

Stanton Nuclear Security Fellows Seminar

Panel 4: Deterrence and Arms Control

1. **James Acton**, CE: *Deep Nuclear Reductions: Theory and Practice*

Russia and United States have reduced their nuclear arsenals considerably since their Cold War highs. Yet, each still retains around 5,000 warheads (with more awaiting dismantlement). Are these arsenals bloated and thus capable of being cut significantly without any negative impact on security? Or are significant improvements in the security environment a prerequisite for further reductions of any significance? I have studied these questions by examining the practical experience of states with small arsenals, including, most importantly, the United States and the Soviet Union during the early Cold War. Having identified potential pitfalls, I was able to sketch out a practical way forward for the reductions process. While deep reductions may be much less problematic from a strategic perspective than commonly perceived, the political challenges to implementing them are daunting.

It is the goal of the United States to create the conditions that would allow for deep *multilateral* reductions in nuclear weapons. This objective raises two questions, one theoretical and one practical:

- What would the effect of deep reductions on international security be?
- How, practically, should the United States advance its stated goal of deep reductions in a way that enhances security?

To answer the first question, I mapped out concerns about deep reductions. To this end, I surveyed the existing literature and, more importantly, conducted an extensive series of interviews with analysts and officials (both former and current) from Russia, the United States and American allies. In broad terms, there are five categories of concern. Specifically, it is claimed that deep reductions would:

- undermine central deterrence and lead to more conflict;
- undermine extended deterrence and the security of U.S. allies;
- exacerbate concerns about arsenal survivability and hence reduce crisis stability;
- quickly be reversed because rearmament stability would be low; and
- lead to the smaller arsenals of other nuclear-armed states increasing in relative importance and thus undermine strategic stability as a result of 'nuclear multipolarity'.

These concerns can be examined from both theoretical and empirical perspectives. Contrary to the often-voiced opinion that deep reductions would be a step into the unknown, there is actually considerable experience of deterrence at low numbers. Every nuclear-armed state apart from the nuclear superpowers has made do with a small arsenal containing, at most, several

hundred warheads. More importantly, during the first years of the nuclear age, the Soviet Union and the United States only had small arsenals. All this experience provides valuable evidence to assess concerns about deep reductions.

Based on this evidence, I argue in a new book, *Deterrence During Disarmament: Deep Nuclear Reductions and International Security* (endorsed by Thomas Schelling and published in the *Adelphi* series in March 2011), that most—but not all—of the problems and instabilities often associated with low numbers are either not related to arsenal size or are only weakly affected by it.

Deep reductions would be unlikely to have a negative effect on the effectiveness of deterrence. In particular, counterforce damage limitation—an old idea that has recently been highlighted as a key justification for retaining large arsenals—is unlikely to be effective enough *today* to enhance deterrence. Consequently, deep reductions, even if they were to reduce the United States' ability to limit the damage it would suffer in a nuclear war, would not detract from deterrence.

The negative impact of deep reductions on crisis stability is also overstated. This is not to deny that crisis stability could be a problem. Russian fears about U.S. *conventional* weaponry—ballistic missile defenses, conventional prompt global strike and even 'non-prompt' munitions such as cruise missiles—create genuine (if over-stated) concerns in Moscow for the survivability of its nuclear forces. In a deep crisis, these fears could generate instability. However, Moscow's retention of a large nuclear arsenal does relatively little to address its fears. Consequently, taking steps to reassure Russia and enhance crisis stability is in the U.S. national interest, irrespective of whether Washington seeks further cuts. The pursuit of deep reductions merely provides the United States with an additional reason for doing so.

Similarly, the absence of nuclear multipolarity in today's world (with its 10 nuclear-armed states) is a result not of Russia and the United States retaining large arsenals, but of the static nature of alliances. Accordingly, deep reductions would be unlikely to cause multipolar instabilities, except where an alliance between nuclear-armed states already exists. In this regard, it will be important to address Russian fears about the possibility of a joint first strike by the three nuclear-armed NATO states.

By contrast, rearmament could become problematic at lower numbers. There are a number of reasons why a state might choose to rebuild its nuclear arsenal, but the most likely rationale is the need to offset a growing *conventional* imbalance with a potential adversary. This effect could become more marked at low numbers because a state with nuclear plenty could mount a nuclear response to a growing conventional imbalance by changing its war plans; a state with a small arsenal might decide that it must rearm to take on a new mission.

Developing a policy agenda to facilitate deep reductions is a strategic *and* a political challenge. Although deterrence at low numbers is less problematic than commonly perceived, there are, as

outlined above, certain strategic challenges that need to be addressed—and doing so will not be easy. Yet, it is the political challenges—ranging from alliance management for United States to Russia’s self-image as a great power being partly based on its large nuclear arsenal—that are more acute. Moreover, political challenges complicate the resolution of strategic ones. American domestic politics, for instance, significantly hinders any kind of resolution to the dispute with Russia over ballistic missile defense.

In a second study, *Low Numbers: A Practical Path to Deep Nuclear Reductions* (published in March 2011 as a Carnegie Report), I examine a way forward for the reductions agenda. I advance practical policy proposals, and where—as is often the case—there is no neat ‘solution’, I lay out the problem and propose some modest next steps. The policy agenda I developed has four components:

Bilateral U.S.-Russian Steps. Bilateral arms control must adopt a comprehensive approach aimed at verifiably eliminating warheads (including tactical and non-deployed ones), deterring rearmament and reducing the incentives to use nuclear weapons first in a crisis. To accomplish this, it must ameliorate the long-running disagreement over ballistic missile defense, address the newer challenge of high precision conventional weapons, readopt the traditional objective of ‘deMIRVing’ and champion the new goal of enhancing the transparency of nuclear weapon production complexes.

Engaging Allies. Although deep reductions would probably not undermine the security of allies, some officials and analysts from allies worry they would. Apart from anything else, this can provide potent ammunition for opponents of arms control in U.S. domestic debates. To win allies’ support for deep reductions, an extensive program of engagement will be needed. In particular, the United States and its allies should initiate wide-ranging reviews to identify security threats and appropriate responses. These reviews should help illustrate the very narrow circumstances in which nuclear weapons could prove useful, thus reducing allies’ fears about deep reductions. Washington should also work with allies to find ways of demonstrating and enhancing its political commitment so that they (and potential adversaries) do not interpret reductions as a signal of a reduced American commitment to extended deterrence.

Conventional Force Balancing. Stabilizing conventional imbalances among the United States, China and Russia is at the very core of facilitating deep reductions. In the short term, the NATO-Russia balance poses the biggest threat to the reductions process. While resolving this problem in the short term is unlikely (in particular because of the bitter dispute over the status of Abkhazia), the fact that neither Russia nor NATO seeks conventional superiority in Europe creates modest long-term optimism about the prospects for arms control. By contrast, the fluid conventional balance between the United States and China is likely to prove much more a problem. Neither Washington nor Beijing appears content to settle for a rough equality of capability in the West Pacific. This creates the possibility of a costly conventional arms race; the

state that loses could increase its reliance on nuclear weapons and, correspondingly, become reluctant to participate in efforts to reduce nuclear arsenals.

Multilateralizing Arms Control. A multilateral arms control regime would serve two key strategic functions. It would limit what Russians term the ‘combined nuclear capability of NATO.’ It would also help persuade Russia and the United States that if they build down, China will not ‘sprint to parity’. A key first step toward multilateral arms control is enhanced transparency from France, the United Kingdom and particularly China. Beijing, however, opposes transparency partly because it worries that openness would undermine the survivability of its nuclear forces. The first step toward multilateral arms control is, therefore, for China and the United States to engage in a program of mutual strategic reassurance. As difficult as achieving a multilateral agreement among the five NPT nuclear-weapon states will be, it is complicated yet further by the impact of the other nuclear-armed states—India, Pakistan, Israel and North Korea. The reductions process will probably be derailed entirely if Iran is successful in acquiring nuclear weapons.

2. **Matthew Fuhrmann**, CFR: *Coercive Limits of Nuclear Weapons*¹

What are the coercive effects of nuclear weapons? Sixty-five years into the nuclear age, we still lack a complete answer to this question. While the Cold War prompted a colossal body of research about the utility of nuclear weapons for purposes of *deterrence* -- that is, to prevent challenges to the status quo -- our understanding of the usefulness of nuclear threats to *compel* targets to relinquish possessions or change their behavior is comparatively limited. Can nuclear weapons be used to blackmail other states into making concessions, or are they effective mainly as instruments of deterrence?

Our research addresses this question using a new dataset of nearly 200 militarized compellent threats from 1918 to 2001. Using a combination of quantitative and qualitative methods, we find that states possessing nuclear weapons are not more likely to make successful compellent threats. If anything, bomb possession reduces the likelihood that targets will accept challengers' demands without a fight. While nuclear weapons may carry coercive weight as instruments of deterrence, it appears that these effects do not extend to compellence.

Historical examples illustrate these results. The British implicitly threatened to use nuclear weapons during the 1982 Falkland Islands crisis but this did not result in the Argentine withdrawal from the disputed territories. Britain had to fight a costly war to achieve this outcome. China's inability to compel Vietnam in 1979, Britain's failed demand against Egypt during the 1956 Suez Crisis, and Israel's ineffective coercive diplomacy in the lead up to the 1982 Lebanon War further underscore the coercive limits of nuclear weapons. In all of these cases, the issue at stake was salient to the target even if the balance of resolve favored the challenger. Yet, nuclear armed challengers failed in many other instances when the target's acquiescence would have been relatively inconsequential for its national security. For example, possessing nearly 30,000 nuclear weapons did not help the United States secure the release of the USS *Pueblo* in 1968. North Korea seized this vessel, claiming that it was illegally in its territorial waters. Pyongyang ultimately released the 82 crew members—but only after holding them in captivity for nearly one year and receiving a formal apology and pledges not to spy on North Korea in the future from the United States. Nuclear weapons were likewise unhelpful for South Africa in stopping its neighbors Lesotho, Botswana, Zambia, Zimbabwe, and Mozambique from harboring African National Congress (ANC) terrorists. And U.S. coercive diplomacy failed to secure the release of hostages held at the American embassy in Tehran from 1979 to 1981.

Our research has implications for important policy debates. Arguments in favor of international nonproliferation turn in part on whether we believe that nuclear weapons would enable nations

¹ This policy memo draws on research that is co-authored with Todd Sechser and was presented at the annual meetings of the Peace Science Society (October 2010), the International Studies Association (February 2011), and the Midwest Political Science Association (March 2011). The full paper entitled "The Coercive Limits of Nuclear Weapons" is available from the author upon request.

to engage in “nuclear blackmail” against their adversaries. For example, some analysts have recently argued that a nuclear-armed Iran would be able to seize control of major oilfields in the Middle East. Iran “would not even have to use” its nuclear weapons to accomplish this, according to one commentator; “intimidation and blackmail by themselves would do the trick.”² Others counter that while Iran might be able to use its nuclear weapons to deter attacks, it would be unable to use them to bully neighbors into submission. In this view, a nuclear Iran would quickly discover that “nuclear bombs are simply not good for diplomatic leverage or strategic aggrandizement.”³ Critical U.S. foreign policy choices depend on which view is more persuasive: if the former perspective is correct, then the United States might be well-served to take military action to prevent Iran from acquiring a nuclear capability. However, if one takes the more optimistic view, then attacking Iranian nuclear facilities might be seen as less urgent.

This research suggests that it would be unnecessary to use military force to prevent Iran from blackmailing its neighbors. Even if Tehran builds nuclear weapons, it is unlikely to issue any more threats than it did as a non-nuclear weapons state and any threats that are issued will not be more likely to succeed. Some hardliners argue that Iran’s ideological fervor makes it unique. This may be true, but there are reasons to doubt this argument. U.S. officials voiced similar concerns about Mao’s China in the early 1960s. According to declassified documents, many in Washington believed that China would be able to effectively put political pressure on other countries in Asia once it tested a nuclear bomb. In the end, China was no more able to blackmail its neighbors once it built nuclear weapons.

This is partially good news for U.S. foreign policy. There is also some bad news for the United States, however. Historically Washington has derived very little utility for compellence as a result of its exceedingly large nuclear arsenal. And this is unlikely to change in the future. This has important implications for current debates on nuclear arms control and disarmament. Prominent strategic thinkers are calling for the eventual elimination of nuclear weapons. Our study suggests that the United States can make deep cuts to its nuclear arsenal without undermining its leverage for compellence. It may be prudent to base calculation about how many nuclear weapons Washington should possess on deterrence and conflict escalation. Concerns about the ability to blackmail its adversaries should not be part of this calculation, however.

Our research does not imply that countries should welcome the spread of nuclear weapons. On the contrary, the United States and other countries should continue to oppose nuclear proliferation. Additional states’ acquisition of the bomb could undermine national and international security by raising the risk of accidental nuclear war, terrorist acquisition of the bomb, and destabilizing preventive strikes. The important point is that nuclear coercion does

² Norman Podhoretz, “The Case for Bombing Iran.” *Commentary* (June 2007): 17-23.

³ James M. Lindsay and Ray Takeyh. 2010. “After Iran Gets the Bomb.” *Foreign Affairs* 89(2): 33-49.

not appear to be among the consequences of proliferation, implying that the spread of nuclear weapons may be less consequential than extremists fear.

3. Anne Harrington de Santana, CISAC: *The Strategy of Nonproliferation*

According to the 2010 Nuclear Posture Review (NPR), the Obama administration assumes that by bringing the United States into compliance with its Article VI commitment to the goal of disarmament under the Treaty on the Non-proliferation of Nuclear Weapons (NPT) it will persuade non-nuclear weapon states to remain in compliance with their own treaty obligations and forego developing nuclear arsenals. Specifically, the NPR states that “[b]y demonstrating that we take seriously our NPT obligation to pursue nuclear disarmament, we strengthen our ability to mobilize broad international support for the measures needed to reinforce the nonproliferation regime and secure nuclear materials worldwide.”⁴ Critics complain that this idea of leading by example is naïve at best, and potentially even dangerous. They claim nuclear weapons fulfill important national security requirements for states and that by eliminating its own nuclear arsenal, the United States will not necessarily incentivize other states to forego pursuing their own nuclear weapons. Ultimately, these critics argue that disarming will leave the US vulnerable. This disagreement begs the question, “What is the relationship between disarmament and nonproliferation?” I argue that maintaining a meta-level commitment to the goal of disarmament will advance the US interest in nonproliferation, but not in the way one might initially think.

Historically, disarmament has been characterized as an end-state and nonproliferation characterized as a legal regime that creates disarmament; in other words, nonproliferation is a step along the way to disarmament. However, careful analysis reveals that nonproliferation is, in fact, a strategy to avoid disarmament. Working towards disarmament reinforces nonproliferation but nonproliferation does not lead to disarmament. In the long-term, both what is meant by disarmament and how to achieve it will need to be fundamentally re-interpreted. In particular, disarmament will need to be theorized as a strategy rather than an end-state.

Applied to the Obama administration’s NPR, this argument reveals that the logic behind the President’s strategy to reinvigorate an ailing nonproliferation regime by re-establishing the credibility of the US pledge to disarm is a lot like the Cold War-era strategy of extended deterrence.⁵ Just as extended deterrence required the US to maintain the credibility of an *incredible* threat to attack, nonproliferation requires the US to maintain the credibility of an *incredible* pledge to disarm.

⁴ U.S. Department of Defense, Nuclear Posture Review Report (Washington, D.C.: U.S. Department of Defense, April 2010). Also quoted in Scott Sagan, “Nuclear-Zero Prophecies,” *The National Interest*, no. 109 (2010): 88-96. I am grateful to Professor Sagan for bringing this quotation to my attention.

⁵ Extended deterrence refers to the threat of military (and in particular nuclear) retaliation in the event of aggression against a third party.

This argument carries implications that diverge radically from the conventional wisdom about nonproliferation and the prospects for disarmament. Even if disarmament would be implementable under a different policy program, the current US disarmament agenda will not bring the world any closer to the goal of zero nuclear weapons. It may reduce the number of weapons worldwide, but that does not mean complete nuclear disarmament is any more or less likely. Contrary to the conventional wisdom, the number of nuclear weapons that exist is not necessarily a good barometer for the likelihood of disarmament.

We typically presume that deterrence and nonproliferation are different kinds of behaviors with different kinds of logic. Deterrence is a military strategy. It explains how and why states maximize their security by doing some things with nuclear weapons, and avoiding others. There is no treaty or agreement that governs the requirements of deterrence. The logic of nuclear deterrence theory governs deterrence and compliance is driven by self-interest. In contrast, nonproliferation is not perceived as a strategy. It is interpreted as a collective bargain codified in legal agreements, which together form the nonproliferation regime. Compliance is presumed to require enforcement to ensure that states prioritize the collective good over their individual self-interest narrowly construed.

The problem with an interpretation that presumes deterrence and nonproliferation are different kinds of behaviors with different kinds of logic is that it actually obscures more than it reveals. I argue that deterrence and nonproliferation are actually much more similar than they are different. Rather than treating nonproliferation as a regime, in which compliance is achieved through collective enforcement, I recast nonproliferation as a strategy much like the Cold War era strategy of extended deterrence. Extended deterrence required the US to behave in a manner consistent with two mutually exclusive, but equally plausible interpretations of that behavior.

Consistent with the principle that it is rational to threaten an act, even if that act would be irrational to carry out, it had to be believable both that the US could (and would) fight and win a nuclear war in response to a Soviet invasion of Europe, and that the sole purpose of the US nuclear arsenal was to prevent the war that it was built to fight. In other words, extended deterrence required states to maintain a strong distinction between the substance of its declaratory nuclear policy, and the purpose of that same policy. Throughout the Cold war, policymakers were able to create and maintain the existence of two mutually exclusive interpretations by distinguishing between a formal, public discourse about what the US was prepared to do with its nuclear arsenal (a message intended for consumption by an outside audience), contradicted by a second, informal discourse (meant for consumption by an internal audience) about the purpose of that same deterrent.

I argue that the Nonproliferation Treaty (NPT) exhibits the same structural dynamics as extended deterrence, and therefore should be understood not simply as a treaty or agreement, but as a strategy. Namely, maintaining confidence in the legitimacy of the NPT requires states to

accept a distinction between two contradictory interpretations of the same text. These two mutually exclusive interpretations are maintained through, on the one hand, the formal substance of the agreement (the management of nuclear technology), and on the other hand, the informal, but mutually understood, purpose of that same agreement (to reduce nuclear danger while allowing the US and Soviet Union to maintain their nuclear arsenals).

While the substance of the NPT is the management of nuclear technology, the purpose of the NPT was for the US and the Soviet Union to secure their collective interest in the maintenance of a bi-polar system against the diplomatic efforts of France, China and the non-aligned movement led by India and Brazil to construct a formally egalitarian order. Politically, this struggle played out as a fight over whether or not the NPT would restrain both vertical and horizontal proliferation, and whether or not the agreement would contain a timeline to disarm.

In other words, just as confidence in the US extended deterrent required states to maintain the credibility of an incredible threat, confidence in the NPT requires states to maintain the credibility of an incredible pledge to disarm. What this reinterpretation reveals is that nonproliferation is not a step along the way to disarmament. In fact, effective nonproliferation policies actually decrease the likelihood that the US will eliminate its nuclear weapons. Rather than bringing us closer to disarmament, experience suggests that effective nonproliferation reduces the incentive to disarm.

What experience also suggests is that the desire to eliminate nuclear weapons has a lot to do with the perception of nuclear danger. Every meaningful diplomatic agreement about nuclear technology has occurred during a period of heightened tension. For instance, the US and Soviet Union concluded the Limited Test Ban Treaty shortly after the Cuban missile crisis, and the Nonproliferation Treaty (NPT) was concluded after all five members of the U.N. Security Council had their own nuclear arsenals and it appeared that the cascade of new nuclear powers would spin out of control. Yet, by quelling those fears, arms control and nonproliferation treaties also quell the political will to take meaningful action on essential aspects of disarmament such as the Comprehensive Test Ban Treaty, the Fissile Material Cut-off Treaty, the establishment of an international fuel bank, and United Nations Security Council reform.

The current renaissance of interest in disarmament is driven by renewed fears of nuclear danger, (the proliferation of nuclear weapons programs; Iran's development of an uranium enrichment program; the discovery of A.Q. Kahn's black market in nuclear materials; and the threat of nuclear terrorism posed by new non-state terrorist groups).

What this reinterpretation tell us about the Obama administration's nuclear agenda is that it will not harness the political will to enact meaningful change towards the goal of disarmament. Rather, the Obama administration's nuclear agenda is a plan to motivate other states to cooperate in reducing nuclear danger by convincing the world that the US would disarm if it could by apologizing for the fact that it can't and it won't. What Obama's plan will do is

reinvigorate a Cold War era nonproliferation regime that effectively postponed nuclear disarmament for more than 25 years.

However, as the instability of the nonproliferation regime over the past decade has already proven, the problem with this approach is that maintaining the credibility of a pledge to disarm is difficult when there is no concrete plan for how to eliminate nuclear weapons. Unlike extended deterrence, the effectiveness of which is difficult to falsify, it is much easier to observe whether or not states are working toward the elimination of nuclear weapons. Thus, the nonproliferation regime is likely to suffer intermittent crises as the credibility of the pledge to disarm declines, and confidence in the regime is undermined.

Although Obama's nuclear agenda may reduce nuclear danger in the short term, it is no substitute for eliminating nuclear weapons. As the instability of the nonproliferation regime over the past decade has already proven, the credibility of an incredible pledge to disarm cannot be sustained indefinitely. In the long-term, both what is meant by disarmament and how to achieve it will need to be fundamentally re-interpreted as well. In particular, disarmament will need to be theorized as a strategy rather than an end-state. Disarmament as a concept must be re-framed not as a goal or a destination, but rather a practice in which the international community will be continuously engaged.

4. **David Karn**, RAND: *Facing the Missile Challenge: US Strategy and the Future of the INF Treaty*

Introduction

The Intermediate Nuclear Forces Treaty (INF) signed in 1987 eliminated nuclear and conventional ground launched ballistic and cruise missiles with ranges between 500 and 5,500 km from the United States and Soviet arsenals. The treaty was a diplomatic watershed, signaling the beginning of the end of the Cold War. It has since served as a basis for the security and stability of Europe. However, the security environment confronting the United States has dramatically changed in the past 20 years. Russia, while continuing to abide by the treaty, has revised its doctrine to include the possibility of using nuclear weapons first to promote its interests in its “near-abroad” and raised the possibility of abrogating the treaty. China has developed a robust theater missile force, which contributes to a growing anti-access/area denial capability. Together with the deployment of advanced air, sea, and cyber-based assets, the Chinese missile force confronts the United States with a challenge to its ability to project power in East Asia. Missile programs (ballistic and cruise) are proliferating in other countries around the world, including in North Korea, Iran, Pakistan and India.

Research Question(s)

Does the INF Treaty serve American national interests or does continued adherence unduly constrain the ability of the United States to effectively respond to emerging security threats?

Methodology / Approach

To answer this question, the analysis builds upon regional expertise, from RAND and elsewhere, utilizes governmental documents and official policy statements, as well as relevant academic writings and general news sources. The study constructs a framework that provides decision makers with a means to assess and compare alternative policy choices and their likely political-military implications for the United States. Where possible, lessons and analogies drawn from the negotiation of the INF Treaty and the United States deployment of theater weapons in Western Europe, the so-called “dual track decision, will be highlighted.

Assumptions

The analysis assumes a complex and interdependent global security environment. Actions are likely to generate both positive and negative feedback, and thus the consequences (both intended and unintended) of any given policy should be assessed to the extent possible.

State actors are essentially rational, calculating the costs, benefits, and risks of various alternative policies, assessing potential tradeoffs, and making decisions. However, domestic political influences and bureaucratic rigidities can alter or distort baseline “rational” policies. More generally, given the uncertainty in international politics, misperception is possible.

Preliminary Findings

Missile Proliferation presents a Challenge to U.S. Interests

A review of the potential threats to American interests suggests that the Iranian and North Korean missile programs constitute important challenges, but because of U.S. conventional military superiority, an “in-kind” response centered on the deployment of a new generation of intermediate-range conventional missiles would not be recommended.

The development and deployment of conventional intermediate range ballistic and cruise missiles could ostensibly contribute to the closing of a perceived gap in the current U.S. escalatory ladder in the East Asian theater created by growing Chinese anti-access capabilities. Thus a new generation of theater missiles could enhance deterrence and stability and improve U.S. capabilities to defend vital interests should deterrence fail.

At the same time, it is not clear that a new generation of U.S. theater missiles that simply offset China’s is preferable to the development and deployment of other systems which may leverage existing U.S. advantages. With additional measures like active or passive defense and diversification of forward bases in the region, other systems could be equally effective and less potentially destabilizing or politically provocative than the introduction of theater missiles. Moreover, land-based missile systems are likely to be vulnerable and would seem to require multiple bases in the region, which present diplomatic challenges.

U.S. Withdrawal from the INF Treaty Would be Costly

A U.S. withdrawal from the INF Treaty would have other implications. Russia would be freed of its obligations under the treaty, and this could reduce stability in Europe. Given Russia’s explicit reliance on nuclear weapons in its military doctrine, INF missiles would likely be developed, deployed and potentially targeted on Europe. At the same time, Russia would be concerned about the marked reversal of U.S. policy that such a move would represent and may also be concerned about the need to compete with the United States in another realm of military capabilities.

For NATO partners, the withdrawal will present significant challenges. It is difficult to envision a course of events in which U.S. termination of the INF Treaty does not spark a potential diplomatic crisis in NATO-Russian relations as well as within the alliance. Divisions between older Western European members and new Central European states may emerge over the nature and potential responses to the threat presented by Russian missiles. Despite the reaffirmation of NATO as a nuclear alliance in its most recent “Strategic Concept,” momentum toward removing tactical nuclear weapons from Europe has seemingly increased. A decision that introduces a new class of missiles with the potential for nuclear missions is likely to precipitate domestic political opposition within member states.

In withdrawing from the Treaty, the United States will be obligated to provide a rationale for its decision. It will be difficult to avoid implicitly faulting China's buildup in INF missile capabilities as a major consideration. Not only will such a move exacerbate Chinese mistrust of U.S. intentions, but if a withdrawal from the Treaty is followed by the deployment of U.S. conventional theater weapons in the Western Pacific, Beijing is likely to view such a move as escalatory and provocative. U.S. reassurances focused on closing a perceived gap in its extended deterrent are unlikely to be accepted. Reciprocal modernization efforts should be expected, and U.S.-China relations may deteriorate across issues areas.

Given the increased economic interdependence in the East Asia region, U.S. allies like Japan and South Korea will be placed in a difficult position should the U.S. withdraw from the INF Treaty. Despite concerns over China's long-term intentions, domestic political opposition to U.S. policy could emerge within these countries and complicate diplomatic relations. Moreover, the potential Russian deployment of theater missile forces that could be expected with the dissolution of the INF Treaty would threaten Japan and could spur further missile proliferation in the region.

More generally, a U.S. withdrawal from the INF Treaty would likely undermine its larger non-proliferation goals, with the Missile Technology Control Regime (MTCR) a likely casualty. We could expect both Russia and China to export missiles and missile components for both economic benefits and to complicate U.S. policies in critical regions.

Moving Forward

This is not to suggest that these implications of a U.S. withdrawal could not be mitigated by a carefully designed diplomatic strategy that would seek to address Russian concerns and reassures NATO allies. However, this seems like a highly complex and difficult task to accomplish even if Russia is generally supportive of ending the treaty. While some have considered a revision of the INF Treaty to allow Russia and the United States to deploy conventional theater missiles but maintain a ban of nuclear-armed forces, the practical barriers to verification and compliance under such a system would be formidable. Moreover, given its large stockpile of tactical nuclear weapons and the centrality of nuclear forces in its military doctrine, the Russian commitment would be difficult to accept. Thus we are left with three potential choices for the United States:

- **Comprehensive withdrawal:** Understanding the diplomatic and security costs of a precipitous unilateral withdrawal from the INF Treaty, the United States would work closely with NATO allies and Russia to dissolve the treaty and attempt to construct confidence building measures to reassure concerned neighbors. Despite its best efforts, the potential for real, tangible diplomatic costs for U.S. policy remain unavoidable in Europe and beyond.

- Expand the INF Treaty: Building on legitimate Russian and U.S. security concerns, the two signatory states would work together to expand the treaty to others. A Russian proposal for a “global” INF accord currently sits in the United Nations Committee on Disarmament. Initial overtures could be made to China, given its perceived focus on INF capabilities. While probability of success in the short-term is low, the opportunity to develop a strategic dialogue with China may prove fruitful and be expanded to include other relevant powers (India, Pakistan) over time.
- Maintain Status Quo: Precisely because the costs of abrogation are so high, work closely with Russia to maintain the INF Treaty, with the commitment to expand INF and also to address other arms control concerns including reducing tactical nuclear weapons, revisiting Conventional Forces Europe (CFE), and cooperation of ballistic missile defense (BMD). In the interim, the United States can address risks created by Chinese military modernization with other military and diplomatic means.

Under the existing status quo, U.S. planners should acknowledge Chinese asymmetric advantages and develop and deploy programs to offset them (passive defenses, forward base diversification) while leveraging relative U.S. strengths (i.e. long-range penetrating strike, air-launched- and sea-based cruise missiles, undersea warfare (USW), and improved C4ISR). At the same time, diplomatic efforts to lay the groundwork for a potential expansion of the INF Treaty could be made in cooperation with Russia and focusing on Beijing.

5. **Tanya Ogilvie-White**, IISS: *Rethinking Deterrence*

Should the nuclear weapon states retain nuclear weapons indefinitely? The honest answer from senior defence officials in all five states would be 'yes'. Yes, because nuclear deterrence provides strategic security in a competitive world where nuclear technology cannot be 'disinvented'. Yes, because nuclear weapons make major conventional war less likely; because they protect sovereign freedoms; because they could be used to deter and punish an aggressive, nuclear-armed adversary. These arguments were easy to make during the Cold War, and they continue to be made today to justify nuclear retention. But the case against nuclear weapons is also strong. Many challenge it on ethical grounds, stressing that nuclear weapons are far too blunt an instrument. If deterrence must be based on a credible threat of use, as strategists insist, then in the last resort we must be prepared to launch them. But even accurately targeted, low yield nuclear weapons would lead to massive civilian casualties, which is difficult to justify on moral grounds. Others argue nuclear weapons pose unacceptable risks - we can't assume rationality on the part of nuclear possessors; we cannot assume nuclear weapons won't fall into the hands of terrorists; and we can't assume that command and control systems will work as intended, that actions won't be misinterpreted or that nuclear accidents won't happen. At times we have come perilously close to deterrence failures and nuclear catastrophe. Some accept all of this but insist the most fundamental problem is that a nuclear war can never be won: even limited use would lead to escalation and annihilation.

I am becoming very familiar with the nuclear optimism and pessimism debates. One of the reasons is that for the past nine months, I have been buried in 8000 letters that address the detailed pros and cons of nuclear deterrence. It is the correspondence of the late Sir Michael Quinlan, who devoted his life to making sure that the horrors of the Second World War are never repeated. Although he was deeply religious and well-versed in just war debates, he regarded nuclear weapons as an appalling strategic necessity, which he believed can be morally justified – at a stretch – on the basis that they make war between the major powers less likely. As policy director and then Permanent Undersecretary at the UK Ministry of Defence, he helped shape British and NATO nuclear policy, and in his private capacity he played a crucial role in influencing public opinion on nuclear matters. He was always quick to spot the Achilles heel of every argument - in the case of most disarmament advocates it was their failure to provide a convincing major war-preventing alternative to nuclear deterrence.

Sir Michael was not numbed to the horrors and risks of nuclear possession and use. In fact, once he left the MOD, he came out in favour of a disarmed world - but not at any cost. He was an advocate of multilateral disarmament but only when the costs of retaining nuclear weapons outweigh the benefits. Unlike others who rigidly hold that nuclear deterrence must be with us for the rest of time, he genuinely believed that it is desirable and necessary for peace and security to be achieved by non-military means, by institutions and norms and procedures that are accepted by everyone. But he was convinced this would be possible only when the major causes of friction, such as those over Taiwan, Kashmir, and Israel/Palestine are resolved, and

when international institutions have the authority and capacity to prevent war. He believed these conditions would not be met for a long time, and so he argued in favour of maintaining a credible nuclear deterrent.

I have kept an open mind on the debate as I have immersed myself in Sir Michael's correspondence. At the International Institute for Strategic Studies, where I am a Research Fellow, my main task this year has been to collate and publish Sir Michael's letters, and I believe it is important that I do so as an objective observer. But it is only natural that I question how my assumptions are changing as I delve deeper into the nuclear debate. It is clear to me that important issues are sometimes overlooked: a key point is that most arguments are not based on fact and evidence but on hope, belief and fear. Many on both sides of the debate have become dogmatic because their core arguments cannot be proved or disproved. We cannot be certain that nuclear weapons ended the second world war, that they have been responsible for preventing a third world war, or that they will successfully deter future threats. Equally, it is not certain that deterrence will one day fail, that nuclear use would lead to escalation, or that a disarmed world would be safer and more stable than a nuclear one. So much of the debate is speculative, underpinned by conflicting realist and idealist assumptions.

There are, however, negatives connected to nuclear weapon status that are based on firm evidence, and we should address these. A key point is that the strategic and political cases for nuclear possession are less convincing than they once were. The UK and France no longer face an overwhelming threat to their survival, and although a stronger case can be made for US, Russia and China to retain a nuclear option, even that is less clear cut than it used to be. To tackle the most serious challenges we face in today's world, such as global terrorism, poverty and climate change, we are dependent on an unprecedented level of international cooperation - we need to pool resources, share information and technology, and collaborate to promote stability and security. The retention of nuclear weapons by a small group of states, despite the legal obligation to disarm, creates intense resentment. It divides the world into them and us, undermines cooperation, and paralyses international institutions. I am not arguing that disarmament will make these problems go away, but that what has sometimes been referred to as 'nuclear apartheid' is a major impediment to collective security. This is a political cost we need to acknowledge when discussing nuclear deterrence.

Rather than relying on nuclear weapons for all time, the nuclear weapon states must be prepared to innovate to meet their defence needs. Innovation calls for creative thinking that overcomes institutional dogma and inertia. That brings me to another issue that is often downplayed in the nuclear debate, which is: how useful are nuclear weapons in real terms? Can we devise more reliable ways to defend ourselves, to deter and punish aggression? Given that the costs of nuclear status are growing, do nuclear weapons deserve the official reverence that was attached to them during the Cold War? The voices of those who question the strategic value of nuclear weapons relative to more flexible, accurate and reliable conventional weapons tend to be drowned out in the debate, by those who regard nuclear weapons as deserving

mythical status. But should we continue to depend on the elaborate system of psychological bluff that is deterrence? Given the complex challenges we face, it seems increasingly risky and unwise.

But disarming may also be unwise unless we prepare for it and are proactive. In the 2006 UK White Paper, Tony Blair made the Quinlanesque point that: “those who question the decision [to maintain a credible deterrent] need to explain why disarmament...would help our security...They would need to argue that [we] would be safer by giving up the deterrent.” Traditionally, pro-disarmers have done a poor job of making this case. Difficult questions about what types of defence and security arrangements are needed to promote peace and security in a disarming and disarmed world have not been given enough thought. For example, on the road to eliminating nuclear weapons, as stockpiles decline, what defence and security options are open to the nuclear weapon states - could a part-time or virtual nuclear deterrent be credible? What types of alliance commitments can replace extended deterrence? How can collective security be strengthened? What types of non-nuclear forms of deterrence are workable? And how would a non-nuclear world deal with nuclear breakout or the emergence of an aggressive great power? These are the questions that need the undivided attention of the Michael Quinlans of today because, whatever the obstacles, we need to prepare for a disarmed world, to ensure that our defense and security needs can be met in a world of low numbers and of zero.

Quinlan’s correspondence has taught me that defence institutions are at their weakest when it comes to innovative thinking. This needs to change if we are to have any chance of achieving a nuclear weapon free world. It wasn’t until Quinlan had left the MOD that he began to seriously consider the question of disarmament. In his official capacity, he was dismissive of arms control and disarmament initiatives: he rejected and countered the ideas of those who questioned deterrence logic for fear that they could undermine the system he had spent his life trying to build. On his retirement, this all changed. He immersed himself in disarmament debates at IISS and inspired studies on a disarmed future. He admitted that as a civil servant, he had been too dogmatic in his pro-nuclear advocacy. He also warned that it is extremely difficult for those outside government to genuinely influence thinking on nuclear issues – reports and studies conducted by scholars and retired practitioners are generally considered to be useful for gauging public sentiment, and not for informing policy.

This brings me to my proposal: that defence officials begin to address the issue of how security and stability could be maintained in a world of zero nuclear weapons. Realistically, we have to accept that nuclear weapons are going to be around for a long time, but that should not stop officials exploring practical war prevention strategies for a post-nuclear world. The very process of thinking through strategies of this kind will benefit disarmament momentum, as one of the biggest obstacles to (and legitimate concerns over) a nuclear-weapon-free world is the fear among government elites that it would be more prone to conflict. The call for official studies of this kind might not sound ambitious, but having spent the past year pouring over the letters of

some of the most influential defence thinkers in the world, I believe it is a modest proposal, which, if it was taken up, could have a significant impact on the nuclear debate.⁶

⁶ For further information, please see my forthcoming publications, *On Nuclear Deterrence: The Correspondence of Sir Michael Quinlan* (3 volumes, IISS Adelphi Series), and (with David Santoro) *Slaying the Nuclear Dragon: 21st Century Disarmament Dynamics* (University of Georgia Press).