five Allies in Europe.

This chapter will examine key issues associated with reassurance—or more correctly "assurance"—for the Alliance, focusing on the critical related challenge of assuring Russia. The argument here will be that the security environment is far different now than before 1991 or the decade thereafter. Many officials and experts within NATO therefore favor adopting a wide range of credible assurance options, implemented together with a schedule for NSNW reductions by a time certain, if not eliminating this entire category from active deployment on European territory.

What complicates this task, however, is that it is almost inextricably paired with another quite different search for assurance: how to find a new positive role for Russia in European security. This is the major shift in Europe since 1991: Russia is no longer an adversary but not yet a partner in European security arrangements.[1]

1. Some observers reject this intermediate category as anything other than transition to either friend or foe.

# CHAPTER SIX: **KEY FINDINGS**

- There are many multilayered and multifaceted clamps that constitute assurance and the "existential deterrence system" of U.S.-NATO guarantees supported by continuing, if smaller, American conventional force deployments in Europe.

- The expansion of NATO into the former Eastern Bloc and perceived interference with Russia's near abroad has become a constant sticking point in U.S.-NATO-Russian relations. Within Russia, expansion is frequently perceived as the ill-intentioned and illegitimate influence the West persistently seeks over Russia's near abroad.

- In the two decades since the collapse of the Soviet Union, neither the West nor Russia has found a satisfactory solution to the question of an appropriate institutional framework to assure regular negotiations, bargaining, and even exchange of strategic information beyond bilateral channels.

- Future reductions of NSNW will depend on whether NATO, the United States, and Russia can develop a new process to discuss the nature and requirement of assurance and key security issues, within NATO and in existing NATO-Russia or U.S.-Russia discussions involving NSNW, missile defense, and/or conventional force deployments.

- Whatever the form, the steps toward reduction seemingly require a reaffirmation of the basic principles of the cooperative security approaches of the late 1980s and 1990s, and especially the key tools of transparency and accountability within an institutionalized arrangement of long or permanent duration.

- The NATO Russia Council (NRC) has at least the potential to be a new type of institutional platform for cooperation. The NRC, since its inception in 1997, has never received the attention it could have had or been fully exploited for its cooperation potential by either the United States or Russia. The increasing interest in the role of the NRC and the new responsibilities it assumed in Lisbon 2010 are welcome and should be reflected in the Deterrence and Defense Posture Review (DDPR).

- To build trust between Russia-NATO-U.S., a series of options to strengthen assurance should be implemented, including renewing and reforming confidence building measures (CBMs) in the realms of conventional and nuclear deployments; reasserting the principles of inclusive cooperative security policies: cooperative missile defense; and revising and redefining the Conventional Forces in Europe (CFE) treaty.

## BACKGROUND

While the reduction of NSNW in the early 1990s was implemented through paired U.S. and Russian unilateral presidential nuclear initiatives (PNI), NATO is now committed to seeking reciprocal reductions[2] with the far larger Russian arsenal (estimates range from 2,000 to 6,000 weapons). Many believe this process will take several years, and will involve balancing several weapons categories—precision conventional weapons, naval deployments of regional significance—in addition to missile defense.

The path to NSNW reductions and eventual elimination runs through Russia accepting a different role in European security…

Future success will depend on whether NATO, the United States, and Russia can develop a new process to discuss the nature of key security issues and the requirements of assurance within NATO and in existing NATO-Russia or U.S.-Russia discussions. These should also involve NSNW, missile defense, and/or conventional force deployments and a far greater degree of transparency and communication, vis-à-vis both public and elites, than has ever prevailed regarding NSNW. Further, it will likely require—on all sides—a transition away from the secretive decision making of the past toward fundamental innovations in accountability and self-regulating governance, perhaps on a regional basis but conceivably within a global framework.

The path to NSNW reductions and eventual elimination runs through Russia accepting a different role in European security, a different arms balance in Europe, and a different consensus about next steps and key requirements. As Tomas Valasek of London's Center for European Reform recently commented, whatever actions the United States takes on NSNW reductions or European Phased Adaptive Approach (EPAA) operationalization for a missile defense system, it must move forward:

> The heart of the question on how to reassure Allies without upsetting Russia—any measures that NATO needs to take with regard to improved situational awareness/early warning/crisis management should be designed in such a way that they cover all directions. This would underscore the NATO preparations are not aimed at any particular country. For example, were NATO's new emerging threats division to start assessing conventional threats it will be important that the divisions look at threats coming from the south and the north as much as from the east. If so, NATO can tell Moscow with a straight face that it is "merely doing what all prudent alliances do," and that its measures are not aimed against it.[3]

2. See NATO, New Strategic Concept, "Active Engagement, Modern Defense," (Brussels: NATO, November 2010), and the conceptual bibliography related to it and its further development, available at http://www.nato.int/strategic-concept/index.html.

3. Tomas Valasek, Director of Foreign Policy and Defense, Centre for European Reform, London, communication to NTI, August 2011.

Ultimately NATO, particularly the United States, will only achieve this progress by meeting and demonstrating inclusion of Russian security concerns in whatever new arrangements emerge. As such, these arrangements may have little or nothing to do with NSNW specifically; rather they will create space for cooperation, and cooperative endeavor on challenging strategic choices that have provided for stalemates in the past. These arrangements may involve formal treaties, hard-fought and subject to not only political winds but also hard-to-predict parliamentary battles. They may also follow equally valid patterns of the past—paired unilateral moves or independent national declarations about future behavior. Most should involve bilateral U.S.-Russian agreements but the Allies have new influence as reflected in the 2010 NATO Strategic Concept and the roles assigned to the NATO-Russia Council, the DDPR and the new NATO Arms Control Council.

Whatever the form, the steps toward reduction seemingly require a reaffirmation of the basic principles of the cooperative security approaches of the late 1980s and 1990s, and especially the key tools of transparency and accountability within an institutionalized arrangement of a long or permanent duration. As the last 20 years have demonstrated, cooperation on specific programs or missions may or may not be cumulative.[4] Recognizing both convergent interests in stability and the primary security concerns of the others is fundamental to overcome the easy political rhetoric of confrontation and competition and to remind publics of what strategic partnership truly entails.

Recognizing both convergent interests in stability and the primary security concerns of the others is fundamental…

## ASSURANCE: NATO, EUROPE AND THE UNITED STATES

Assurance and the "existential deterrence system" of U.S.–NATO guarantees is multilayered and multifaceted, and has been generally unaffected by the numerous policy disputes and tactical disagreements of the United States with various partners during the eventful last decade. The NATO consensus may move exceedingly slowly and with many rifts and texts that paper over great divides, but its debates and planning constitute a constant communication stream and a chance to agree, either to forward motion or another round of debate.

The inextricable intertwining of the alliance in the political, economic, and social realms as well as those that directly concern the military sphere provide the foundation for U.S. assurance to its NATO Allies. Karsten Voigt, an SPD politician and former German transatlantic coordinator, often relegated the alliance relationship, and indeed the whole transatlantic complex of interlocking ties, to a special third category of international relations—too close and intimate to be

4. See also Catherine M. Kelleher, "The Future of Cooperative Security," (CISSM, University of Maryland, November 2011), http://www.cissm.umd.edu/papers/display.php?id=560.

governed by the simple concepts of sovereignty and the rules of international law but too separate to have the easy ability as in domestic politics, to make deals or extended political bargains to overcome disagreements.

The recent global financial crisis provides a strong example of this, with the ever-clearer evidence that the economic link between the United States and the European Union is just as important as the transatlantic military link. By any measure, the United States and the European Union together have a commanding share (at least 42.4 percent) of the global economy.[5] The level of communication and transparency ranks close to that in the domestic frameworks, and whatever the tactical policy disputes, there is ever growing evidence of shared processes and assumptions about acceptable financial risk and gain. There are huge disagreements over tactics and over which interests are to be protected first. But these do not undercut the existence of a fundamental transatlantic economic bloc, and primary trading community.[6]

For many experts, the greatest challenges to assurance of the Europeans will come from American doubts and reluctance to commit. Europeans question whether the United States will or even can remain involved with Europe given the predominance of its Asia ties and its perceptions of Chinese challenges, economic and military. They argue, as do some American experts, that China's rise necessarily means a lower status for Europe (particularly as personified by the European Union) in trade and political influence, in a region that is less turbulent or uncertain than East or South Asia. The fear is not of a renewal of American isolation but of American preoccupation with debt, domestic politics, and its own structural crisis, with a need to reallocate resources, and especially its military costs, in ways to meet what it defines as the 21st century challenges. The less Europe contributes to the common security effort, the more this concentration on Asia will seem justified. But without American leadership and capabilities, it is argued, the Alliance either will not act or will not act in time.

This is the quintessential European dilemma, and one observed and pondered since the 1950s. Objective evidence seems to show these fears to be unfounded or

5. The World Bank, "Gross Domestic Product 2010," http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP.pdf; CIA World Factbook, "Field Listing: GDP (Official Exchange Rate)," 2011, https://www.cia.gov/library/publications/the-world-factbook/fields/2195.html; International Monetary Fund, World Economic and Financial Surveys: World Economic Outlook Database (2011), http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/index.aspx.

6. In 2009 alone, half of all Foreign Direct Investment (FDI) in the European Union, $1.73 trillion, came from the United States; two-thirds of all FDI in the United States, $1.48 trillion, came from the European Union. Also in 2009, 16.71 percent of U.S. imports came from the European Union (second only to China) and 18.77 percent of U.S. exports to the European Union (the largest recipient); also, 11.3 percent of EU imports came from the United States (again, second only to China) and 18.0 percent of EU exports went to the United States (again, the largest recipient). Half of U.S. global corporate earnings come from the European Union.

refutable by the thick, strong everyday bonds—economic, cultural, political, and military—that bind the transatlantic community. However, no assurance formula, even the most serious of speeches or formal pledges, or the presence of physical capability, can provide absolute surety for issues of perception.

## ASSURANCE: NEW NATO MEMBERS AND THE UNITED STATES

The geographical expansion of NATO has fundamentally shifted the debate on assurance within NATO. This expansion to a large degree has been shaped at every stage by U.S. presidential politics and leadership, which has led to a unique relationship between the United States and the new and smaller NATO members, who often appeal to the United States to be the "balance holder." At a minimum, this means they expect the United States to represent their interests against larger European member states, or insist on protections and solidarity against what they see as Russian intimidation (e.g., the lagging support on the Russian blockade of Polish meat exports, or the lack of reaction to the Estonian cyber attacks).

The geographical expansion of NATO has fundamentally shifted the debate on assurance within NATO.

The new NATO members, especially the Baltic states, and their Washington defenders, have successfully utilized bilateral channels to influence NATO policy outcomes, stressing historical burdens and debts owed at every instance of Russian misbehavior and bombast. Even these perceptions, however, have been tempered since 1991 by the dictates of domestic politics as well as size and diplomatic opportunity within the diverse Central and Eastern Europe (CEE) group.

Recent Polish experiences illustrate the roller-coaster effects of identification with a special U.S. guarantee. Poland is seen in the United States as the leader of "New Europe," in the words of Donald Rumsfeld, former U.S. Secretary of Defense.[7] Under previous Polish governments and the influence of the Georgian war, there has been great fear that NATO would not act quickly enough to come to Poland's aid in a crisis.[8] However, Poland has also taken the lead among the CEE states in finding ways to "normalize" their relations with Russia,[9] to overcome

7. BBC News, "Outrage at 'Old Europe' Remarks," January 23, 2003, http://www.news.bbc.uk/2/hi/europe/2687403.stm.

8. In the wake of the Georgia-Russia conflict, when referring to the mutual commitment aspect of NATO's Article 5 reassurance, Poland's Prime Minister Donald Tusk said that, "NATO would be too slow" in coming to Poland's defense if Poland were threatened, and that the bloc would take "days, weeks to start that machinery." Associated Press, "U.S. and Poland Agree to Missile Defense Deal," August 14, 2008.

9. See forthcoming, Carnegie EASI paper on reconciliation, which reflects Daniel Rotfeld's role in the Russian–Polish historical reconciliation task force he co-chaired. See the official Polish commentary on the results of the work of the Joint Polish Russian Group for Difficult Matters, see http://www.msz.gov.pl.

smaller disputes, and to defuse historical wrongs and popular rumors. Their preferred instruments have been both transparency (e.g., publishing the historical reconciliation project on disputed historical incidents) and accountability (e.g., the open investigation of errors and asserted blame in the April 2010 crash in Russia of Lech Kaczynski's presidential plane).[10]

## RUSSIAN PERSPECTIVES

The symbolism and persistent memory of the horrible losses suffered in World War II remain eternally imprinted on the minds of all Russians.

The expansion of NATO into the former Eastern Bloc and perceived interference with Russia's near abroad has become a constant sticking point in U.S.-Russian relations.[11] Russia's near abroad includes all former Soviet republics, the most contentious of which include the Baltics, Georgia, and Ukraine. These countries are considered important for two main reasons: not only do these countries have considerable ethnic Russian populations, but they also represent what traditionally has been regarded as Russia's "last line of defense" against invading forces. Dramatic decreases in tension levels in Europe and major leaps in both military and civilian technology have made the likelihood of invading armies essentially zero. Yet the symbolism and persistent memory of the horrible losses suffered in World War II remain eternally imprinted on the minds of all Russians.

By 2005, following his disappointments with American "strategic partnership" and George W. Bush, Vladimir Putin put a special spin on these arguments against NATO expansion. He constantly claimed the West was at loggerheads with Russia and that any reliance on the United States to grant Russia the status it deserved was a failed enterprise. In this narrative, the West had consistently indicated that it was unwilling to grant Russia the "respect" Russia deserved or the unquestioned authority it felt justified in asserting over its "rightful" sphere of influence, legitimized by its major investments and sacrifices of blood and treasure in Soviet times.

Putin and others, right and left in the Russian political spectrum, stressed that American and Western hostility underlined the dangers in Russia's objective stance.[12] By many measures, Russia has since 1991 failed to secure the defenses it has long believed it needed against surprise attack or tactical airstrike, conventional or nuclear. The reason is partially its far lower investment in defensive measures for example, an effective replacement for the largely still-missing

10. See also Jacek Durkalec's "Reductions of Tactical Nuclear Weapons in Europe: Unbinding the Gordian Knot," PISM Strategic Files #16 (The Polish Institute of International Affairs, May 2011).

11. Russians are not the only ones who argued this. See, for example, the continuing commentaries of Michael Mandelbaum beginning with his *The Dawn of Peace in Europe: A Twentieth Century Fund Book* (New York: Twentieth Century Fund Press, 1996).

12. See Kelleher, "The Future of Cooperative Security," for further details and historical data.

early warning system disrupted by the loss of republics on Russia's northern and southern periphery where coverage had been deemed crucial during the Cold War. There have been alternative assignments both to other ground assets and those in space, but reportedly not enough to reassure Russian decision makers against their deep-seated fears of surprise attack—by tactical aircraft or a "bolt out of the blue" missile attack by a rogue state.[13]

But it is also the result of unreconstructed political symbolism in Russia, which for much of the past two decades has equated the United States and NATO in adversarial images and rhetorical terms almost identical to those of the Cold War. In 2008, the military threat from the United States, NATO, and the West ranked highest among a list of threats that concerned the Russian public (more so than terrorism, economic collapse, or the prevalence of social problems such as alcoholism and drug abuse).[14]

Russia also continues to face new and demanding threats—from its own south and east, where it believes it cannot necessarily count on support from the West. And, although there is no longer the same fear of escalation to nuclear standoff that occurred at times during the Cold War, Russia cannot afford to ignore the need to overcome its conventional inferiority and uneasiness. Its primary requirement continues to be the modernization of its conventional forces at all levels.

In 2008, the military threat from the United States, NATO, and the West ranked highest among a list of threats that concerned the Russian public.

## OPTIONS FOR STRENGTHENING RUSSIA-NATO-U.S. ASSURANCE

It remains important to consider options that would strengthen or substitute new elements of assurance for NATO members and Russia in the future. Listed below are what seem to be the most interesting options that might help build the confidence necessary for further NSNW reductions. Options are examined in terms of relative speed and ease of transition; range of popular response or approval; political impact within the Alliance and Russia; and organizational and operational impact.

13. Or even another Mathias Rust incident, in remembrance of the lone German aviator who on May 28, 1987, landed a Cessna in Red Square on the national holiday of the Soviet Border Guards, presumably unobserved. See Carl Wilkinson, "What Happened Next?" *The London Observer*, October 27, 2002.

14. Early in 2010, Russia issued a new national security strategy that downgraded NATO from "a primary danger" to only "a threat." See Carolina Vendil Pallin, Fredrik Westerlun, "Russia's Military Doctrine—Expected News" Totalförsvarets forskningsinstitu, February 3, 2010.

## Organizational Reform in the Interest of Greater Transparency and Accountability within NATO[15]

Despite numerous attempts at reform and widened participation over the years, NATO still relies on a relatively small, closed circle to implement Allied participation and provide input into the NATO nuclear planning process. The Nuclear Planning Group and its associated national working contacts and bureaucracies appear not to welcome innovation or change easily. They have, for example, taken turns in blocking the disclosure of all but the most superficial data or information to even the expert public or NATO mission members outside of those with direct and self-certified "need to know," on the grounds of "Alliance security."[16]

The Nuclear Planning Group and its associated national working contacts and bureaucracies appear not to welcome innovation or change easily.

To serve the goals of greater transparency and accountability, this process must be radically re-adjusted and opened up to greater scrutiny and reporting. The increasing interest in the role of the NRC and the new responsibilities it has assumed under the Lisbon 2010 decisions are welcome, but more needs to be reflected in the NATO DDPR and in the still-nascent Arms Control subgroup.

## Renewal and Reform of CBMs in the Realms of Conventional and Nuclear Deployments

From the 1970s to 1990s, a series of CBMs[17] were developed to both defuse the conventional stalemate in Europe and to contain or mitigate fears of sudden offensive maneuvers across the Central German plain. Many of these were debated and formulated in relation to the Helsinki process. They later were attached to either the CFE treaties or directly to the Organization for Security and Cooperation in Europe (OSCE). All were formed with the dictates of the geography of the Cold War stalemate but also reflected the political acceptability of transparency and accountability to both East and West. They provided a political "cushion" to address security doubts and data oversight during both the break-up of the Soviet Union and the transition to an enlarged membership in Europe. There was also a helpful re-orientation in the 1990s to regional stabilization.

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15. See Stanley Sloan, "Permanent Alliance? NATO and the Transatlantic Bargain from Truman to Obama" (New York: Continuum International Publishing Group, 2010).

16. In my own experience, states sometimes had a certain relish in taking on the "bad cop" role in their turn. Often decisions declared not possible at NATO because of consensus decisions requirements appeared all the more foolish in the face of national decisions to release documents. The WikiLeaks trove has only heightened this effect.

17. As used here, this terms encompasses both those formally known as CBMs (Confidence Building Measures) and CSBMs (Confidence and Security Building Measures). For further background analysis, see the annual chapter reviews in the SIPRI Yearbook (Oxford University Press, 1990–present).

Despite neglect during the last 10 years, and the dismissal of CBMs by some American and European experts as "outdated" or "irrelevant," most have survived.[18] Their major defect at the moment is the Russian suspension of data transmission and access under CFE, and as will be discussed below, a path to Russian reinstatement is still very much debated. The problem is that they have not been updated or creatively reformulated to respond to strategic concerns about future European stability and security. In several geographic provisions, they currently exacerbate rather than reduce tension over force structures and movement restrictions on the "flanks"—in the Baltic or on the Turkey-Russia border in particular. Moreover, they tend not to integrate the data they collect in a way that is either user-friendly or of great relevance to anyone other than other inspectors or bureaucrats.

Many of these CBMs fall into three categories, all of which could contribute to a new level of assurance:[19]

1. Joint education and training, in a transparent mode and on a regular basis;
2. Notification and communication about military movements within specific regions or along NATO-Russia borders, special maneuvers, planned exercises, and major troop rotations or new deployments; and
3. Inspections, either on-site or from the air, under short notice, special permission, or by schedule, with newly constituted or existing organized multilateral teams, to test the presence of certain weapons or to examine items otherwise surveilled (often from the air) but not satisfactorily identified.

The task of reforming, let alone streamlining, these processes while simultaneously negotiating and testing new, more relevant force limits and exercise restraints is enormous and expensive. This is especially true if measured in terms of manpower required for renewing the inspectorate at the national level and perhaps establishing new critical equipment and infrastructure. The U.S. presence is also missing from most of them, both by desire not to be involved and by the insistence of some participants that the United States should not have a crucial role in purely European matters. Neither objection will necessarily pertain in a future re-working and the greater involvement of Americans in the process can help foster assurance. But the gain in confidence and trust both at the expert and public levels is already measurable and the practice of informal consultation and notification in times of surprise or crisis is already well established.

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18. See, for example, the essays of several American CFE supporters in Chapter 2, in the only recent comprehensive volume, Wolfgang Zellner, Hans-Joachim Schmidt, and Goetz Neuneck, eds., *The Future of Conventional Arms Control in Europe* (Nomos, 2009).

19. For further analysis, see the essays in Zellner, Schmidt, and Neuneck, eds., *The Future of Conventional Arms Control in Europe*.

## Re-assertion of the Principles of Cooperative Security

Working with Russia in a cooperative security arrangement is an obvious solution to enhancing confidence, one often praised but so far not effectively practiced. What is needed is rapid implementation of a series of key cooperative security principles. One model might be an expansion and extension of the existing frameworks that are now largely unused or undervalued.

Working with Russia in a cooperative security arrangement is an obvious solution to enhancing confidence, one often praised but so far not effectively practiced.

One example would be operating the Cooperative Airspace Initiative (CAI), which allows for early warnings regarding rogue airplane intrusions 150 kilometers on each side of the NATO-Russia border area.[20] The expansion of the monitoring area to other NATO and Russian zones would make more states "stakeholders" in this process; it probably would require other national monitoring nodes, more data exchange channels, and reorienting any remaining Cold-War geographic scope.

The involvement of more NATO states in this now-tested process should be an easy step; most European states already have both the compatible hardware and software needed under the European civil air traffic control and monitoring network. Extending the geographic reach or creating zones in depth will be somewhat harder and probably will or could stir debate about frozen conflicts, disputed territory spots, and conflicting claims for more information than states traditionally have been willing to part with. There are, however, obvious payoffs both for territorial defense and the anti-terrorist efforts now enjoying some popularity. Greater transparency could increase public support further and calm anxiety. With resolve, and perhaps the assignment of CAI to a more accountable multilateral governing body, it could be doable in the next four to five years.

Another option explored by Sidney Drell and Christopher Stubbs, is expanding the long-neglected Open Skies Initiative, a treaty-based regime that dates from the beginning of the 1990s and involves data collection and aerial inspections.[21] Its extension to chemical weapons monitoring functions, and perhaps a more limited biological weapon oversight function, will allow cost-savings, arms control and defense synergies, and increase the scientific basis for international action and national sanctions. The regime's pie-shaped areas, bilateral inspection quotas, and multinational monitoring techniques might provide unique answers to the usual concerns about inspections confined to Cold War geography or the unequal treatment of Russia.

Updating these regimes—building on the tradition of CBMs from the 1980s and 1990s—would require more powerful data exchange networks, data fusion centers, joint training regimes, and regular reporting exchanges. It could also

20. Anya Loukianova, *Cooperative Airspace Security in the Euro-Atlantic Region* which includes a review of all the earlier airborne monitoring systems.

21. Drell and Stubbs, Realizing the Full Potential of the Open Skies Treaty.

involve steps toward the design or cooperative production of monitoring equipment, or for training scenarios using the latest in social media techniques for popular participation.

## Institutions Acceptable to All

In the two decades since the collapse of the Soviet Union, neither the West nor Russia has found a satisfactory solution to the question of an appropriate institutional framework to assure regular negotiations, bargaining, and even exchanging strategic information beyond bilateral channels. Russia expected to be treated well after 1991 because of its former superpower status and the way it had surrendered its identity, its territory, its CEE Allies, and its nuclear weapons. It was not. In some respects, it is truly a "dialogue of the deaf." NATO, the European Union, the OSCE, or the CFE regime all placed Russia in the unenviable position of being the one against all the rest, the focus or the target of action of the others. Russia has been and continues to be unwilling to accept an unequal status; this is especially true when dealing with states it regards as its "near abroad" or "rightful" sphere of influence or that were former Soviet Republics. Russian sensitivities are perhaps highest regarding those in northern Europe for both political and strategic reasons but the sense of "special privilege" extends to all the Russian western and southern borderlands.

Events in early 2010 and up to the present demonstrate that the Russian leadership wants to return to the international game, making specific proposals and seeking advantage rather than engaging in simple oppositional diplomacy. In part this is reflected in the positive turn of the arms control negotiations, which President Dimitri Medvedev and Foreign Minister Sergey Lavrov have fostered and defended on numerous occasions. The Russian leadership clearly welcomed Obama's avowed willingness to "reset" and his transformation of Bush plans for missile defense, even while publicly declaring that missile defense plans would remain a problem in the future. Despite tough and sometimes confusing public rhetoric and hard bargaining in private, the Medvedev government has been rather responsive to Obama administration requests.[22] The favorable responses include increasing rights to overflights to Afghanistan; supporting nonproliferation bilaterally and at the UN vis-à-vis Iran; signing the New START treaty in 2010; renewing and continuing arms control/missile defense talks at Brussels, Geneva, and elsewhere; and avoiding further turbulence in Europe on the level of previous energy shutdowns or food boycotts, let alone the use of military force as in Georgia.

22. The question for the next months is the degree to which Vladimir Putin's decision to return to the Russian presidency after the March 2012 elections will change these choices.

The NRC has at least the potential to be a new type of institutional platform for cooperation. Since its inception in 1997, however, the NRC has never received the attention it could have had or been fully exploited for its cooperation potential by either the United States or Russia. Both the Lisbon decisions and the appointment of important Russian and U.S. representatives have changed its image and it clearly now has a profile that might well be solidified with achieving a new significant agreement that goes beyond its formal status or a simple bilateral arrangement. The NRC, however, is not an institution that itself can or will change the fundamental relationships.

Central Asia is for now and the immediate future a key area where U.S. and Russian interests intersect . . .

**NATO-COLLECTIVE SECURITY TREATY ORGANIZATION LINKAGE?** Zbigniew Brzezinski argued in 2009 to create a new basis for engagement with Russia and partnership in global security cooperation.[23] Russia is clearly not going to join NATO and the OSCE and the CFE treaty will not be restored to their former glory in their present forms. Why not therefore link a NATO relationship with the Russia-led CSTO for functional cooperation as appropriate? Brzezinski saw a critical near term task: linking NATO's efforts to ensure stabilization or the deployment of peacekeeping forces post-Iraq and/or post-Afghanistan to Russian stakes to its south and the provision of forces or logistics.

Central Asia is for now and the immediate future a key area where U.S. and Russian interests intersect because NATO needs access to Central Asian airfields and Russian airspace for supplies. However, it remains to be seen whether the American drawdown in Afghanistan will affect these relationships and how the manpower needed to prevent a Taliban restoration or to avoid a division of control over either Kabul or the hinterland would be constructed and maintained. Moreover, the Kremlin blames the war in Afghanistan for the extremely high heroin usage rates throughout Russia.[24]

The region has also become increasingly important for China, who has no desire to see foreign military forces near its western border. Brzezinski suggests that eventually the new partnership arrangement with Russia might lead to a link with the Shanghai Cooperation Council, where China plays a leadership role, albeit one focused primarily on regional economics. It might also allow for an easing of the friction that the membership of some Central Asian states in both the CSTO and Partnership for Peace has generated in the past, and enlarge the agenda for training and engagement of the emerging military forces and the border police in the region.

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23. Zbigniew Brzezinski, "An Agenda for NATO," *Foreign Affairs,* September-October 2009, http://www.foreignaffairs.com/articles/65240/zbigniew-brzezinski/an-agenda-for-nato.

24. CNN Global Public Square, "Russia's Afghan Addiction," July 25, 2011, http://globalpublicsquare.blogs.cnn.com/2011/07/25/russias-afghan-addiction.

## Missile Defense in Europe: A Game Changer in Waiting

The search bilaterally and within NATO for new cooperative mechanisms in European missile defense represents an ambitious effort to craft game-changing strategies that meet strategic concerns or permit measurable perceptions of risk reductions on all sides.

The need to establish a new crisis/early warning system ideally would involve cooperation with the Russians on a continuous basis. Russian cooperation with the Active Layered Theatre Ballistic Military Defense/European Phased Adaptive Approach (EPAA) arrangements is a critical element of most European missile defense plans and could be a functional "game changer." It has the additional advantage of involving all NATO members as stakeholders. First the Lisbon Declaration of 2010 emphasized the primary NRC responsibilities in this field. If implemented as currently under discussion in unofficial NATO-Russia encounters and Track II discussions such as the Euro-Atlantic Security Initiative group,[25] the European missile defense framework will involve interceptors from several nations—at a minimum, Great Britain, France, Germany, the Netherlands, Italy, and Spain—and the radar/sensors located throughout the region to support an early response mission. Other NATO members will presumably have the chance to participate in the early warning system, the data exchanges, and the specialized training that will be required. Russian cooperation in all of these activities will allow for a broader geographic sweep and the use of radar on Russian territory to deal with missile threats coming from the South (presumably from Iran) and the East (perhaps North Korea or China).

There is no question that hardliners, particularly in the military, still see a looming follow-on threat in U.S. conventional strategic superiority, and the plan for EPAA as the first step toward a series of linked regional missile defense schemes, for example in East Asia and the Gulf. There is, however, a better fundamental state of strategic cooperation on which to build and that can be expanded to support American and Russian interests and tradeoffs. There are some elites among the NATO Allies—for example, in government circles in Germany—who see missile defense as itself providing a new form of deterrence. It is also worth noting that it would build on the over 100 strategic data exchanges that have taken place between the United States and Russia, and which resumed in March 2011 under the terms of New START.

25. For further details, see the EASI website, www.carnegieendowment.org/publications/special/misc/easi/. Reports of EASI working groups are to be published by February 2012.

### Revising and Redefining the CFE

The revision and redefinition of the CFE Treaty is an enterprise that could—as in the past decade—consume years in long, detailed negotiation fraught with dangerous involvement in presidential electoral politics and technical details. Russia's suspension of its CFE participation in reporting and allowing prescribed inspections over time has led to a hardening of positions despite there being no new threats or risks visible, at least publicly. Many in Moscow—but also in Washington—dismiss CFE as either too hard to tackle or too inconsequential because some of its detailed arrangements still reflect Cold War concerns.

It is hard, however, to imagine any movement on NSNW that does not involve movement on the basic issues of transparency and accountability that CFE encompasses.

It is hard, however, to imagine any movement on NSNW that does not involve movement on the basic issues of transparency and accountability that CFE encompasses. The decisions made in 1999 on the flank problems and the removal of Russian bases in Georgia and Transnistria have to be swept away with a face saving formula for all, given the objective facts of the Georgian war and NATO's de-facto air policing in the Baltic region. Moreover, if the European missile defense scheme goes forward, maps for inspection and verification, and their underlying political assumptions, will surely have to be redrawn—especially if Turkey's recent decision to site early warning radars on its territory hold true.[26]

Not everything has to be resolved at once. There are ways to take immediate action to indicate future cooperative intent, for example, an immediate unilateral or paired unilateral force level freeze in the critical categories at present levels—establishing present maxima below the formal treaty limits.[27] More profitable might be designing a set of phased experiments involving all CFE countries in dyads or triads to test the contribution new technologies might allow to the verification regime. These could be done in designated regional "slices" redrawn to be acceptable to all, thus overcoming Russian fears of singularity, and allowing inspection skills to be refreshed and mutual discussions to occur.

## THE WAY FORWARD

Searching for credible substitutes for NSNW is in many respects a foolish construction whether pushed by the United States, the NATO Allies, or the Russians themselves. To reiterate: there is no totally satisfactory replacement for what is essentially an intellectual construct tied rather imperfectly to a weapons category

26. Rick Gladstone, "Turkey to Install U.S.-Designed Radar, in a Move Seen as Blunting Iran's Missiles" *New York Times*, September 3, 2011, http://www.nytimes.com/2011/09/03/world/europe/03missile.html.

27. See Ulrich Kuehn, "CFE: Overcoming the Impasse," *Russia in Global Affairs*, July 7, 2010, http://eng.globalaffairs.ru/number/CFE:_Overcoming_the_Impasse-14892.

that has shrunk and changed in character over the years. At its core, assurance is about political beliefs and perceptions, and therefore political stakes. Identifying and protecting these are crucial. It will not be sufficient to leave future developments to what is often cited as the last refuge of scoundrels and politicians: a call for greater leadership or political will.

CHAPTER SEVEN

# Reconciling Limitations

## *on Non-Strategic Nuclear Weapons, Conventional Arms Control, and Missile Defense Cooperation*

ROBERT H. LEGVOLD

Turning missile defense into a cooperative U.S.-NATO-Russian enterprise and resuscitating a conventional arms control regime in Europe remains intimately connected with the overall state of relations between Russia and the United States as well as Russia and NATO. This reflects an ironic truism: when arms control and military cooperation are most feasible, they are least needed; when they are most needed, they are least feasible. When relations are good or improving, finding common ground grows easier, but the urgency of doing so also diminishes. When deteriorating relations constrains military competition, progress becomes more difficult. Hence, it is no small matter that transforming U.S. missile defense plans from a source of U.S.-Russia friction into an important area of cooperation has brightened because the tenor and character of the overall relationship has improved markedly since 2008. Similarly, although salvaging the CFE treaty or some facsimile is dimmer, what optimism exists derives largely from the evolution of Russia's sour, friction-laden relationship with NATO into the tentative engagement of the post-2008 period, with its accent on small cooperative steps.

The intimate connection tying the larger political context to the prospects for missile defense cooperation and conventional arms control, however, constitutes only the first and most general way that different but key dimensions intersect. The fate of missile defense cooperation and conventional arms control is also inter-linked with developments in other military spheres, much like the symbolic rings of the Olympic Games. These other spheres include, in particular, outcomes surrounding non-strategic nuclear weapons (NSNW), nonproliferation efforts, and nuclear disarmament. The scope of the problem facing efforts to build a common missile defense system and, even more so, the obstacles standing in the way of conventional arms control in Europe cannot be addressed effectively or perhaps at all without coming to terms with the way these issues overlap.

# CHAPTER SEVEN: **KEY FINDINGS**

- The fate of missile defense cooperation and conventional arms control is inter-linked with developments in other military spheres, much like the symbolic rings of the Olympic Games. These other spheres include outcomes surrounding NSNW.

- The scope of the problem facing efforts to build a common missile defense system and, even more so, the obstacles standing in the way of conventional arms control in Europe cannot be addressed effectively or perhaps at all without coming to terms with the way these issues overlap.

- How U.S., Russian, and NATO policymakers view the connections and create linkages among them will decide whether and what form cooperation on missile defense takes and how conventional arms in Europe are managed. Poorly chosen linkages become an obstacle to progress, as do dueling linkages that set one side against the other. In contrast, well-conceived linkages that respect the natural connections among issue areas are essential if progress on missile defense and a safer, more stable military balance in Europe are to be achieved.

- Of the three issues the one that suffers the deepest imprint from context is the future of U.S. and Russian NSNW. But it is also the central "ring" joining nuclear and conventional arms control. Unless it is addressed successfully, progress in either of the other two areas has limited prospects.

- With respect to conventional arms control, good reasons exist for making more effort to keep intact the core benefits of the Conventional Forces in Europe (CFE) regime, along with those of its critical auxiliaries—the Open Skies Treaty and the Vienna Document's Confidence- and Security-Building Measures (CSBMs), which have continued to function despite the dispute over the CFE Treaty. Any approach will require greater political investment and flexibility by all parties, which involves a mutual willingness to discard preconditions and linkages that have precluded both creativity and progress.

- Unlike the other two spheres, the idea of missile defense cooperation has a certain momentum, with national leaders in Washington, Moscow, and within NATO appearing more determined to succeed. Indeed, the momentum and determination have significantly raised the stakes for all sides: failure to capitalize will be a significant and broad setback in Euro-Atlantic security, whereas success will surely create a more positive context for progress on broader nuclear issues and efforts to advance conventional arms control.

- Several general propositions emerge when one steps back and contemplates what unites the three areas:

  - First, the single largest impediment on achieving constructive, stabilizing outcomes in all three instances is the burden of mistrust. Unless policymakers make a first-order priority to put their minds to devising concrete steps aimed at eroding existing levels of mistrust, the other elements in their negotiating packages will not go very far very fast.

  - Second, whether one devises a strategy that links aspects of the different issue areas or simply acknowledges their existence, progress in each issue area likely depends on parallel developments in one or more of the other areas.

  - Third, for at least two of the three issue areas—missile defense and NSNW—any arrangement will have to consider relevant third-country factors, whether China, Iran, or Pakistan.

  - Fourth, for all the technical and operational obstacles impeding agreement in all three areas, at the end of the day, any agreement ultimately depends on political will. That has been the single most important missing factor in all three cases and it remains a vital uncertainty looking ahead.

This basic proposition, however, leads to another that bears still more directly on achieving agreement on ballistic missile defense and conventional forces in Europe. The overlap among these issue areas is one thing; what the different sides make of the interconnections is another. How U.S., Russian, and NATO policymakers view the connections and create linkages among them will decide whether and what form cooperation on missile defense takes and how conventional arms in Europe are managed. Poorly chosen linkages become an obstacle to progress, as do dueling linkages that set one side against the other. In contrast well-conceived linkages that respect the natural connections among issue areas are essential if progress on missile defense and a safer, more stable military balance in Europe are to be achieved. It is the harmful versus helpful interplay of the linkages drawn by Russian and U.S. officials that forms the analytical basis for what follows.

## KEY CONTRASTS

At a basic level, the three issues differ considerably. Missile defense cooperation has not only acquired a political momentum that the other two lack, it would now be a "game changer." That is, beyond offering a better answer to an intrinsic problem, a mutually acceptable, cooperative approach to Euro-Atlantic missile defense is capable of transforming the general character of Russia's relations with the Western powers. In his March 2011 speech to Moscow University students, Vice President Joseph Biden used this language, predicting that collaboration on missile defense "will be a game-changer if we can get it done."[1] NATO Secretary-General Anders Fogh Rasmussen, a year earlier, stressed that "the more that missile defense can be seen as a security roof in which we all have a share, the more people from Vancouver to Vladivostok would know that they were part of one community."[2] If missile defense becomes a common enterprise, the ulterior motives that Russians attribute to U.S. missile defense plans would have to be rethought and their NATO threat analysis recalibrated. NATO members would have to leaven their lingering mistrust of Russia with a new readiness to work with Russia on a key element of NATO security. Sovereign responsibility for national security may be the reigning principle, but missile defense cooperation will inevitably entail striving for mutual compatibility and a positive dependency if it is to have any practical meaning.

In contrast, although conventional arms control in Europe is important for both Russia and NATO, and at various points national leaders on both sides have

1. Vice President Joseph Biden (remarks at Moscow State University, March 10, 2011), The White House, Office of the Vice President, http://www.whitehouse.gov/the-press-office/2011/03/10/vice-president-bidens-remarks-moscow-state-university.

2. Anders Fogh Rasmussen, "Building a Euro-Atlantic Security Architecture," (speech to the Brussels Forum, March 27, 2010), http://www.nato.int/cps/en/natolive/opinions_62395.htm.

urged renewed efforts to salvage the imperiled CFE Treaty, the issue has neither the political momentum nor the priority of missile defense cooperation. Rather than being treated as a game changer—a role it probably could not play even if it were made a priority—conventional arms control in Europe remains a problem that, if ill-managed, risks creating real dangers in some distant future, but that the parties have neither the wit nor will to get an adequate grip on now.

Dealing with NSNW is still again different. Despite the obstacles that impede agreement on missile defense and the lethargic progress on conventional arms control, both sides claim a readiness to engage one another. Not so in the case of NSNW. Up to this point, Russia has shown no interest in responding to Western entreaties. This reluctance—indeed, among some powerful Russian players who adamantly oppose any thought of discussing the matter—creates a fundamentally different starting point from that in the other two cases.

At another level, however, all three issue areas have in common an important contrast. The ostensible concerns motivating each country sometimes obscure the deeper factors at work, or more often reveal only half the story. For example, in the case of NSNW, the United States and NATO emphasize Russia's large advantage in the number of its weapons and their deployment near Baltic borders, but behind this concern looms the challenge of finding a solution that does not compromise the United States' nuclear guarantee to Europe or NATO's readiness to share the nuclear burden. Russia stresses the threat posed by nuclear weapons deployed outside national borders, but its real worries are centered on an incipient Chinese military threat, NATO's military superiority, and the Alliance's ever-nearer presence on Russian borders.

In the case of the CFE Treaty, the United States and NATO insist that the key issue is Russian forces on foreign territory without host-nation consent and the loss of transparency as the result of Russia's 2007 decision to suspend compliance with the treaty's monitoring and verification provisions. These, indeed, represent genuine concerns, but they are part and parcel of a larger frustration over Russia's role in the region's protracted conflicts. Russia, conversely, faults NATO for failing to ratify the Adapted Conventional Armed Forces in Europe Treaty (ACFE), the Baltic States' escape from its provisions, and the unequal effect of the treaty's flank limitations. But, again, the deeper impulses behind Russia's stance trace back to anger over NATO's evolving posture and capabilities.

In the case of missile defense, the gap between publicly stated concerns and deeper impulses is less conspicuous. U.S. defense planners want to avoid involvements with Russia—or for that matter, within NATO—that risk delaying or unduly complicating the initial stages of the European Phased Adaptive Approach (EPAA). In some circles, however, and certainly among some NATO members, the wariness takes a harsher form; they worry either that Russia wants cooperation only to constrain or undermine progress on missile defense or that it seeks to draw the United States into arrangements that would give Russia an exclusive right to

Russia stresses the threat posed by nuclear weapons deployed outside national borders, but its real worries are centered on an incipient Chinese military threat, NATO's military superiority, and the Alliance's ever-nearer presence on Russian borders.

defend territory contiguous to its borders. Russian leaders, in turn, claim they are not convinced that later stages of the United States' phased adaptive approach will not threaten Russia's nuclear deterrent. In fact, however, Russian apprehensions appear to run much deeper, and reflect lingering suspicions that EPAA and its global extension are simply a piece of a broader U.S. program designed to create a usable defense against Russian strategic missiles and thereby achieve U.S. nuclear superiority over Russia. More immediately, they also harbor a suspicion that the United States wants to put in place missile defense in order to create a shield permitting it, at some point, to launch major military actions against Iran.[3]

Thus, when assessing what might come of missile defense cooperation or conventional arms control in Europe, context matters. Both the way one sphere intersects another and the effect of each side's deeper, unarticulated concerns compose a context that further complicates the already difficult detail swirling about these three issues.

The primary obstacle hindering an agreement on limiting NSNW is not the asymmetry in numbers but the asymmetry in stakes.

## NON-STRATEGIC NUCLEAR WEAPONS (NSNW)

Of the three issues, the one that suffers the deepest imprint from context is the future of U.S. and Russian NSNW. But it is also the central "ring" joining nuclear and conventional arms control. Unless it is addressed successfully, progress in either of the other two areas has limited prospects.

What gives NSNW prominence now, however, has less to do with the intrinsic threat they pose to a safer and more stable U.S.-Russian nuclear balance or the risk they raise of greater crisis instability in Europe. The reasons are more fundamentally political. In the United States those who see U.S. military strength as reason to give no quarter to the Russian side and certainly no reason to tolerate the asymmetrical advantage Moscow has in NSNW have made eliminating this advantage a key requirement for any further nuclear arms control progress. NATO's new Strategic Concept also sets it as an objective, presumably because the asymmetry in numbers casts a political shadow over its newest members. On the Russian side, making national basing the ultimate standard has less to do with the threat Russian military planners see in NATO's Dual Capable Aircraft (DCA) and B-61 gravity bombs—neither of which in combination figure in operational war plans—but rather with a determination to roll back NATO's swelling profile.

The primary obstacle hindering an agreement on limiting NSNW is not the asymmetry in numbers but the asymmetry in stakes. For the United States, the principal value of having approximately 200 B-61 nuclear bombs forward-based in reportedly five European countries is political and symbolic. They serve as a physical measure of the United States' good faith nuclear guarantee to its European

3. Private conversation with a senior official in the Russian Foreign Ministry, October 19, 2010.

Allies, even if they add little or nothing to the other nuclear capabilities by which the United States would make good that guarantee. When mated with Allied DCA, they also represent a tangible expression of the European Allies' role in NATO's nuclear defense.

Russia's stake in its arsenal of NSNW, in contrast, appears to be principally military. Russian defense planners see them as a potential force enhancer (and deterrent) compensating for conventional force inferiority.[4] That is, they are assigned the role of deterring or blunting a conventional attack were Russia's conventional forces overwhelmed on the battlefield. Second, they are viewed as critical to the selective or tailored use of nuclear weapons in the event of war and, hence, an important means of controlling escalation—a mission Russian military strategists label "nuclear de-escalation."[5] Third, they are embraced as the best available response to the United States' stand-off conventional attack capabilities (i.e., U.S. conventional ballistic and cruise missiles guided by space-based intelligence and information systems). And, fourth, they are seen as a legitimate counterpart to the short- and medium-range nuclear weapons held by third countries.

The heart of the problem created by asymmetrical stakes leads back to the "Olympic rings"—the entangled relationship among issue areas. Virtually every military mission assigned to Russian NSNW, even when these weapons are a poor second-best solution, is driven by Russia's conventional military inferiority and its apprehensions over modernization plans for U.S. strategic forces and prompt conventional global strike capabilities. NSNW may be an anachronistic and implausible remedy for the disparities Russian defense officials fear, but as long as they view their own situation as so disadvantaged when it comes to a prospective conflict with NATO—however improbable this may be—they will not easily put these weapons on the table. Nor are they likely to divorce any agreement to limit them from constraints placed on potential U.S. conventional counterforce capabilities.[6]

The United States with its NATO Allies, conversely, freed from the military anxieties that prevailed during the Cold War, understandably have less reason to cast these weapons in terms of the overall military balance between Russia and NATO and to focus instead on their political and broader security implications. Here too the "rings" intersect, but the overlap is more with the nuclear than the

4. These and the other military uses listed here come from Alexei Arbatov, Vladimir Dvorkin, Sergey Oznobishchev and Alexander Pikaev, *NATO-Russia Relations: Prospects for New Security Architecture, Nuclear Reductions, CFE Treaty*, (IMEMO RAN, 2010), 34–35.

5. For partially conflicting views of this role's current standing, see Andrei Zagorsky, "Russia's Tactical Nuclear Weapons: Posture, Politics and Arms Control," *Hamburger Beiträge zur Friedensforschung under Sicherheitspolitik*, February 2011, 24–26, and Arbatov, "Gambit or Endgame?," 6.

6. This, however, begs the question of why Russia insists on holding a disproportionately large number of these weapons when a far smaller number would be sufficient to meet their putative mission.

conventional. In the first instance, the nuclear realm involves the United States and NATO's own anachronism: the felt need to preserve extended deterrence. NATO Europe's nuclear protection in this form can, at this juncture, only be intended for a potential Russian threat. This is something well-reflected in the fear of Baltic state leaders that a decision to remove the B-61 gravity bombs from Europe will be read in Moscow as a weakening U.S. security guarantee.

Undistracted by worries over trends in core military areas, the United States emphasizes instead the danger of nuclear proliferation posed by NSNW. As a result, prominent voices in the West—far more than their Russian counterparts—view these weapons from the perspective of their vulnerability to theft or unauthorized use.[7] Both their forward basing and at times questionable security are thought to make them easier targets for terrorists; their characteristics (lighter and possibly with fewer locking devices) are thought to make them more attractive to terrorists. Here too an interconnection exists, but with the broader realm of nuclear proliferation and with a priority altogether different from that of Russia.

Since May 2011 the painful, unproductive last-ditch effort to save in some form conventional arms control in Europe has simply stopped.

Two factors further complicate a way forward: first, Russian leaders have dismissed any chance of discussing the issue until they are persuaded that the United States takes seriously Russian concerns over missile defense, conventional arms in Europe, and conventionally armed strategic missiles. Whether this is simply a maximum opening bid or a way of closing the door to negotiations, their stance clouds any prospective engagement. So does the conviction in influential U.S. political quarters that the Russians want these weapons, not because they are genuinely concerned about the military balance with NATO, but because they cling to a handy instrument by which to intimidate their new neighbors. To the degree that it influences the way that the United States frames the issue, it too will waylay progress. Both factors impinge on possible approaches to the challenge posed by NSNW, heavily influencing the chances of each.

## CONVENTIONAL ARMS CONTROL AND THE CFE TREATY

In no sphere are the effects of negative or "dueling" linkages more damaging than in managing conventional arms in Europe. Framing the issue as each side has, brought the regime created by the Soviet Union and NATO in 1990 to near collapse. Since May 2011 the painful, unproductive last-ditch effort to save in some form conventional arms control in Europe has simply stopped. If the pause while the sides rethink their positions yields only further paralysis, the loss will lie tangled in the interplay of the two sides' grievances and demands. The simple overshadowing virtue of the original CFE Treaty was to "prevent dangerous con-

7. See, for example, Sam Nunn, "NATO, Nuclear Security and the Terrorist Threat," *The International Herald Tribune*, November 16, 2010.

centrations of military forces, and to inhibit the potential for launching surprise attack"—the essence of a system designed to eliminate the gravest danger inherent when opposing armies remain in place.[8]

Admittedly this achievement seems less compelling when one of the two opposing military alliances has disintegrated and its Russian core has been left but a shadow of its former self, while the other alliance has voluntarily shrunk its military holdings to levels that are roughly 50 percent of what it could have under the CFE Treaty's terms. As a result, each side has felt free to indulge its frustrations over broader political issues, underscoring once more the link between the overall state of relations and the prospects for arms control noted at the outset.

For Russia the formal reason for delaying the process has been the six preconditions first laid out at the Vienna CFE review conference in June 2007: (1) an end to the flank limitations on Russian forces; (2) ratification of the 1999 ACFE Treaty by the United States and other NATO parties to the treaty; (3) the formal acceptance of the treaty by the Baltic States; (4) a mutually acceptable clarification of NATO's pledge in the 1997 NATO-Russian Founding Act not to station "substantial combat forces" in the new member states; (5) the rollback of force levels in Romania and Bulgaria to compensate for the imbalance created with their entry into NATO; and (6) a commitment to begin negotiating the transformation and modernization of the ACFE immediately after it enters into force.[9]

The deeper, more visceral linkage, however, has always been NATO expansion and Russian apprehensions over the open-ended nature of NATO's further evolution. Hence, while Russia's preconditions—only momentarily softened in response to the compromise "parallel actions package" that NATO offered in 2007 and 2008 (discussed below)—constituted for much of the period after 2007 the immediate bar on progress from the Russian side, the real obstacle resided in the political realm, where a more diffuse set of developments matter, such as NATO's evolving self-identity, including its new Strategic Concept, the dynamic within the NATO-Russia Council, and the course of U.S.-Russian relations.

For their part, the United States and its NATO partners have also linked the fate of the ACFE Treaty to political concerns that reach beyond the immediate scope of the treaty. Long before the 2008 Russo-Georgian war and the impasse created by the redeployment of Russian forces into Abkhazia and South Ossetia, NATO

8. Anne Witkowsky, Sherman Garnett, and Jeff McCausland, "Salvaging the Conventional Armed Forces in Europe Treaty Regime: Options for Washington," *Brookings Arms Control Series*, Paper 2, (March 2010), 4, http://www.brookings.edu/papers/2010/03_armed_forces_europe_treaty.aspx.

9. These have been articulated by Russian officials in several forms before and after the 2007 Russian decision to suspend the treaty, but the most official version is in the announcement issued at the time of the decision to suspend the treaty. (See Information on the Decree, "On Suspending the Russian Federation's Participation in the Treaty on Conventional Armed Forces in Europe and Related International Agreements," President of Russia, July 14, 2007, http://archive.kremlin.ru/eng/text/docs/2007/07/137839.shtml.)

members had made the 1999 supplementary Russian undertaking to remove its remaining troops and equipment from Georgia and Moldova a prerequisite for ratifying the adapted treaty.[10] Although the continued presence of Russian forces in these regions is obviously relevant to the principle of host-nation consent contained in the original treaty and, in the case of the Georgian territories, to the limits placed on Russian treaty-limited equipment (TLE) in the southern flank, from the start the issue had as much to do with U.S. and NATO's objections to Russia's role in the separatist conflicts and Russia's perceived manipulation of the troop issue to pressure the Georgian and Moldovan governments. By linking the fate of the adapted treaty to these protracted conflicts, a related but separate matter, they not only placed the treaty in indefinite limbo, they also opened the process to the deeper paralysis produced by the 2008 war.

. . . the seminal achievement of the original CFE agreement was to deny either side the ability to concentrate forces on a scale making a surprise attack feasible.

True, had NATO countries kept these issues separate and ratified the adapted treaty, Russian leaders could still have insisted on their remaining preconditions. Separating these issues, however, would have meant facilitating the removal of residual Russian arms and troops by trying harder to achieve progress on the protracted conflicts, rather than the other way around—an approach that would have created a sound basis for addressing the far more portentous post-2008 Georgian problem, while giving the adapted treaty a chance it otherwise lost. Instead the treaty is close to becoming a dead letter, and the uninspired task of the day has become how to achieve a "soft landing" as it dies, notwithstanding the earnest effort on the part of some Obama administration officials to coax the various sides to come up with new ideas.

Before considering how these negative linkages might have been overcome or, indeed, with sufficient political will could still be overcome, it is worth contemplating the reasons for making the effort. They fall into different categories, and, when added together, the ensemble deserves a much higher priority than Moscow, Brussels, or Washington has given them.

- First, as noted earlier, the seminal achievement of the original CFE agreement was to deny either side the ability to concentrate forces on a scale making a surprise attack feasible. However unfavorable the Russians may find the overall ratio of NATO to Russian forces today, were the treaty or its equivalent preserved, this benefit to Russia would be as well.
- Second, the combination of transparency and constraints produced by data exchange, the regular presence of inspectors at military exercises, and the limits on the number of tanks, artillery, combat aircraft, armored combat vehicles,

10. President Bill Clinton announced at the November 1999 Istanbul OSCE conference where the adapted treaty was approved that he would not submit it for Senate review until Russian troops were gone. (See Jeffrey D. McCausland, *The Future of the CFE Treaty: Why It Still Matters*, The East-West Institute, June 2009, 3.)

and combat helicopters offer a critical measure of security for states like Belarus, Moldova, and Ukraine bordering Russia and outside NATO.

- Third, the treaty affords a level of transparency and the possibility of monitoring neighboring military forces otherwise absent among the smaller states on Russia's borders, beginning with Armenia and Azerbaijan, whose rivalries contain their own risks.
- Fourth, although transparency, both between NATO and Russia and at the subregional level, constitutes an important stabilizing factor in Euro-Atlantic military relations, the treaty's critical contribution is the predictability that comes from a legal framework that places a ceiling on the quantity of heavy armament and the freedom of military movements along the region's fault lines. Today is today, but how confident can today's statesmen be that the same will hold if in the future poorly managed relations and shifting capabilities renew an arms competition within the Euro-Atlantic security space?[11]
- Fifth, the CFE provision for short-notice inspection can help in crisis management, as Russian inspections at Aviano Air Base during the 1999 Kosovo conflict demonstrated by avoiding misinterpretation of the U.S. air campaign.[12]
- Sixth is the negative side to a point made earlier: if salvaging and strengthening the CFE Treaty, whatever the chances, would likely facilitate agreement on NSNW, the collapse of the Treaty will most assuredly lead the Russian military to insist on maintaining and perhaps modernizing these weapons beyond what has already been done with the Iskander system.

## Choosing among Approaches to Conventional Arms Control in Europe

Thus, good reasons exist for making a far more strenuous effort to keep intact the core benefits of the CFE regime, along with those of its critical auxiliaries—the Open Skies Treaty and the Vienna Document's CSBMs, which have continued to function despite the dispute over the CFE Treaty. But how might this be done? The answers come in two forms, with multiple variations on each.

. . . good reasons exist for making a far more strenuous effort to keep intact the core benefits of the CFE regime, along with those of its critical auxiliaries.

11. Ulrich Kuehn frames this point more generally: Given that the real threats facing Russia come from the East and South and that the course of U.S. policy toward Russia over time is unpredictable, Russia should want to secure its western border without forcing it into an arms buildup that will simply induce countermeasures on the part of NATO. Hence "Europe needs CFE because Russia needs CFE." Ulrich Kuehn, "CFE: Overcoming the Impasse," *Russia in Global Affairs*, July 7, 2010, http://eng.globalaffairs.ru/print/number/CFE:_Overcoming_the_Impasse-14892.

12. Witkowsky et al., "Salvaging the Conventional Armed Forces in Europe Treaty," 8, make this point.

**"SOFT LANDING" AND DIALOGUE.** Initially, once the road-accident occurred, and the Russians suspended compliance with the ACFE's monitoring and verification provisions in fall 2007, the United States and its partners tried to restart the search for a compromise over the ill-fated ACFE Treaty in March 2008 by offering a "parallel actions package" (PAP). NATO signatories to the adapted treaty were to begin the ratification process if Russia would resume troop and equipment withdrawals from Georgia and Moldova, and they would then complete the ratification process when Russia completed its withdrawals. Once ratified, the Baltic States would accede to the adapted treaty, and NATO would consider lowering its weapons ceilings "where possible." It would have also then been ready to discuss the limitations placed on Russian forces in the flank zones.

By early 2009, PAP and its various emendations had come undone, gutted by the stalemate over Russia's military moves in Abkhazia and South Ossetia following the August 2008 war, and the sides were settling into a search for modest ways to salvage some minimum level military cooperation. In February German Chancellor Angela Merkel and French President Nicolas Sarkozy jointly suggested reversing the linkage between at least one of the protracted conflicts and ratification of the ACFE. In a joint editorial, they argued that a "rapid solution" to the Transnistrian issue should be sought in order "to create a different atmosphere" permitting the ACFE to go forward.[13] A year later the Obama Administration in a May 2010 speech by Vice President Biden also urged moving in a different direction—one focused on a more basic understanding of what the "size and location of conventional forces" should be in a new Europe, a Europe in which "our militaries" are "steer[ed] away from basing their exercises on scenarios that bear little resemblance to reality."[14]

By then the administration had begun pushing for, as a first step, agreement on a framework statement that would spell out principles to guide negotiations on a revised treaty. From June 2010 to May 2011, the 36 countries struggling with the future of CFE tried different combinations of ideas, all to no avail. In the end the effort collapsed over Russia's refusal to act on the other side's two preconditions: acceptance of the principle of host-nation consent for deploying external forces and Russia's renewed compliance with the monitoring and other transparency measures of the CFE Treaty.

The core of the edifice for managing conventional arms in Europe—the CFE Treaty—by fall 2011 remained not only at an impasse, but risked unraveling

13. Nicolas Sarkozy and Angela Merkel, "Security Our Joint Mission," *le Monde*, February 9, 2009, www.ambafrance-uk.org/Security-our-joint-mission.html. Presumably this formed part of the thinking behind the bilateral Merkel-Medvedev June 2010 proposal to create a new EU security committee to deal with issues like Transnistria, and then the follow-up initiative among Merkel, Sarkozy, and Medvedev at the October 2010 Deauville summit.

14. Joseph R. Biden Jr., "Advancing Europe's Security," *The International Herald Tribune* (May 6, 2010).

entirely. After four years of Russia's non-compliance with the Treaty's monitoring and verification requirements, pressures were building in other states, including the United States, to reciprocate by refusing to exchange further data when the next reporting deadline arrived in December. At the OSCE Annual Security Review Conference in July 2011, Rose Gottemoeller appealed to "all of us" involved in the CFE negotiations "to spend some time considering the current security architecture, and to ask ourselves some questions about what our future needs will be and what types of measures will help achieve those security goals."[15] It was a heartfelt attempt to breathe life into a dying enterprise, welcomed by many in her audience, including her Russian counterpart. But it co-existed with a powerful lethargy on the part of most, who were more focused on attending to the problems surrounding the Open Skies Treaty and the CSBM regime of the Vienna Document 1999—both of which had their own considerable problems.

**ALTERNATIVE APPROACH: A REVISED EUROPEAN CONVENTIONAL ARMS CONTROL REGIME.** The alternative indisputably ambitious approach starts from the assumption that each side must set aside the preconditions that have brought the CFE regime to this pass, and seek another path to solving the problems they address.[16] This, of course, places the second approach at odds with the inertia of the moment. The political obstacles preventing each side from yielding on its preconditions loom large. That said, the second approach argues that the goal of securing the withdrawal of Russian forces from Abkhazia, South Ossetia, and Transnistria should be done in the context of addressing Georgian-Abkaz/South Ossetian relations and Georgian-Russian relations (almost certainly progress on the latter will depend on movement in the former). Limits on the number, nature, and role of Russian forces in Abkhazia and South Ossetia might—indeed, should—be part of any reconstruction of a conventional arms control regime, but framed in a status-neutral fashion. The Russian side, for its part, should move away from whatever preconditions are left over from before, agree to resume verification and monitoring, and engage in a serious discussion of how the "host nation" principle might be implemented in mutually acceptable fashion.

From here the process would begin with the most feasible and from there move to the more difficult. The easiest (albeit not easy) might be the idea advanced by Sam Nunn in this volume and echoed in Gottemoeller's call at the 2011 OSCE Annual Security Review Conference to begin a dialogue. At a minimum

15. "Statement by Rose Gottemoeller, Assistant Secretary of State for Arms Control, Verification and Compliance, State Department of the United States" to the OSCE Annula Security Review Conference, Vienna, Austria, Session III, July 1, 2011, PC.DEL/545/11/Corr.1, June 29, 2011.

16. Wolfgang Zellner, for example, makes the argument in, "Can This Treaty Be Saved? Breaking the Stalemate on Conventional Forces in Europe," *Arms Control Today Online* (September 2009), http://www.armscontrol.org/act/2009_09/Zellner. NATO has apparently agreed internally on what "substantial" combat forces means, but, if so, this has not been conveyed to Russia.

this dialogue would focus on all parties' principal concerns, notion of threats, and sense of the best way to deal with them. Somewhat more ambitious might be, as Nunn suggests, a dialogue among military leaders over operational doctrine with the aim of adjusting it to give others increased warning and decision-making time.

Second, there are a set of issues that, were the paralyzing preconditions removed, should be soluble. Russia's legitimate complaint that the original TLE ceilings have become unbalanced with the last round of NATO enlargement ought not to be difficult to resolve. The United States and its NATO partners earlier indicated that, were the obstacles to ratification of the ACFE Treaty removed, they are ready to discuss lower ceilings. Because actual NATO equipment levels are already considerably lower than the formal ceilings, unless, as is unlikely, anyone in NATO is contemplating major new equipment acquisitions, simply codifying current holdings as the new ceiling would be one way to solve the problem.

Similarly, the problem of defining what each side means when pledging not to move "substantial" combat forces into the "new" NATO states or the southern flank zone, while more fraught, should also be open to progress. NATO has said that it is willing to address the issue.[17] Finally, even the central and more contentious issue of host-nation consent should be amenable to solution. It is an integral part of the original CFE Treaty to which Russia is party. It should not be in dispute as a principle applicable to Transnistria. Russian military presence in the separatist territories of Georgia is another matter. Already during the ultimately unfruitful 2010-2011 negotiations, the United States signaled a readiness to find a flexible interpretation of the principle's application in the Georgian case, if the Russia side accepted the principle itself. The Russian side never responded, sparing Washington what surely would have been Georgian opposition had the idea gone forward.

Assuming that the baseline for a new agreement would remain the adjusted standard in the ACFE (that is, equipment limits applied to individual states with territorial ceilings for total forces), two major issues would remain: regulating forces on the flanks and subregional limitations. The Soviet and Russian military never cared for the CFE Treaty and particularly abhorred the constraints placed on its forces in the Caucasus and Baltic military districts. As early as 1993, Russian defense officials were making the case against what they saw as their inequity and inappropriateness, and twice NATO has agreed to alter the terms of those limitations. The Russians, however, want them eliminated entirely.

That would be a bad idea because limitations on military maneuvers, troop concentrations, and freedom of reinforcement in the most sensitive parts of the Euro-Atlantic region are key to a stable Euro-Atlantic security system. To be effective, however, they must apply equally to both sides. Limitations designed only for

17. The issue, however, is complicated by the added pledge that forces that were introduced would not be permanent and the U.S. claim that its new bases in Romania and Bulgaria are "temporary," when they are clearly intended to be long term.

Russian territory (and a small portion of Ukrainian territory) are not sufficiently sturdy building blocks for what might be better thought of as "safety zones"—i.e., areas of reciprocal restraint in which each side limits the nature of military exercises, the kinds of equipment forward deployed, and the scale of permitted troop reinforcements from outside the area, in addition to the territorial TLE ceilings that are part of an amended CFE agreement.[18]

The idea of safety zones in the Baltic and Caucasus/Balkan regions links to the other difficult but important issue, that of subregional limitations. European security, if it is to be enhanced by conventional arms control, entails not only the stability of the NATO-Russian military balance, but also the stability of subregional balances. The conversion of the original CFE Treaty's bloc-to-bloc TLE ceilings to the state-by-state limitations in the ACFE preserved, as John Peters noted, unequal force-ratio balances between a number of states (such as Russia and Ukraine, Ukraine and Poland, and Poland and its neighbors).[19] These disparities cannot be completely eliminated, but they might be reduced sufficiently to provide greater confidence between neighbors. Still, more important, there are other ways to introduce stability into key bilateral relationships. Hungary and Romania long ago agreed to aerial observation arrangements resembling those under the Open Skies Treaty, and this example, along with other tailored CSBMs, could well be duplicated elsewhere, particularly if safety zones were created in Europe's north and south.[20]

The second, alternative approach, therefore, consists of tiered elements, beginning with steps short of formal negotiations for a treaty and advances through steps that would require formal agreement, some of which in treaty form. But in its entirety it is animated by a vision of what a modernized, more stable and predictable European conventional arms control regime should look like. And it places this vision front and center when contemplating the path to a genuinely enhanced European security system.

## MISSILE DEFENSE COOPERATION

Unlike the other two spheres, the idea of missile defense cooperation has a certain momentum. In contrast to the three prior failed attempts, this time national leaders in both Washington and Moscow, reinforced by support within NATO, appear more determined to succeed.

18. Kuehn develops the idea more fully in "CFE: Overcoming the Impasse."

19. John E. Peters, *The Changing Quality of Stability in Europe: The Conventional Forces in Europe Treaty toward 2001*, National Defense Research Institute RAND, 2000, 5–9.

20. Peters makes the point in *The Changing Quality of Stability in Europe*, 11.

Achieving accommodation on missile defense, however, remains far from certain.

Achieving accommodation on missile defense, however, remains far from certain. Despite the obvious seriousness with which all parties are approaching the task, formidable obstacles remain. In the months since the November 2010 Lisbon commitment to forge Russian-NATO-U.S. cooperation on missile defense, progress has been real but fitful. The Russian side, until mid-July 2011, publicly insisted on a unified system and a legal guarantee that the system will never be capable of jeopardizing its nuclear deterrent, whereas the United States and NATO advocate coordinated but separate systems and regard a formal legal guarantee as both impractical and politically unacceptable. Behind the scenes, however, negotiators from the three sides are inching forward. Progress is being achieved on developing fusion centers and relaunching staff command exercises. On the eve of the Deauville U.S.-Russian presidential summit in May, the two sides had begun developing a joint statement that addressed four issues, including a legal guarantee (by substituting the looser notion of political assurances). By the close of the July NATO-Russia Sochi meeting, Russian Foreign Minister Lavrov acknowledged that a joint missile system would not be possible and the Russian sectoral approach was no longer at issue.[21]

That the process has been as tortured as it has been and that leaders left Deauville, the June Brussels NRC ministerial, and the July Sochi NATO-Russia meeting disappointed owe to a fundamental problem afflicting all three issue areas. Peel away the layers of disagreement and at the core remains the corrosive factor of mistrust. All three original official Russian demands and a fourth that Sergei Ivanov added trace back to this factor. Russian officials simply do not trust that, whatever the Obama Administration's current intentions, a U.S.-designed ballistic missile defense system will not at some point be directed against their country's nuclear deterrent. Their initial insistence on a joint system, their notion of a "sectoral approach," Ivanov's off-the-cuff comment that Russia must have its finger "on the red button,"[22] and, in particular, their grudging and vacillating retreat from the demand for a legal guarantee that missile defense will not target Russian forces, all have this common inspiration. Mistrust is what impels the

21. See his comments at the press conference following the meeting in "Russia Admits No Chance of Sectoral Missile Approach with NATO," *RIA-Novosti,* July 4, 2011, http://en.rian.ru/russia/20110704/165016655.html. Since then, however, the demand has resurfaced and is implicit in ideas that Russian negotiators continue to push.

22. Ivanov's comment was on the sidelines of a conference in Florida and appeared to be his personal innovation. (See Simone Baribeau and Henry Meyer, "Ivanov Says Russia Wants 'Red-Button' Rights on U.S. Missile-Defense Plan," Bloomberg, April 8, 2011.) As a further sign of progress, however, after the NATO-Russia meeting in Sochi in July 2011, President Medvedev's special representative for missile defense, Dmitri Rogozin formally repudiated this idea. "Giving anyone access to this virtual red button," he said, "is something that can never happen. It is impossible.... We will not put our system of strategic nuclear forces and system of aerospace defense under anyone's control." See his comments at the press conference following the meeting in "Russian Lawmaker Calls on NATO to Halt Fielding Missile Defense," *Global Security Newswire*, June 1, 2011, http://gsn.nti.org/gsn/nw_20110601_5870.php.

Russian leadership to cloud the present with the future—to insist that what matters are the last two phases of the U.S. administration's EPAA or whatever variations successor administrations may introduce—plans that are nearly a decade away for weapons that do not yet exist.

Mistrust, however, exists on the U.S. side as well. It is evident in the letter 39 Republican senators sent to the president warning that, in negotiations over missile defense, Russia "will seek to obtain whatever missile defense concessions it can and that such concessions could undermine the security of the United States and our Allies."[23] The letter goes on to ask for written assurances that the United States will not in any agreement provide Russia with sensitive data nor will the administration allow Russia to influence deployment decisions nor will it heed Moscow's concerns over phases 3 and 4 of the EPAA. Behind these demands is the suspicion that Russia will share sensitive data and technologies with "states such as Iran and Syria," but this, as the letter makes plain, is part of a more basic perception of Russia as still a hostile competitor engaged in serious espionage activity against the United States.

Thus, the lesson in the case of missile defense is the same for conventional arms control and for dealing with NSNW: real progress can come only if addressing the pernicious impact of mistrust becomes an important objective, and, from the outset, is built into the negotiating framework. In the case of missile defense cooperation, this, as reflected in the concept proposed by the Euro-Atlantic Security Initiative's Working Group on Missile Defense, would have several elements.[24]

First, cooperation would best be launched on issues accessible to agreement, while postponing the more divisive issues until a moment when they must be addressed. The relatively noncontentious aspects of the first two phases in the EPAA should be used to fashion a cooperative missile defense system, leaving ways of dealing with phases 3 and 4 for later and within the context of a functioning cooperative framework.

Second, there should be agreement that developing and deploying an effective missile defense system are two different things, and that deployment will be tailored to the threat that emerges. In this way differences over current threat assessments can be set to the side.

Third, the sides should ensure that data (or "fusion") and operational centers are manned by U.S./NATO and Russian officers working together to fashion a common threat picture, and not simply virtual centers. Human interaction at this operational level is an important confidence-building measure and will promote greater understanding of the sides' missile defense systems and their limitations.

The lesson in the case of missile defense is the same for conventional arms control and for dealing with NSNW: real progress can come only if addressing the pernicious impact of mistrust becomes an important objective.

23. Daniel Halper, "No Red Button for the Russkies," *The Weekly Standard*, April 15, 2011.

24. "Missile Defense: Toward a New Paradigm," The Working Group on Missile Defense, Euro-Atlantic Security Initiative, May 2011.

In the end, it is clear that any collaborative missile defense system will not be unified and joint but separate and coordinated…

Fourth, the threat should be framed in precise terms to eliminate a misreading of intentions. For the moment the threat from states like Iran arises from medium- and intermediate-range missiles (2,000–4,500 kilometers), and a missile defense system designed for this threat cannot be a threat to the Russian nuclear deterrent, because under the INF treaty Russia does not have such weapons.

Fifth, it is important to resume joint command-staff exercises on ballistic missile defense, and to expand their scope to include defense against medium- and intermediate-range missiles. These have been done before, would be instantly feasible, and should be among the first steps undertaken.

Finally, because much of the discord over the capabilities attributed to U.S. present and prospective missiles depends on the assumptions built into the models that defense planners run, the United States and Russia, within the normal rules of disclosure, should organize joint modeling exercises. This may help to mitigate stubborn Russian suspicions that EPAA missiles will by the fourth stage threaten Russian forces in a way that U.S. assurances to this point have not. All of these steps are features essential to an effective cooperative missile defense system, but they are also means by which the sides can erode the mistrust that narrows their vision of what is possible.

Any missile defense system drawing the United States, NATO, and Russia together that stands a chance of being realized, however, will almost surely have to possess four characteristics. First, it will have to be a system based on full partnership. Even if in the early stages the contributions of different parties are unequal, the underlying principle must be equal responsibility and, from the beginning, an equal voice in determining the system's architecture and purposes.

Second, it must respect the sovereign right of each participating state to defend its own territory. Where practical and desirable this does not preclude the sides from negotiating protocols in advance permitting—or, indeed, committing—one country to intercept missiles targeted on another country as they cross its territory.

Third, within the normal limits applied to the exchange of sensitive technology, countries should be ready to share technologies and other resources permitting a more effective coordinated system.

And, fourth, the system should be based on open architecture, and accessible to any country willing to renounce the development of medium- and intermediate-range missiles as well as to commit itself to protecting the nonproliferation regime.

In the end, it is clear that any collaborative missile defense system will not be unified and joint but separate and coordinated, a reality that only slowly is being accepted in Moscow. As for Russia's other demands, its leadership will have to decide whether it gains more by being inside a program whose U.S. component it cannot prevent, rather than standing outside and struggling to fulfill its threat to offset a U.S.-NATO system. And perhaps the better way to assure themselves that

the EPAA does not pose a threat to their country is by actively working side-by-side with United States and NATO in building the system rather than by insisting on formal legal guarantees in advance. As Russian officials have acknowledged, failure to achieve agreement on missile defense will carry a very heavy price, and perhaps that realism will ultimately be decisive. Still, as history demonstrates, wisdom does not always carry the day when bureaucratic inertia and the vagaries of politics stand in the way.

As Russian officials have acknowledged, failure to achieve agreement on missile defense will carry a very heavy price…

## CONCLUSION

Ultimately we are brought back to the point where we started. Whether a cooperative ballistic missile defense system can be worked out in Europe; whether Europe will be blessed with new arrangements that bring greater predictability, stability, and mutual confidence to military relations; and whether NSNW can be removed as a factor of concern will depend on the course of political relations between the United States and Russia and Russia and its European neighbors. Positive for now, nothing guarantees that these trends will survive the outcome of critical Russian and U.S. national elections in 2012, and nothing yet suggests that if these trends continue they will acquire the added momentum needed to achieve the breakthroughs that this limited moment of opportunity provides.

CHAPTER EIGHT

# A Russian Perspective

## *on the Challenge of U.S., NATO, and Russian Non-Strategic Nuclear Weapons*

ALEXEI ARBATOV

The New START Treaty between the United States and Russia constitutes an important and useful step in bilateral nuclear arms reductions. The Treaty's ratification by both nations and the beginning of its practical implementation has opened up a new security agenda consisting of highly complex problems involving both nuclear and conventional forces. One of the key challenges of such efforts would be extending negotiations and agreements to non-strategic nuclear weapons (NSNW, alternatively called pre-strategic, tactical, or theater nuclear weapons).

Even during negotiations on New START, several U.S. Senators insisted on including NSNW in the agreement. The April 2010 U.S. Nuclear Posture Review (NPR) stresses the concern over Russia's NSNW and indicates the importance of including these weapons in future negotiations.[1] The fact that NSNW were left out of New START permitted the new Treaty to be concluded shortly after the original START expired in December 2009; otherwise negotiations might have continued for many years without any guarantee of success, due to the complexity of the NSNW issue. The final U.S. Senate resolution of ratification of New START adopted in December 2010, however, states that "the United States will seek to initiate, following consultation with NATO Allies but not later than one year after the entry into force of the New START Treaty, negotiations with the Russian Federation on an agreement to address the disparity between the non-strategic (tactical) nuclear weapons stockpiles of the Russian Federation and of the United States and to secure and reduce tactical nuclear weapons in a verifiable manner."

In addition, the NATO Summit declaration of November 2010 and its new Strategic Concept underlined the importance of seeking Russian agreement to

1. United States, Department of Defense, *Nuclear Posture Review Report* (Washington, D.C.: April 2010), X–XI.

# CHAPTER EIGHT: **KEY FINDINGS**

- There is every indication that the United States and NATO will make the issue of NSNW one of the main priorities of their foreign policy and disarmament strategy. The United States and NATO believe Russia has a huge numerical advantage in NSNW—an advantage that would be more consequential under further reductions in strategic nuclear forces. In addition, the location and security of Russian NSNW is an expressed concern of both the United States and NATO.

- The Russian position is that U.S. NSNW now forward deployed in Europe must be returned to the United States as a condition for dialogue; moreover, Russia believes there are several security issues, including missile defense and conventional forces that must be addressed in parallel to NSNW in any future disarmament discussions.

- Beyond this fundamental divide in U.S./NATO–Russian perceptions, there are several difficult issues associated with any future NSNW limitations. These involve the definition of NSNW, their location and deployment status, their delivery vehicles, third-country systems, and the political and military utility of these weapons as perceived from both sides.

- One option being considered by the United States for the next round of nuclear arms control is an equal ceiling on all U.S. and Russian nuclear warheads—strategic and non-strategic, deployed and nondeployed. This could also involve relocating Russian NSNW as far as possible from NATO borders, as stated in the NATO Lisbon Summit Declaration.

- As elegant as this model may look at first glance, it has profound deficiencies when viewed from Moscow. In particular, Russia believes it must rely more than the United States on NSNW for regional contingencies (including beyond its NATO neighbors), and would not want to accept inequality in strategic arms in order to maintain regional security. As to combat readiness, the type of storage facility (operational or centralized) is more important than the geographic location of the storage facility. Moreover, the Russian advantage in NSNW as perceived by the West largely depends on the counting rules for NSNW, which combined with the complex problems of verification might lead negotiation on the above model to a prolonged deadlock, at least in the foreseeable future.

- A more promising way to begin the process of engagement on NSNW would be for the United States, NATO, and Russia to start with consultations on definitions, proceed with data exchanges and associated confidence building measures, and then reach an agreement on relocating both U.S. and Russian NSNW from operational (forward based) to centralized (reserve) storages. Expanding U.S.-Russian and NATO-Russian joint threat assessment activities to include regional nuclear and conventional balances and the role of NSNW might also narrow the gap between Russian and Western security perceptions.

increase transparency on NSNW in Europe and relocating them away from the territory of NATO members, as well as taking into account the disparity with the greater Russian NSNW stockpile in any further steps by NATO.[2]

It should therefore be presumed that the United States and NATO will make the NSNW issue one of the main priorities of their foreign policy and disarmament strategy.

Defining NSNW as a subject of negotiations is quite a challenge, raising a number of questions and issues.

## WHY LIMIT NSNW?

In the West there are several specific arguments for limiting NSNW:

- It is assumed that Russia has a huge numerical advantage in NSNW over the United States and NATO and that lowering levels of strategic forces would make this advantage yet more tangible;
- Russia's assumed numerical advantage in NSNW and the location of Russian NSNW is an increasing concern for NATO;
- In case of military conflict, Russian NSNW are to be deployed together with general-purpose forces and may be immediately involved in combat actions, thus triggering quick nuclear escalation; and
- Allegedly, to provide flexibility to their combat employment, NSNW (especially older versions) have less stringent or redundant systems ("electronic locks") for preventing unauthorized use than strategic weapons. NSNW also have smaller physical dimensions making them more vulnerable to theft and more easily accessible and attractive for terrorists.

Russia's position on NSNW has been extremely reserved and vague. It has been limited to the demand that the United States removes its NSNW based in Europe to its national territory, as a precondition for entering any dialogue on the subject.

## WHAT ARE NSNW?

Defining NSNW as a subject of negotiations is quite a challenge, raising a number of questions and issues. It would be logical to include in this category the nuclear weapon systems that are not covered by the existing treaties, namely the New START Treaty of 2010 and the Intermediate-Range Nuclear Forces (INF) Treaty of 1987.

According to this logic, such nuclear weapons should include ground-launched ballistic missiles (GLBM) and ground-launched cruise missiles (GLCM) with

2. North Atlantic Treaty Organization, *Strategic Concept for the Defense and Security of the Members of the North Atlantic Treaty Organization* (Lisbon: November 2010), http://www/nato.lisbon2010/strategic-concept-2010-eng.pdf.

ranges of less than 500 kilometers, combat aircraft with ranges of less than 8,000 kilometers not capable of carrying long-range (i.e., more than 600 kilometers) air-launched cruise missiles (ALCM) and submarine-launched ballistic missiles (SLBM) with ranges of less than 600 kilometers.

Within this construct—and in line with the United States and the USSR/Russia Presidential Nuclear Initiatives (PNIs) from the early 1990s—NSNW should include various other nuclear systems, such as the following:

- Artillery shells and nuclear mines (demolition munitions) assigned to the Ground Forces;
- land-based and air-launched anti-aircraft missiles;
- air-to-surface missiles and bombs (including depth charges) assigned to non-strategic Air Force and Navy aircraft;
- various surface-to-air, anti-ship, and anti-submarine missiles and torpedoes of surface ships and attack submarines; and
- artillery shells of surface ships and sea-launched land-attack cruise missiles of various range on combat ships and attack submarines.

**SEA LAUNCHED CRUISE MISSILES**: Such a broad interpretation, however, does not address the question of how one defines long-range (about 3,000 kilometers) SLCMs with nuclear warheads that may be deployed on ships and attack submarines? In terms of technical characteristics, such missiles are similar or even identical to GLCMs prohibited and eliminated under the INF Treaty and ALCMs included in the START Treaties. This type of nuclear SLCM was treated as a strategic weapon and limited by the START I Treaty of 1994–2009 through a separate ceiling of 880 for each party; although this provided some transparency, there were no verification procedures. The New START Treaty of 2010, however, makes no mention of this weapons category. In Russia, nuclear SLCMs are considered and called "strategic SLCMs."

**GRAVITY BOMBS AND MEDIUM BOMBERS:** Certain U.S. nuclear gravity bombs (such as the B-61 and B-83) can also be deployed with both U.S. strategic (heavy) bombers and tactical strike aviation, placing them in both strategic and NSNW classes.

The Russian Tu-22M3 medium bomber is the only medium range weapon system left after the elimination of medium-range (500–5500 km) ground based ballistic and cruise missiles under the terms of the 1987 INF Treaty. In the SALT II agreement of 1979, this system was treated in an appendix that prohibited its refueling and other methods of range extension, and also limited production rates.[3]

3. Much later this type of aircraft was included in the CFE Treaty limitations and reductions of 1990 together with other conventional airplanes and ground forces' arms in Europe.

**THIRD COUNTRIES**: Another key issue in defining NSNW is that beyond the United States and Russia, other nuclear weapons states (North Korea, France, India, Israel, Pakistan, and the People's Republic of China) also have short- and medium-range aircraft and missiles in their inventory. For many of these states, "non-strategic" systems comprise most of their entire nuclear capability, although these countries regard the weapons as "strategic."

In particular with respect to NATO, the French Strike Force includes 60 Mirage 2000N land-based and 24 Super-Etendard carrier-based fighter-bombers that are capable of delivering a total of 60 Air-Sol Moyenne Portée Ameliorée (ASMPA) air-to-surface missiles to the target. By their range (up to 500 kilometers) these missiles may be attributed either to medium-range (like missiles of Russian Tu-22M3 bombers) or to tactical nuclear systems. However, France regards them as a part of its strategic force.

**DATA ISSUES:** The existing American and Russian NSNW systems remain following the implementation of PNIs in the early 1990s. Because the PNIs did not have any verification procedures, there is a considerable amount of confusion as to how many arms of various types have been withdrawn from forward bases, where they were relocated, and what kind of dismantlement, elimination, and utilization handling was applied to them. All this understandably would affect the assessment of the present U.S.-Russian NSNW balance.

**NSNW MAINTENANCE AND USE:** Also important to consider are two aspects of NSNW maintenance and use. First, with very few exceptions, NSNW are deployed on dual-purpose—conventional and nuclear—platforms, and use dual-purpose launchers and delivery vehicles.[4] Therefore, in contrast to strategic nuclear missiles, it is impossible to count NSNW or implement and verify their limitation or elimination through the elimination of their launchers, delivery vehicles or platforms (such as ballistic missiles, heavy bombers, and nuclear-powered ballistic missile submarines under the START treaties). They all fall in the category of general-purpose forces inventory.

They are designed mainly for conventional military operations and are partially covered by other agreements (such as the Conventional Forces in Europe (CFE) Treaty, which limits non-strategic combat aircraft and artillery in Europe). Thus, any substantial reduction of NSNW by their launchers and delivery vehicles would be very difficult, because it would lead to drastic cuts in combat equipment and arms of air forces, the navies, ground forces, and air/missile defense of the nuclear powers, including those assigned missions in local conflicts.

Unlike strategic weapons, NSNW are not operationally deployed (i.e., they are not mated to their platforms, launchers, and/or delivery vehicles in peacetime). In the 1990s, Russia would routinely deploy a few nuclear anti-ship missiles and

4. Medium bombers, fighter-bombers, ships and attack submarines, short-range offensive missiles and surface-to-air missiles, naval weapons, and heavy artillery.

torpedoes on its attack submarines on patrol; however, after the catastrophe with the *Kursk* nuclear submarine in August 2000, this practice ended.[5] It is unknown whether Russian attack nuclear submarines occasionally go on sea patrol with nuclear SLCMs to supplement the one or two ballistic missile submarines deployed at sea at any given time.

## WHERE ARE NSNW?

All U.S. and Russian NSNW are located in storage facilities. There are several principle types of facilities that imply different possibilities for accounting, verification, and limitation of NSNW. Differentiating among deployed and nondeployed NSNW may imply differentiating among various types of storage facilities.[6]

Differentiating among deployed and nondeployed NSNW may imply differentiating among various types of storage facilities…

First, there are operational depots at or near military bases, where NSNW delivery vehicles, launchers, or platforms are deployed. These NSNW are either assembled with delivery vehicles (missiles, bombs, torpedoes, etc.) or have separated munitions to be mated with delivery systems on demand. Sometimes NSNW are kept at the same depots with strategic nuclear weapons.[7]

Second, there are large centralized storage facilities, each with several large sections where a reserve stock of hundreds or even thousands of non-strategic and strategic nuclear weapons are kept after being withdrawn from operational bases. They are preserved as ready replacement or reinforcement of the nuclear arms at operational bases; some may be used for spare parts and many await dismantlement. They undergo regular service, which is strictly scheduled, regulated, and recorded, in order to provide checks and maintenance.

In Russia such storage facilities are called "S-sites" and are managed by special nuclear-technical troops of the 12th Main Directorate of the Ministry of Defense (12th GUMO). The storage facilities are surrounded by several perimeters of fences with various monitoring and safety equipment, and heavily guarded and patrolled by special troops. The personnel and their families live in closed cities adjacent to S-sites and isolated by another fenced perimeter and guarded by the internal troops.[8]

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5. There is evidence from parliamentary sources that the *Kursk* had two anti-ship nuclear SS-N-19 missiles (P-700 Granat), although later this was officially denied by the Russian Navy. See http://www.gazeta.ru/2001/04/05/bylolinakurs.shtml.

6. In contrast to strategic weapons, which are considered deployed if actually mated with strategic nuclear delivery vehicles or, in the case of heavy bombers, having nuclear weapons at nearby depots.

7. Foremost at naval bases and airfields where strategic submarines and heavy bombers are collocated with general purpose planes and naval vessels.

8. During the 1990s, for the safety reasons all the depots at armed forces' bases were transferred to the management of the 12th GUMO and thus also became "centralized" storage sites, from which the warheads may be handed to armed forces only on the authorization of the Ministry of Defense.

In the United States, perhaps the closest equivalent to a Russian "S-site" would be the Kirtland Underground Munitions Storage Complex, which provides nuclear weapons storage, shipping, and maintenance for the U.S. Air Force and Navy.

The third type of storage facilities is located at nuclear munitions manufacturing facilities. Here, nuclear arms are assembled and sent to centralized storage facilities and operational bases, or dismantled for use and further preservation in stocks to be eventually used for military (in new weapons) or civilian (nuclear fuel) purposes. In the United States, there is one such facility, Pantex in Amarillo, Texas, run by the Department of Energy (DOE). In Russia, there are presently two manufacturing plants managed by the military sector of Rosatom (according to unofficial data, these are "Zlatoust-36" plant in the Cheliabinsk region and "Start" plant at Penza-19 about 400 km to the south-east from Moscow).

The fourth type is deep reserve storage facilities with nuclear "pits" from dismantled nuclear munitions under control of the U.S. DOE and Russian Rosatom. These facilities represent efforts to manage overall stocks of weapon-grade nuclear materials. The new Russian storage at Mayak nuclear complex near Cheliabinsk (Southern Ural Mountains area) was built with the help of the United States and is designed for 25,000 containers with weapon nuclear material components.

In addition to the above, nuclear munitions can be in transit at any given time, moving among various storage sites, which Russia does by land routes and the United States by airplanes.

Depending on the geographic location and storage type of NSNW to be taken into account, the U.S.-Russian or Russian-NATO balance of NSNW would vary significantly in terms of numbers.

Depending on the geographic location and storage type of NSNW to be taken into account, the U.S.-Russian or Russian-NATO balance of NSNW would vary significantly in terms of numbers (and the degree of "superiority" in terms of comparing the U.S./NATO–Russia NSNW balance, with almost every public Western estimate indicating a large Russian advantage); this would also affect possible limitations and verification measures.

## U.S. AND RUSSIAN NON-STRATEGIC NUCLEAR WEAPONS[9]

### The United States

According to various estimates, by the end of the 1980s, the United States had over 8,200 NSNW. In line with the unilateral PNI of 1991, the United States committed to withdraw its NSNW from foreign bases to its own territory, eliminate all NSNW from ground forces, remove all NSNW from surface ships and attack submarines (excluding long-range SLCMs), and destroy 50 percent of its total number of NSNW.[10] Eventually the United States was to destroy over 90 percent.

9. Neither of the two powers discloses official information on its stockpiles of NSNW.

10. Alexander Pikayev, "Non-strategic Nuclear Weapons," *Nuclear Proliferation: New Technologies, Weapons and Treaties*, eds. Alexei Arbatov and Vladimir Dyorkin (Moscow: Carnegie Moscow Center, ROSSPEN, 2009), 129–159.

According to unofficial estimates, the United States currently has approximately 500 "active" NSNW. These include 100 Tomahawk SLCMs (TLAM-N) for nuclear-powered attack submarines at Kings Bay and Bangor naval bases in the U.S. territory. A further 190 SLCM warheads (W80-0) are reserved in storage. In addition, there are 400 gravity bombs (B-61-3 and B-61-4), with 200 bombs at six U.S. Air Force storage facilities in five NATO member-states (Belgium, Germany, Italy, the Netherlands, and Turkey). These bombs are to be delivered by F-16 fighter-bombers of the U.S. Air Force, as well as by allied airplanes of the same type and Tornado strike aircraft.[11]

According to the new U.S. Nuclear Posture Review, all Tomahawk nuclear SLCMs will be retired. The B-61 gravity bombs, however, will undergo a program to enhance the weapons safety and extend its service life for another 30 years. The new tactical F-35 fighter aircraft, as well as remaining F-15E and F-16 aircraft, will be certified to deliver these bombs. These B-61 bombs are addressed in the context of the U.S. extended deterrence commitment to Allies, and their future deployment in Europe will be subject to consultation within NATO.[12]

There is no reliable information on the aggregate number of nuclear munitions stored on U.S. territory. By some data, these munitions are stored at 21 locations in 13 states in various storage facilities at air and naval bases, in separate central locations, and in depots at Pantex.[13] According to official data, U.S. strategic nuclear forces, NSNW, and the active stockpiled reserve consist of 5,113 nuclear warheads.[14] By some independent experts' estimates, another 3,500–4,500 weapons are deactivated and intended for disposal.[15] In addition, around 14,000 nuclear "pits" are stored at Pantex and 5,000 canned assemblies (thermonuclear secondaries) are at Oak Ridge Y-12 nuclear plant (Tennessee).[16]

## The Russian Federation

Information on Russia's non-strategic nuclear assets is mostly classified. According to various estimates, Russia had up to 22,000 units of NSNW in the late 1980s.[17] As part of the USSR and Russia PNIs of 1991–1992, all NSNW of the

11. Stockholm International Peace Research Institute, *SIPRI Yearbook 2010: Armaments, Disarmament and International Security*, (Stockholm: Oxford University Press, 2010), 341–42.

12. *Nuclear Posture Review Report 2010*, XII–XIV.

13. Robert S. Norris and Hans M. Kristensen, "Nuclear Notebook: Worldwide Deployments of Nuclear Weapons 2009," *Bulletin of the Atomic Scientists* 65(6) (November 2009), 86.

14. United States, Department of Defense, "Fact Sheet: Increasing Transparency in the U.S. Nuclear Weapons Stockpile," May 3, 2010, Washington, D.C., http://www.defense.gov/npr/docs/10-05-03_Fact_Sheet_US_Nuclear_Transparency__FINAL_w_Date.pdf.

15. *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers*, (Canberra, A.C.T: International Commission on Nuclear Non-proliferation and Disarmament, 2009), 20.

16. *SIPRI Yearbook 2010*, 342.

17. Alexei Arbatov, ed., *Nuclear Weapons and Russian Security* (Moscow: IMEMO, 1997), 56.

According to declarations by representatives of the Russian military and political authorities, all Russian NSNW are stored at centralized facilities.

ground forces were to be moved to storage facilities of nuclear weapons manufacturing plants and to central storage locations for subsequent total elimination. In addition, about 30 percent of NSNW of the Navy, 50 percent of Air Defense, and 50 percent of the aircraft weapons were to be eliminated.

According to official data, by the year 2000, all NSNW of the Navy and the Naval Aviation were removed from ships and submarines and relocated to central storage facilities, with 30 percent of naval tactical nuclear arms eliminated. Also, 50 percent of the Air Force NSNW and 50 percent of the warheads of surface-to-air missiles were eliminated. A large part (although due to the costs of elimination, not all) of nuclear munitions of the artillery, tactical missiles, and mines of the ground forces were also eliminated.[18]

According to unofficial estimates, Russia currently has an active stockpile of approximately 2,000 NSNW (Figure 1).[19] These include about 650 tactical nuclear air-to-surface missiles and gravity bombs for 120 Tu-22M3 medium-range bombers and 400 Su-24, Su-27IB and Su-34 tactical bombers. In addition, there are about 240 air-to-surface missiles, gravity bombs, and depth charges of the naval aviation comprising 60 Tu-22M3, 60 Su-24, and 60 Il-38 aircraft. More than 530 NSNW are anti-ship, anti-submarine, and anti-aircraft missiles and torpedoes of surface ships and submarines, including up to 240 nuclear long-range SLCMs of attack submarines. Allegedly, an estimated 630 munitions are assigned to S-300/400 surface-to-air and other air defense missile systems.[20] In addition, another 3,400 weapons may be stored as a reserve inventory.[21]

As noted above, in the 1990s, all NSNW of ground forces and air defense, as well as most of the NSNW of the Air Force and the Navy, were redeployed to the centralized storage facilities of the 12th GUMO, where they are kept in active reserve or are awaiting disassembly and disposal. According to declarations by representatives of the Russian military and political authorities, all Russian NSNW are stored at centralized facilities.[22]

It is unclear how many NSNW remain in the depots of air and naval bases placed under the management of the 12th GUMO, and how many were redeployed to the initial S-sites. Although their total amount is classified, foreign experts estimate the number of stored weapons slated for dismantlement is approximately 8,000.[23]

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18. Igor S. Ivanov, "Statement by the Minster of Foreign Affairs of the Russian Federation at the Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, April 25, 2000," *Diplomatic News* (*Diplomatichesky Vestnic*), May 2000.

19. *SIPRI Yearbook 2010*, 344.

20. Ibid., 344–48.

21. Ibid.

22. Viktor Litovkin, "Security May Only Be Equal," *Nezavisimoe Voennoe Obozrenie*, December 19, 2008, 3; Sergei Ivanov, "Nuclear Disarmament: Is Global Zero Possible?" *Voenno-Promyshlenny Kurier* (no. 6) February17–23, 2010, 3.

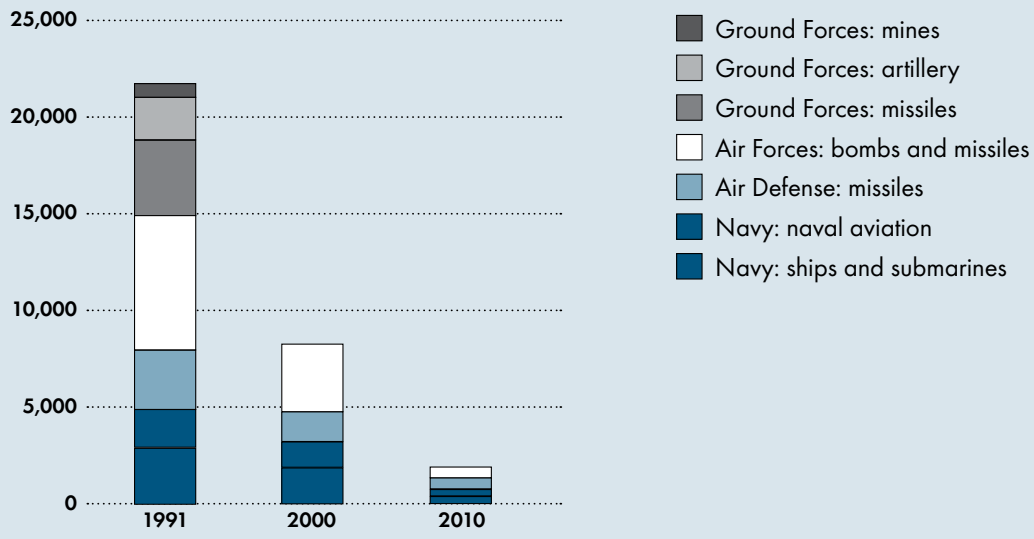
23. *Eliminating Nuclear Threats* (2009), 20.

According to recent unofficial estimates, there are 39 Naval (and possibly also Air Force) nuclear depots, nine centralized S-sites of the 12th GUMO, and two storage locations at manufacturing plants[24]—plus a Mayak (Cheliabinsk) storage facility designed for 25,000 containers with plutonium and uranium components.

**UNCERTAINTIES**: Questions remain regarding the method used to calculate numbers of NSNW by independent experts. For example, it is unclear what method was used to count the 2,000 number. Does this include NSNW only at airfields and naval and air defense depots, or also at initial S-sites and manufacturing plants? Because of the lack of reliable information, estimates based on numbers of available delivery vehicles are a possible point of reference. Estimates are also plagued by a broad range of uncertainty, because not all dual-purpose delivery systems (missiles, airplanes, and torpedoes) are equipped and certified for delivering NSNW. On the other hand, aircraft and missile and torpedo launchers may have some nuclear weapons reloading capacity and a corresponding weapons complement.

24. Norris and Kristensen (2009).

FIGURE 1. **OPERATIONAL DEPLOYMENT* OF NON-STRATEGIC NUCLEAR WARHEADS OF THE USSR/RUSSIA, 1991–2010**




*"Operational deployment" means the deployment in depots of bases of Ground Forces, Air Forces, Air Defense, and Navy. Alexei Arbatov (1997), 56.

**MODERNIZATION:** Russian NSNW are modernized through deploying Iskander tactical ground-mobile missiles that may be equipped with either a nuclear or a conventional warhead.[25] In addition, the new Su-34 tactical strike bomber will most probably be a dual-capable aircraft.

### Other Nuclear Weapon States

Other nuclear weapon states keep information on their NSNW stockpiles classified. According to unofficial estimates, the People's Republic of China has approximately 100 to 200 such weapons, Israel has 60 to 200 warheads, Pakistan and India have around 100 and 90 respectively, and North Korea has 6 to 10 weapons.[26] These estimates include medium- and short-range ballistic and cruise missiles, as well as air-delivered bombs of strike aircraft.

## RUSSIAN STRATEGIC PERSPECTIVES

With the Cold War over, Germany united, the Warsaw Pact dissolved, the USSR collapsed, and Soviet troops withdrawn from Central and Eastern Europe, the threat of an attack by general purpose forces was lifted for NATO member-states. Nevertheless, today the United States maintains nuclear weapons on the territories of five NATO member-states.

For Russia, there are a number of considerations with regard to the strategic value of its NSNW. First, with NATO expanding to the East, the past supremacy of the USSR and the Warsaw Pact in general-purpose forces was replaced by the supremacy of NATO over Russia and the countries of the Collective Security Treaty Organization (CSTO), albeit at much lower total force levels. In this light, Russia perceives NSNW primarily as an instrument to neutralize NATO superiority in general-purpose forces, especially in the context of the eastward expansion of the Alliance, which Moscow considers unjustified, unfair, and threatening. This linkage is broadly discussed in Russian political and strategic communities, and it is indirectly proclaimed at an official level.

Second, Russia appears to regard its advantage in NSNW as compensation for the fact that it is now falling behind the United States in terms of strategic weapons—a gap that the New START Treaty will narrow, but not bridge.[27] Moreover, due to their range and the possibility of relocation of NATO strike aircraft to forward bases, these weapons may theoretically be delivered deep into Russian

25. See http://nvo.ng.ru/concepts/2005-01-21/4_stability.html.

26. Alexander Pikayev, *Index of Collected Works*, 129–159.

27. In particular, under the new START due to its counting rules and dismantling provisions, the United States will maintain a huge nuclear warhead up-load capacity (up to 2,000 additional warheads), which Russia will lack.

territory and are regarded by Moscow as a supplement to U.S. strategic offensive forces, adding about 13 percent to the 1,550 U.S. START accountable ceiling for strategic warheads. Conversely, Russian NSNW are not capable of reaching U.S. territory (except SLCMs on attack submarines under certain conditions).

Third, Russia regards NSNW (particularly SLCMs and NSNW deployed on medium bombers) as a counterbalance to the nuclear forces of the other nuclear states, Russia's territory being within the range of nuclear weapons of all of these states. Reducing strategic nuclear forces and eliminating medium- and short-range missiles (in the range of 500–5500 kilometers) in line with U.S.-Russia treaties relatively increases the role of Russia's NSNW as a deterrent against seven nuclear powers in Eurasia. Of particular value to Moscow are probably its 180 relatively long-range Tu-22M3 medium bombers and 240 SLCMs on nuclear attack submarines, which do not directly fall in the category of NSNW (and were not included in the PNIs of the early 1990s). No doubt, states like India, Israel, and North Korea are of less real concern, than are the United Kingdom, France, China, and Pakistan, but conservative strategic planning implies taking into account existing and projected capabilities rather than the present political intentions of other states. In particular, China's increasing military power and the 5,000 kilometers of shared border with Russia cannot be disregarded, although this issue has been sidestepped in Russia's official papers for reasons of political correctness.

China's increasing military power and the 5,000 kilometers of shared border with Russia cannot be disregarded…

Fourth, Moscow may perceive its NSNW as a counter to a possible U.S./NATO ballistic missile defense (BMD) system in Europe, if the attempts at cooperative BMD development fail. In this case, the capability to attack BMD sites with NSNW would remove the potential of it degrading the Russian strategic retaliatory potential. Due to the lack of effective precision-guided conventional arms, Russia in its contingency planning is relying on nuclear weapons, including NSNW, for attacking BMD interceptor bases and radars as well as Standard-3 launching ships and naval units protecting them.

Fifth, there is still the issue of NSNW as a counter to U.S. long-range precision-guided conventional weapons (SLCMs and ALCMs) supported by advanced space information systems (reconnaissance, targeting, navigation, and communications). Using Russian NSNW against air and naval bases as well as against surface ships and submarines carrying non-nuclear SLCMs could look to be more of a credible deterrent against an "aerospace attack" than retaliating with strategic nuclear forces.

## CONDITIONS FOR NEGOTIATING NSNW

The top priority given in Russia's 2010 Military Doctrine to the danger of NATO expansion and NATO's basic infrastructure toward Russia appears considerably overstated, at least in terms of the threat of an actual armed attack against Russia and its Allies. The increase in the number of NATO member-states has not led to a build-up in the total amount of the Alliance's forces because of the reduced armies

in several states, particularly the U.S. continental troops, as well as French, German, Italian, Polish, and Spanish armies. Currently, the 28 NATO member-states have a lower overall number of troops and weapons than the 16 NATO member-states of the early 1990s.

Nevertheless, Russia cannot disregard the adverse trends in the balance of military forces both globally and regionally. Simply attempting to persuade Russia that its official perception of these issues is wrong will not relieve Russia's concerns. To do so, steps must be taken to remove these impediments by negotiations and adjusting NATO military policy.

Simply attempting to persuade Russia that its official perception of these issues is wrong will not relieve Russia's concerns.

## THE "SINGLE CEILING" APPROACH

Within the broad framework for NSNW discussed in the NPR of April 2010 and the NATO Lisbon Summit Declaration in November 2010, both the United States and NATO are now reviewing specific options for addressing NSNW and possible negotiating approaches with Russia.

One approach would seek to include NSNW in the next agreement with Russia, limiting all U.S. and Russian deployed and non-deployed strategic warheads as well as NSNW in storage facilities with a single equal ceiling (possibly with some sub-ceilings). This could also involve relocating Russian NSNW as far as possible from NATO borders, as stated in the NATO Lisbon Summit Declaration.

### Advantages

This approach has some advantages. First, it reflects the fact that NSNW in peacetime are not operationally deployed on delivery vehicles unlike most strategic forces. Hence, limiting them implies counting weapons in storage facilities, just like non-deployed strategic warheads, bombs, and ALCMs.

Second, many strategic and non-strategic nuclear warheads are stored together and counting them separately could complicate things by the requirement to distinguish between the two classes (all the more difficult because some are kept in containers).

Third, technically there is no difference between dismantling and disposing (as well as verifying this process) of strategic and non-strategic nuclear warheads (explosive devices).

Fourth, the idea of an equal ceiling with freedom to mix strategic deployed, strategic non-deployed and NSNW in storage facilities and depots is appealing by its simplicity. With equal numbers of strategic deployed warheads for both nations, the United States might opt for a larger quantity of non-deployed strategic weapons, whereas Russia might favor a larger number of NSNWs. In 2010 the United States declared its active nuclear stockpile to be approximately 5,100 warheads. Allegedly, around 500 were NSNW and 2,200 were deployed strategic and 2,400 non-deployed strategic warheads. Hypothetically, if an equal ceiling

were set at an aggregate of 5,000 warheads for each side, then Russia might have a mix of 2,000 NSNW, 2,200 deployed strategic warheads, and 800 non-deployed strategic weapons.

That would more or less correspond to the actual Russian active stockpile and military requirements as assessed by independent experts. This would, however, leave Russia with its present NSNW superiority, which would be opposed by many in the United States and NATO countries. Reducing the ceiling down to 4,000-3,000 warheads would be no problem for the United States (which could just reduce its non-deployed weapons), but would cut into Russian forces more tangibly, presenting a difficult trade-off between strategic and non-strategic nuclear forces.

## Deficiencies

As elegant as this model may look at first glance, it does have profound deficiencies. First, a bilateral agreement based on the principle of an equal ceiling would be seen in Moscow as detrimental to Russian security, even if this reduction would imply withdrawing U.S. NSNW from Europe to American soil. Since NSNW are by definition a regional, rather than global (strategic) class of nuclear weapons, an assessment as to their sufficiency and balance should take into account the regional military environment—more like CFE, rather than START. Reducing forces to lower levels of strategic parity with the United States under New START and having eliminated all medium- and short-range ground based ballistic and cruise missiles, Moscow has to rely much more than Washington on its non-strategic nuclear forces for regional contingencies.

No doubt, deterrence does not imply a Russian right to have numerical equality with the sum of all nations capable of reaching its territory with their nuclear weapons. But by the same logic, there is no strategic justification for the United States to insist on equality with Russia in the sum of strategic and non-strategic nuclear weapons taken together. Lagging behind the United States in strategic forces, Russia is unwilling to detract still more from its strategic potential in order to have robust deterrence of nuclear and conventional regional threats.

In practical terms, things are still more complicated. According to unofficial estimates, Moscow currently might enjoy a considerable superiority in NSNW (about 2,000 active weapons) over U.S. forward based NSNW in Europe and the combined nuclear forces of the other seven nuclear weapons states (altogether about 1,000 warheads). The balance, however, largely depends on counting rules—and the result may be different with various methods of calculation.

For instance, counting only U.S. and Russian forward based NSNW outside of national territory would give a balance of approximately 200–0 correspondingly. Taking into account Russian NSNW on its territory (allegedly 2,000) would imply calculating U.S. NSNW on its territory as well. Accepting the U.S. official figure of 5,113 active nuclear weapons and subtracting about 2,200 deployed strategic

. . . a bilateral agreement based on the principle of an equal ceiling would be seen in Moscow as detrimental to Russian security . . .

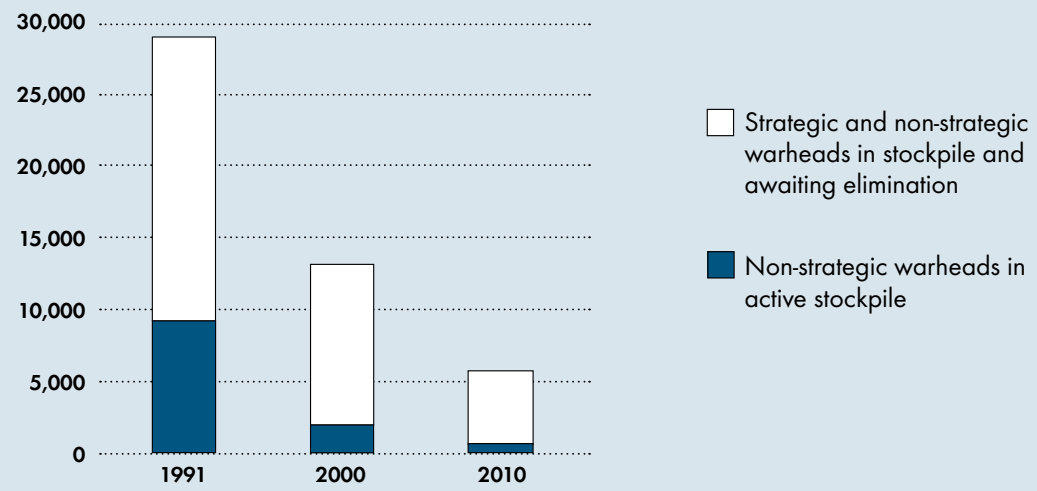
warheads (ICBMs, SLBMs, ALCMs, and bombs), the total remaining U.S. number is about 2,900 strategic and non-strategic weapons. It is not clear, however, how many B-61 and B-83 gravity bombs, deliverable by both strategic and tactical aircraft, are included in this sum, or why several thousand nuclear munitions slated for dismantlement are not included (estimated at 3,500–4,800). Moreover, counting Russian defensive warheads on air-to-surface missiles (allegedly more than 600) may not be viewed as justified in Moscow.

This does not mean these weapons are necessary, and in fact, some respected experts like General Vladimir Dvorkin are proposing their unilateral elimination. Be that as it may, a fair comparison of storage-to-storage and charge-to-charge might demonstrate that Russia's alleged superiority in NSNW is much smaller than commonly perceived. This is all the more so because Russia may be incapable either of differentiating between active and inactive nuclear warheads; non-deployed strategic and non-strategic U.S. munitions; or verifying their numbers under the terms of a possible treaty (Figure 2).

## Additional Complexities

Including all nuclear munitions together and limiting them by an equal aggregate ceiling may involve (depending on definitions and verification procedures) dealing with some 15,000 additional U.S. nuclear "pits" (the Russian number is unknown, but probably even larger), or accounting for all nuclear explosive devices

FIGURE 2. **U.S. NON-STRATEGIC AND OTHER NUCLEAR WARHEADS IN STOCKPILE**



produced, stored, and dismantled in the past. Because those pits may be used to manufacture new nuclear weapons without producing (or using) additional weapons grade fissile material, and because the process of weapons assembly at manufacturing plants would be difficult to limit or verify, those pits would have to be controlled as well (if all assembled or partially assembled nuclear munitions are subject to limitations).[28]

Whatever the official information provided by the U.S. government on the subject (and satisfactory for independent experts), under the terms of a new treaty, Russia would demand verification. The same relates to U.S. declarations on the planned elimination of nuclear SLCMs. In the context of a new treaty, a statement in the NPR will not suffice: Russia would require the possibility to verify their elimination and ensure that no remaining conventional Tomahawk SLCMs on ships, submarines, and in storage facilities have nuclear warheads.

## Protecting Sensitive Information

Setting an overall ceiling and verifying the number of all nuclear weapons implies counting them in depots at military bases, big centralized storage facilities, and storage facilities at manufacturing plants. The latter two types of facilities would be particularly hard to open to inspections: it might involve counting many hundreds or thousands of devices, distinguishing between strategic and non-strategic ones, compromising the secrets of the device construction, and violating the schedules and strict procedures of assembly, dismantlement, and maintenance work, with some safety risks. Hence, any agreed ceiling on NSNW or on strategic and NSNW together, or on the sum of deployed and non-deployed warheads, seems an unrealistic idea, at least in the foreseeable future.

The same goes for verifying the elimination of nuclear munitions, implied by agreed ceilings on warheads, because verifiable and secure procedures for such elimination do not yet exist.[29] Moreover, verifiable elimination would be senseless unless manufacturing new weapons is prohibited or limited in verifiable ways, which may require monitoring nuclear munitions production plants, as well as limiting and verifying existing stocks of weapon grade fissile materials (besides banning their production).

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28. For instance, according to the American PNI of 1991, all tactical nuclear warheads of the Army were withdrawn from Europe to U.S. territory, but there is no proof that they were all subsequently eliminated. Likewise, if all NSNW of the Navy (except SLCMs) were removed from ships and submarines and approximately 50 percent were subsequently destroyed, what has happened to the other half? Certain assessments estimate that approximately 3,100 B-61 bombs were produced altogether, so where are the remaining 2,700 bombs, besides the 400 presently estimated in storage facilities in the United States and in Europe?

29. The U.K.-Norwegian pilot project on verifiable dismantlement procedures that do not compromise design secrets is an interesting technical experiment, but it falls far short of providing acceptable legal norms and procedures comparable to START dismantling rules and definitions.

### Relocation

As for NATO's 2010 proposal to relocate Russian NSNW away from NATO borders, this raises serious political, technical, and strategic challenges. With regard to the availability of NSNW for combat use, geographic location is much less important than the type of storage facility where the weapons are placed. For example, NSNW located at a Russian centralized "S" site within a hundred miles from a NATO border should be less "threatening" than a NATO airbase with nuclear weapons and strike aircraft located a thousand miles from Russia. Relocating NSNW a few hundred kilometers further away would be senseless in military terms, and would imply building costly new depots and relocating 12th GUMO personnel—all without any clear purpose, except symbolic.

As for NATO's 2010 proposal to relocate Russian NSNW away from NATO borders, this raises serious political, technical, and strategic challenges.

Relocating NSNW to much farther distances, for instance, from storage facilities in Europe (especially from large centralized S-sites) to near the Ural Mountains or in Asia would be prohibitively expensive, slow, and might require building new large storage facilities, closed cities, and all the associated infrastructure. Moreover, it would be politically controversial. For example, China and Japan would certainly object to a significant number of Russian nuclear weapons being transferred from the European to Asian part of its territory.

## POSSIBLE SOLUTIONS

Russian emphasis on NSNW is tied to its concerns about alleged threats of NATO conventional forces superiority and U.S. advantages in both strategic conventional systems and BMD systems development. This linkage may be turned to the benefit of NSNW limitations and reductions.

In particular, achieving progress along all three directions—1) Revival of the CFE treaty; 2) Follow-on strategic nuclear and conventional arms limitation and confidence-building measures; and 3) Progress on cooperative BMD development—would be conducive to serious negotiations on NSNW, besides being valuable on their own terms. Moreover, if the next START Treaty envisions reductions down to approximately 1,000 warheads, the removal of U.S. NSNW from Europe should be seen by Moscow as a significant bonus.

Expanding U.S.-Russian and NATO-Russian joint threat assessment activities to include regional nuclear and conventional balances and the role of NSNW might also narrow the gap between Russian and Western security perceptions. The NATO-Russia Council may be one of the forums for such discussions. However, its effectiveness will be rather limited, due to the heavily politicized and public relations-oriented nature of the debates among 29 NRC member-states. Confidential discussions by mixed teams of officials and independent experts, who would be reporting to their governments, would probably produce better substantive results. As for consultations and eventual negotiations on NSNW

limitations, a U.S.-Russian bilateral format would seem to be the best available option, at least at the initial stage.

Due to the specific nature of the design and maintenance of NSNW, in addressing this class of nuclear weapons, the parties will have to deal more with various types of storage facilities rather than the actual weapons.

**DEFINING NSNW:** The first step could be consultations on defining NSNW, including identifying and addressing many "gray areas."[30] In particular, "operationally deployed" NSNW could be defined as those fixed to launchers or delivery vehicles or in depots within or immediately adjacent to the armed forces' bases (i.e., within a distance of a few kilometers).

The first step could be consultations on defining NSNW, including identifying and addressing many "gray areas."

It is easy to envision Russian objections to including Tu-22M3 Backfire medium bombers' weapons, and Granat RK-55 (RKB-500) nuclear SLCMs. In the past, these weapons were associated with strategic arms treaties, and in the future they may be considered as the only counterbalance to nuclear weapon states in Eurasia within reach of Russian territory (Russian strategic forces are declining in numbers and assigned retaliation missions against the United States). In particular, the connection may be made to French air-launched ASMPA missiles as analogous to Russian HA-22N Buria (AS-4 Kitchen) missiles on Tu-22M3 Backfire bombers. As for nuclear SLCMs, it would be in the U.S. interest to exclude them to avoid the verification problem of distinguishing nuclear from conventional naval cruise missiles on ships, attack and converted strategic submarines, as well as in depots at U.S. and allied bases. As significant as the commitment in the 2010 U.S. NPR to eliminate nuclear SLCMs, verifying that this had been done under the terms of a new arms control treaty would be quite a challenge.

**IMPLEMENTING CONFIDENCE-BUILDING MEASURES:** The second step may consist of confidence-building measures. For instance, the sides could exchange information on how many and what types of NSNW had been eliminated in line with the PNIs of the early 1990s; what happened to their component parts; and where the weapons are that were withdrawn from the armed forces but have not yet been eliminated. A series of mutual on-sight inspections could be conducted to substantiate the data exchanged and develop new methods of verifying emptied storage facilities and decommissioned nuclear munitions at storage facilities.

**INFORMATION EXCHANGES:** The third step could be exchanging information on the numbers, types, and location of operationally deployed NSNW (see above) and on the location of the operational depots, along with some sample on-site inspections. The data on the overall numbers and types of NSNW, including those

30. For example, B-61 and B-83 gravity bombs, nuclear SLCMs, medium-range bombers, French strike nuclear capable aircraft, types of storage facilities, defining "inactive" or dismantled munitions, nuclear "pits," etc.

at centralized storage facilities and manufacturing plants, could also be exchanged as a good-will measure, but would hardly be verifiable.

**RELOCATION:** The fourth step could involve an agreement on relocating all NSNW from operational delivery vehicles and bases to central storage locations in the national territories (in point of fact, to the reserve). At the airbases where strategic and non-strategic bombers are co-located, verifying this agreement in Russia would be easy, because its heavy bombers are only armed with ALCMs and no other nuclear weapons would be left at the depots, provided that all nuclear gravity bombs for tactical aircraft are removed. American strategic bombers are equipped with ALCMs and B-61 and B-83 gravity bombs. Because the bombs may be delivered by tactical aircraft and because strike airplanes can quickly redeploy to strategic airbases (even if they are not routinely co-located with bombers), under this arrangement all the bombs of either types, or an agreed part of them, should be relocated to centralized storages.

The same applies to NSNW at naval bases, where SSBNs, SSCNs, SSNs, and combat ships are based together. Russian submarines are equipped only with nuclear SLCMs, whereas U.S. converted strategic boats, attack submarines, and ships are equipped with many thousands of conventional SLCMs, externally undistinguishable from nuclear missiles (TLAM-N). Hence, if these are not excluded from NSNW definitions, special verification procedures would have to be devised to ensure that only conventional cruise missiles are on naval vessels and in depots at U.S. naval bases and abroad. The same would apply to other U.S. and Russian naval dual-purpose tactical missiles, torpedoes, artillery shells, depth charges, and gravity bombs (including those for carrier-based aircraft), which were in the past or are at present (as is the case with Russia) serving as nuclear weapons' delivery systems. Russia's "advantage" would be the absence of foreign bases, which may pose a serious problem for verification involving U.S. Allies. The difficulty of verifying naval vessels and depots at bases and greater variety of naval NSNW that remains presently (or were in service in the past) may suggest at the first stage dealing with Air Force NSNW, and then proceed with the Navy.

...the United States would initially withdraw its alleged 200 bombs from six bases in five European countries, whereas Russia would send a total of about 300–400 bombs from the air bases in its territory to central storage facilities.

In this context, the United States would initially withdraw its alleged 200 bombs from six bases in five European countries, whereas Russia would send a total of about 300–400 bombs from the air bases in its territory to central storage facilities. Incidentally, the principle of equal security would require not only relocating the U.S. NSNW to its national territory, but banning their presence at the air bases (and, subsequently, at the naval bases) or in any areas, other than central storage locations which would be specifically designated. Completely withdrawing operationally deployed Air Force (and later Naval) NSNW from forward bases is easier to verify—the storage facilities of known locations and characteristics would simply be empty, mothballed and unguarded.

Of great help would be an agreement on short-notice challenge inspections (similar to those agreed for strategic offensive weapons for the bases of ICBMs,

SLBMs, and heavy bombers) at air and naval bases in the territories of Russia and the United States. Sample inspections at ground forces' bases, where NSNW were deployed in the past, similar to those conducted under CFE, may also be required. Verification will likely be needed in the national territories of U.S. and Russian Allies, where such weapons had previously been located. Therefore, in practical terms, the potential agreement may be a more complicated and delicate issue for Washington than Moscow, and may require greater effort on the U.S. side.

Relocation to central storage facilities would remove NSNW from their forward positions and ensure greater security against their acquisition by terrorists, as well as against unauthorized relocation or use. At the same time, this way of dealing with the problem would avoid extremely difficult and controversial problems associated with counting and verifying nuclear munitions at centralized storage facilities and at manufacturing plants, as well as verifying their dismantlement and banning the production of new weapons. Some S-sites are relatively close to NATO borders; however, they should be of no concern to the alliance if they are located away from air and naval bases of Russia. Moving NSNW back to forward positions by trains or ground transportation would take longer for Russia than flying NSNW back to Europe from the United States. Challenge inspections at naval and air bases' depots would be insurance against tacit violations involving significant numbers of NSNW.

This option would also make it easier to resolve disagreements over the bilateral-multilateral format of the agreements; equality-asymmetry principles of limitation; and the delineation between strategic-tactical, and deployed and non-deployed status of the warheads. Under this proposed arrangement, Russia theoretically would be able to return NSNW to the armed forces if there is a security threat on the country's western or eastern borders. Likewise, NATO would theoretically be capable of a similar response. However, provided reliable verification of operational storage facilities, such a step would take a long time, would be visible for both sides, and would not take any of them by surprise. Moreover, according to the Pentagon and Russia's senior military officers, this will not imply serious expenditures because a large part of NSNW has already been removed to central storage locations in Russia and to storage facilities in the United States.

At centralized storage facilities, NSNW would in fact be safely kept in reserve until the disarmament process extends to eliminating nuclear warheads and using nuclear materials for peaceful purposes. Eliminating nuclear explosive devices per se would imply a qualitatively new kind and format of nuclear disarmament and verification, as well as much better political relations and resolution of many other security issues among nuclear weapon states.

CHAPTER NINE

# Worlds Apart

## *NATO and Asia's Nuclear Future*

JONATHAN D. POLLACK

This chapter addresses NATO's new Strategic Concept adopted at the November 2010 Lisbon Summit and ongoing discussions under the Deterrence and Defense Posture Review (DDPR)in the context of nuclear weapons strategy in Asia. In particular, it examines how different trajectories of Asian nuclear weapons development could influence future deliberations over nuclear weapons and international security.

The new NATO Strategic Concept revisits nuclear weapons policy in light of major changes in European security and U.S./NATO-Russia relations since the previous strategic review in 1999. The 2010 Strategic Concept embraces two central if seemingly contradictory principles—that NATO is committed to creating the conditions for a world without nuclear weapons in accordance with the Nuclear Non-Proliferation Treaty (NPT); and for as long as there are nuclear weapons NATO will remain a nuclear alliance.

The United States and its alliance partners seek to appreciably reduce the role of nuclear weapons in international security without undermining their essential deterrence function, while also pursuing deeper nuclear reductions and enhanced transparency in future arms control agreements with Russia. NATO's DDPR is also exploring options to further reduce the numbers and functions of non-strategic nuclear weapons (NSNW) in Europe, thereby more fully aligning NATO policy with the conclusions of the U.S. Nuclear Posture Review (NPR).

## NUCLEAR WEAPONS IN ASIAN SECURITY

### Overview

With the exception of China, the indigenous development of nuclear weapons in Asia is a recent phenomenon. Although the aggregate number of nuclear weapons in the region represents a very small portion of the global nuclear inventory, the

# CHAPTER NINE: **KEY FINDINGS**

- At a time when NATO's nuclear posture, missile defense, and other means of strategic deterrence and defense are under review—including possible next steps with Russia—regional nuclear realities in Asia are moving in very different directions.
  - China is in the midst of a long-planned strategic modernization program—intended to enhance the survivability and reliability of its nuclear forces—including new land-based ICBMs, developing a sea-based deterrent, and adding regionally oriented land-based missiles.
  - In a little over a decade, three additional Asian states—India, North Korea, and Pakistan—have decided to openly pursue nuclear weapons. The decisions of all three states have appreciably altered regional security dynamics, often in very destabilizing ways.
  - Any decision by Asian powers to restrain the growth of their nuclear forces or even to forgo particular weapons alternatives will require considerable heightened strategic trust among Asian states and between regional states and outside powers. Such trust is in very short supply.
- Although the nuclear agendas are very different in Europe and Asia, NATO's DDPR must be explicitly mindful of how decisions in NATO could influence nuclear thinking in Asia.
- Major changes in NATO nuclear strategy and further agreements with Russia could establish important precedents for Asian states that have yet to make binding choices on their nuclear future. These shifts will require unprecedented information disclosure and large-scale reductions in NATO and Russian nuclear capabilities if the resulting agreements are to generate meaningful support among Asian states.
- Any redeployment of Russian NSNW from Europe to Asia would be threatening to China. Agreements to enhance U.S./NATO-Russia missile defense cooperation could also markedly amplify Chinese strategic suspicions and influence the scope and pace of China's future nuclear programs.

numbers are growing while the numbers of weapons decline elsewhere. There is also no forum within Asia where the region's nuclear weapons states discuss (let alone negotiate) their respective nuclear capabilities and future plans. Nuclear programs and policies operate in largely autonomous fashion. There are undoubted possibilities of major crisis in all the regional settings where there are now nuclear-armed states in Asia.

Three principal characteristics of the nuclear equation in Asia stand out. First, the equation is extremely complex. It involves four separate states who zealously protect their national sovereignty, are not members of an alliance, are not subject to any negotiated constraints on the numbers or characteristics of their weapons, and are not obligated to disclose the composition or location of their nuclear forces.

Second, Asia's nuclear weapons primarily represent new capabilities, compared to the far larger legacy forces of the United States and Russia, and (to a lesser extent) those of the United Kingdom and France. India and Pakistan decided to openly pursue active nuclear weapons programs in the late 1990s, and North Korea followed suit shortly thereafter. South Asia and the Korean peninsula already involve the largest concentrations of conventional military power anywhere on the globe, and nuclear weapons (despite their posited deterrence function) inject heightened instability into inherently dangerous circumstances. Although tensions across the Taiwan Strait have ameliorated in recent years, the latent possibilities of major armed conflict persist there, as well. The enhancement of Chinese military forces (including short range missile forces targeted against Taiwan and ballistic and cruise missiles intended to impede or deter potential U.S. military operations); Taipei's efforts to counter Chinese emergent military capabilities; U.S. arms sales to Taiwan; and the potential role of U.S. forces in a future conflict underscore the continued risks of a major regional crisis.

Third, there is a wide range of possibilities in Asia's nuclear future, depending on how various states assess the longer-term role of nuclear capabilities in national security planning. The factors shaping Asia's nuclear future are highly diverse. China's ongoing nuclear modernization; the decisions of India, North Korea, and Pakistan to pursue nuclear weapons development; the increased prominence of ballistic missile defense within the region (including the extensive role of U.S. forces both regionally and in homeland defense missions); the expectations of U.S. Allies for strengthened extended deterrence commitments; and Russian strategic equities beyond Europe interact in complicated ways, creating a highly complex and unsettled picture.

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## Asia's Strategic Transition

Asia is in the throes of an extraordinary long-term power transition. The rise of China is central to this process, but the region's economic, political, and military transformation encompasses much more than one country. Although U.S. military predominance remains unquestioned, many regional states have undertaken

major military modernization programs that will redefine power relationships within Asia and between regional states and outside powers. Continued momentum in nuclear weapons development will pose added risks to strategic stability across the region.

U.S. policy is also a crucial factor in Asia's strategic transition. American policy presumes enhanced security collaboration with China in areas of overlapping interest, focused primarily on nontraditional security and on maritime security cooperation. But the U.S. Department of Defense argues that Beijing's extant nuclear, space, and cyber warfare capabilities already have global strategic implications, and it voices increasing concern about China's pursuit of advanced coercive capabilities. China, however, views military modernization (including nuclear modernization) as necessary to deter, deny, or inhibit America's military reach into locations abutting the Chinese homeland. Chinese officials express ample wariness about U.S. strategic intentions and future weapons plans, including U.S. pursuit of prompt global strike capabilities. There is almost reflexive Chinese skepticism or outright opposition to U.S. military deployments and reconnaissance and intelligence gathering activities along China's periphery.

While European states are reducing their nuclear inventories and moving toward increased military transparency and more inclusive security concepts, Asian states are steadily enhancing their strategic autonomy and at most imparting partial information about their longer-term nuclear strategies and capabilities, and (in the case of North Korea), none at all. Although some Asian governments voice support for a nuclear weapons free world and endorse nuclear weapons-free zones, any such initiatives must acknowledge that nuclear weapons are now a central factor in regional strategy.

Asia thus confronts the paradox of increasing economic integration and much denser societal and institutional ties while strategic trust and strategic restraint are conspicuously lacking. Regional military advancement continues without letup, with states unprepared to entrust their national destinies to expectations of a more cooperative world.

Asian states are steadily enhancing their strategic autonomy and at most imparting partial information about their longer-term nuclear strategies and capabilities…

## Asia's Nuclear Dynamics

**CHINA**. There is no single pattern to nuclear weapons development in Asia. As the region's first indigenous nuclear power and one of the world's five nuclear weapon states according to NPT criteria, China possesses the most developed and diversified nuclear capabilities of any regional power. From its earliest years as a nuclear weapons state, however, China has pursued a minimalist nuclear strategy. It has limited its nuclear deployments to very modest numbers (prevailing estimates of its operationally deployed warheads range between 150–200, although some estimates are as high as 400 and with 55–65 intercontinental ballistic missiles). It has also consistently adhered to a "no first use" (NFU) policy stating it would use nuclear forces only in response to a nuclear attack against China.

China's principal goal, in the event of receiving a nuclear first strike, has been to ensure a survivable means of retaliation with sufficient force to inflict unacceptable damage on an attacker, and it has never wavered from this fundamental objective. With continued advancement toward a somewhat larger, modern, diversified force that relies heavily on concealment and mobility, China appears determined to ensure that it can ride out a major attack in light of far superior U.S. and Russian capabilities. Deploying a sea-based force would render China even less vulnerable, although it will introduce unprecedented command and control issues that Beijing has not had to face in the past.

Any Chinese decision to depart from a minimal nuclear posture would reflect a major reassessment of China's strategic circumstances.

Any Chinese decision to depart from a minimal nuclear posture would reflect a major reassessment of China's strategic circumstances. It would presumably reflect an appreciably heightened perception of threat from the United States but also possibly from Russia (especially if Russia were to deploy some of its NSNW assets away from Europe and closer to China); the ultimate need to counter Indian nuclear capabilities should the latter's forces grow considerably in numbers, range, and quality; acceding to the inexorable logic of a more mature and diversified nuclear force; or in response to heightened risks of nuclear instability in countries located near China. To date, there is no evidence that China is planning for a substantially larger force, although an incremental increase in the number of deployed weapons does not seem implausible as older missile systems are retired and newer models are introduced.

Chinese strategy, however, has long focused less on numbers of nuclear weapons and more on the objectives and strategies they are intended to serve. Nuclear war fighting has never generated meaningful interest in Chinese strategic circles; indeed, for many years Chinese analysts even viewed nuclear deterrence in highly pejorative terms, associating it with concepts of nuclear coercion developed during the Cold War. But some Chinese analysts (including some military officers) are questioning the continued relevance of a strict NFU doctrine, arguing that U.S. precision strike capabilities blur the distinction between nuclear and nonnuclear use, and could inhibit China's capacity to respond in a future armed conflict, even if it were limited to conventional weapons. Others call attention to U.S. ballistic missile defense capabilities that could degrade China's means of retaliation, although China continues to heighten development of various countermeasures designed to deflect or confound U.S. capabilities, and presumably Russian systems, as well.

The United States argues that its missile defense capabilities are far too limited in numbers and capabilities to undermine China's nuclear deterrent. At most, the United States believes they could be used in the event of an accidental or unauthorized launch from Chinese or Russian territory, but analysts in both countries give very little credence to American assurances. This seems especially the case for China, given that its strategic forces are vastly smaller than those of Russia. The Chinese also retain an abiding respect for U.S. technical and military prowess, believing that future defense R&D breakthroughs could one day render their

limited retaliatory forces far more vulnerable. Thus, despite the maturation of Chinese capabilities, there is a persistent anxiety within Chinese strategic circles that its nuclear forces could be degraded or that the United States is intent on other steps to diminish the credibility of China's nuclear deterrent. The prospect of heightened U.S.-Russian missile defense collaboration (including technology sharing and collaboration on early warning) could appreciably amplify Chinese strategic suspicions.

The perceptions of malign U.S. intent (although paralleled by comparable judgments in U.S. circles about malign Chinese intent) reinforce ample Chinese wariness about U.S. calls for heightened nuclear transparency. To Beijing, opacity or obscurity about its nuclear forces offer the best guarantee that they will remain invulnerable. China sees no reason to impose negotiated restraints on its nuclear programs (although the Comprehensive Nuclear Test Ban Treaty, which China has signed but not ratified, would constrain Chinese nuclear modernization—as has China's self-imposed moratorium on nuclear testing during the past 15 years). It also attaches far more importance to how nuclear forces operate than to their absolute numbers, making the survivability of a retaliatory capability China's defining nuclear requirement. This suggests that China could ultimately be prepared to enter into discussions about nuclear strategy that might also encompass other highly sensitive topics, including missile defense, military operations in space, long-range conventional strike capabilities, and cyber warfare. But this day has yet to arrive.

The persistent issue inhibiting Sino-American strategic relations is the absence of strategic trust by either side. For example, Beijing's unwillingness to enter into detailed discussions about nuclear strategy feeds American suspicions in some quarters that China is waiting until U.S. and Russian forces are reduced to far lower levels, which would then presumably enable China to build up its forces to rough numerical equivalence with the world's dominant nuclear powers. But there is no evidence that China aspires to such equivalence. For the present, a Sino-American nuclear relationship where the U.S. retains a superior nuclear force appears a tolerable outcome for Beijing, whereby China would sustain its commitment to a minimal but more secure nuclear force. It seems very likely that Beijing would contemplate serious strategic discussions with Washington only when it feels less disadvantaged militarily, and when it concludes that the United States is fully prepared to accept China as a legitimate major power in all respects.

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**INDIA.** India's nuclear goals warrant comparison to those of China. India long contemplated and prepared for a nuclear weapons program, but deferred an unequivocal decision until internal realignments in political leadership enabled it. From the outset leaders in New Delhi restrained domestic voices urging highly expansive nuclear goals. Like Beijing, New Delhi articulated and has sought to sustain a minimal deterrence strategy. It adheres to a NFU policy that is enshrined in

Indian nuclear doctrine and has yet to accumulate fissile material on a scale that would enable a large-scale nuclear program.

New Delhi's long-term nuclear goal is to build a force that will cement India's standing as South Asia's dominant power so that its strategic interests will not be undermined or directly challenged by either Pakistan or China. Pakistan is undoubtedly the more immediate priority for Indian defense planners, with a need for India to prepare for a full spectrum of military operations. India believes that the ability to reach targets throughout Pakistan (in conjunction with India's conventional superiority) will deter risk-taking by Islamabad and require Pakistan to accept Indian dominance of the sub-continent. But these assumptions have not been validated. There has been a succession of terrorist activities against major governmental and commercial targets in New Delhi and Mumbai (many believe with the knowledge, if not complicity, of Pakistani military authorities) and additional instances of Pakistani risk-taking, against which India has opted not to retaliate. Moreover, Pakistan (as discussed below) seems fully prepared to match or exceed Indian nuclear capabilities.

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Should New Delhi decide to embark on a more expansive set of nuclear goals, realizing nuclear sufficiency would be both daunting and open-ended. If anything, the logic of an Indian minimal deterrent seems more persuasive in relation to China than it does in relation to Pakistan given the highly adversarial relationship between New Delhi and Islamabad. A credible minimal deterrent capability against China nonetheless presupposes a full testing program for longer range missiles and perhaps additional efforts to mate warheads to delivery systems. (India's total weapons inventory probably approaches but very likely does not exceed 100.) Some prominent figures in the Indian defense R&D community continue to advocate a much more ambitious weapons program, up to and including an ICBM capability encompassing thermonuclear weapons. There have also been repeated intimations that the results from India's nuclear tests in 1998 fell well short of expectations and that further nuclear tests will be needed to fully validate Indian weapons designs. But India's political leadership remains uneasy about more ambitious strategic nuclear goals. It is also not prepared to advocate additional nuclear tests, which would invalidate understandings in the Indo-U.S. nuclear agreement and almost undoubtedly prompt Pakistan (and perhaps China) to undertake additional tests, as well.

India's decision to unambiguously cross the nuclear threshold was nonetheless highly validating within the country and ultimately to the country's international standing. Although the ensuing friction in the U.S.-Indian bilateral relationship took years to resolve and could be renewed if India were to resume nuclear testing, the nuclear tests ultimately did not preclude major advances in relations with the United States, including the signing of the Indo-U.S. nuclear agreement, despite India not being a signatory to the NPT. At the same time, Sino-Indian relations have advanced significantly over the past decade, although Indian officials remain vexed that China looms much larger in Indian eyes than India does in Chinese

eyes. But it is far from certain that accelerated nuclear weapons development would garner major strategic advantages for India.

A far more achievable outcome is incremental nuclear modernization leading over time to an approximation of Sino-Indian strategic equilibrium, although not requiring numerical equivalence between the two states. Such an outcome would afford much better prospects for longer-term stability in relations between Asia's two largest powers. It might also enable New Delhi and Beijing to constrain an open ended military competition, even as the military capabilities of India and China will undoubtedly continue to grow. But this outcome would be contingent on both states demonstrating mutual accommodation and strategic restraint on nuclear weapons and on regional geopolitics more generally. This suggests the obvious basis for strategic discussions between both powers, although it is doubtful that either is yet prepared for such talks. But the logic seems persuasive, lest either or both are locked into a longer term strategic competition that neither seeks.

**NORTH KOREA AND PAKISTAN.** Not even guarded optimism is warranted in the cases of North Korea or Pakistan. In different but closely related ways, the nuclear programs of these two states pose the greatest risks for building a more predictable nuclear order in Asia. This judgment reflects more than the long record of illicit nuclear commerce between the two countries as well as the respective involvement of Pakistani and North Korean scientists in the transfer of nuclear technologies and materials to other states, of which the conduct of Abdul Qadeer Khan was by far the most widespread and egregious. Pakistani and North Korean behavior reflects the continued domination of adversarial belief systems within the leaderships of both countries, which pose longer term risks for two primary sub-regions of Asia where the possibilities of major armed conflict persist and (if anything) have grown.

Pakistan's nuclear ambitions and activities are much more extensive than widely realized. Its accumulation of fissile material is leading to a significant expansion of its weapons stockpile, which is growing more rapidly than that of any other nuclear weapon state. According to one recent estimate, Pakistan's holdings of highly enriched uranium and its ongoing construction of two additional plutonium production reactors will enable the expansion of its warhead inventory of between 90–110 in 2011 to 150–200 within a decade, although some estimates range even higher. The lower range estimates of Pakistan's stockpile in another decade would be roughly comparable to the projected size of the U.K.'s stockpile. Depending on the scope of China's nuclear modernization plans, some experts believe Pakistan's inventory of nuclear weapons could even exceed that of China in another 10 years. Armed with a growing array of short- and medium-range ballistic missiles, cruise missiles, and nuclear-capable aircraft, Pakistan has adopted a war-fighting nuclear strategy intended to compensate for India's conventional advantage. Its military doctrines presume early use of nuclear weapons

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in any serious armed conflict with New Delhi. Although there has been repeated international concern about the security of Pakistan's nuclear weapons and about its command and control procedures, the gravest risks reflect the country's apparent readiness to use nuclear weapons in a future war. Its exceedingly problematic record in the transfer of nuclear materials and technology adds another very worrisome dimension to this picture.

North Korea's nuclear capacities remain small in numbers but their development and longer-term precedents are also deeply worrisome. It is the only state ever to withdraw from the NPT, and it has reneged on every denuclearization accord it has ever signed. Having twice tested nuclear devices in defiance of adversaries and benefactors alike, it now claims equal standing with all nuclear weapon states. North Korea asserts that its entire inventory of plutonium has been weaponized, likely resulting in an inventory of six to eight weapons; it has also revealed the existence of a modern facility for uranium enrichment, thereby enabling development of an alternative means of fissile material production.

It is impossible to discern Pyongyang's ultimate nuclear ambitions. But its weapons breakthroughs demonstrate how a small, isolated regime confronting grievous economic shortcomings proved able to defy the world's most powerful states and sustain pursuit of nuclear weapons, first covertly inside the NPT and overtly following the withdrawal from the treaty. North Korea is located in the heart of Northeast Asia, a pivotal region in global economics and politics, and its strategic reach (primarily with medium range ballistic missiles) extends to all neighboring states. Senior U.S. officials also believe Pyongyang may one day successfully test a long-range ballistic missile capable of reaching U.S. territory, thereby raising the prospect of North Korea as a direct national security threat to the United States. In addition, Pyongyang has long standing political, technological, and military ties to states with highly problematic nuclear and missile histories, including Iran, Pakistan, and Syria.

Many observers questions North Korea's longer-term survivability, but the system has a resilience and durability that the outside world frequently fails to grasp. Even though the North's economic circumstances may seem dire, it does not consider its nuclear weapons as a bargaining chip that it will trade for economic assistance, even as it clearly seeks the latter. North Korea's leaders view nuclear weapons as central to the state's identity and security planning. The sinking of a South Korean corvette and the shelling of a South Korean coastal island in 2010 suggests that Pyongyang believes that its nuclear capabilities provide an added measure of protection from retaliation, even as South Korea insists that any future use of force will not go unanswered. The open-ended prospect of a nuclear-armed North Korea locked in deeply adversarial relations with South Korea and Japan and unprepared to abide by its international obligations presents a deeply disquieting picture. It underscores the extraordinary risks posed in a region where nuclear weapons are now an inescapable and growing feature of the strategic landscape.

The future nuclear trajectories across Asia are thus unsettled and potentially very worrisome. Equally important, it may well prove increasingly difficult to reconcile the possibilities of a significantly diminished dependence on nuclear weapons in Europe with a raised nuclear profile in Asia.

## IMPLICATIONS FOR NATO

As NATO conducts its ongoing DDPR, it must be highly mindful of the disparate factors at work in Asia and the absence of a regional framework to adjudicate these issues. The alliance also needs to be aware of how decisions coming out of the DDPR could affect nuclear security in Asia.

Russia's NSNW assets constitute a relevant example of the relationship between the strategic debate within NATO, its implications for Asia, and the possible unintended consequences of arms control agreements in Europe. Any agreement that encourages or requires redeployment of Russian NSNW to storage locations in Russia's interior (as distinct from their outright dismantlement) would not eliminate NSNW so much as it would relocate them. Although Russia today can redeploy its NSNW anywhere it chooses, such a NATO-Russia agreement could increase NSNW deployments east of the Urals and opposite China and other Asian nations. Rather than diminishing the role of NSNW, it could breathe new life into these capabilities, which would be decidedly contrary to the larger objective of diminishing reliance on nuclear weapons. Similarly, attempts to cooperate with Russia on missile defense could also affect the strategic equities of different Asian states—in particular China, which would view increasing missile defense capabilities in the United States and Russia as a threat to its minimum nuclear deterrent.

For most of NATO's history (even when the United States maintained significant tactical nuclear deployments in South Korea and on board U.S. surface ships), Asia has been an afterthought in nuclear planning within the alliance. U.S. extended deterrence commitments to Japan, the South Korea, and Australia have always included a nuclear component, but these commitments have been bilateral rather than multilateral, and rarely elaborated with much specificity. Paradoxically, in an era when the United States is seeking to diminish its reliance on nuclear weapons, Asia's increasing nuclearization has generated interest within some U.S. Allies for more clarity in American nuclear policy. There has neither been an Asian equivalent of the NATO Nuclear Planning Group, nor are there nuclear-sharing arrangements in Asia similar to those undertaken within NATO. There is neither a regional forum where nuclear issues can be fully and openly deliberated, nor is one imaginable under prevailing circumstances. Strategic thinking about nuclear weapons among U.S. regional security partners has also remained very underdeveloped, in as much as the United States has repeatedly sought to inhibit consideration of nuclear weapons by America's regional Allies.

To fully achieve the nuclear policy objectives outlined in NATO's new Strategic Concept, shifts in strategy and operational policy emerging from the DDPR—including those intended to affect Russian nuclear strategy and policy—must be approached in holistic fashion. These shifts will also require unprecedented information disclosure and large-scale reductions in NATO and Russian nuclear capabilities if the resulting policies and agreements are to generate meaningful support among Asian states, as distinct from reinforcing the views of those favoring more nuclear weapons rather than less. Even major changes in NATO and Russian strategy may prove largely immaterial to the nuclear calculations of Asian states, which are largely shaped by a combination of national level security concerns, internal leadership, and bureaucratic support within various states for nuclear weapons development.

## CONCLUDING OBSERVATIONS

NATO has reached a moment in its history where it is able to weigh major changes in nuclear strategy and doctrine that were unimaginable in the era of Soviet-American confrontation. It is seeking to disentangle from the cumulative nuclear inheritances of the Cold War in cooperation with Moscow. The nuclear policy changes outlined in the new Strategic Concept and under examination in the DDPR could include unprecedented levels of transparency with Russia and even sharper reductions in weapons that no longer serve any conceivable military purpose.

Comparable circumstances do not apply in Asia. China still believes that the disproportionate size and capabilities of U.S. and Russian nuclear forces compared with its own and the prevailing strategies of both countries leave it at a pronounced disadvantage, even if it is not seeking to emulate the strategies of either. It insists that it is incumbent on the world's two dominant nuclear powers to undertake strategic assurance and strategic restraint toward China. This leaves Beijing with fewer incentives to contemplate bilateral or multilateral arms control discussions, and this applies even more fully to Asia's new nuclear entrants. All are intent on enhancing their still nascent weapons programs. None are prepared to forgo capabilities that have been built at great cost and which all believe ensure vital national goals. As a consequence, many of the steps under consideration in NATO do not seem transferable at this stage of nuclear development across Asia.

The broad trends, however, within the alliance seem clear, lending a virtual if seldom acknowledged schizophrenia in global strategic debate. NATO and Asia are very much out of phase: as NATO continues to emphasize a reduction in the roles and risks of nuclear weapons, the reliance on nuclear weapons increases to the east. But within Asia the maximalist strategies of North Korea and Pakistan are juxtaposed against the more measured paths pursued by China and India. These contrasting possibilities underscore the very divergent directions that are

shaping strategic thinking in Asia. With states in Asia on the cusp of longer-term decisions on their nuclear futures, NATO's new Strategic Concept and the DDPR at least provides the power of example, if not a precise model to emulate. Building a nuclear order in Asia is largely a challenge for the states of Asia to determine, and this work has barely begun.

With states in Asia on the cusp of longer-term decisions on their nuclear futures, NATO's new Strategic Concept and the DDPR at least provides the power of example, if not a precise model to emulate.

# AUTHOR BIOGRAPHIES

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The Nuclear Threat Initiative is a nonprofit, nonpartisan organization with a mission to strengthen global security by reducing the risk of use and preventing the spread of nuclear, biological, and chemical weapons. Founded in 2001 by former Senator Sam Nunn and entrepreneur Ted Turner, NTI is guided by a prestigious, international board of directors.

NTI is focused on closing the gap between global threats from nuclear, biological, and chemical weapons and the global response to those threats. Recognizing that governments have most of the resources and authority in the large-scale work of threat reduction, NTI emphasizes leverage. It's not just what NTI can do throughout the world. It's what we can persuade others to do. We use our voice to raise awareness and advocate solutions, undertake direct action projects that demonstrate new ways to reduce threats, and foster new thinking about these problems.

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