

Chapter 29

Nuclear Disarmament and Non-proliferation Today and in the Near Future



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The prospects for nuclear disarmament, arms control, and nonproliferation today and in the near future are bleak. Multiple factors have made the United States and the Russian Federation increasingly unlikely over the last several years to seek and agree on new measures, and some existing agreements are in peril. North Korea has violated norms, defied the world powers including its few allies, and threatened its neighbors and the United States with nuclear war. Iran abides by the Joint Comprehensive Plan of Action, but the United States seeks to reopen the deal to tighten restrictions. In the face of these circumstances, the nuclear technical policy community can continue to engage and explore opportunities for promoting peace, stability, and security; provide relevant and timely advice inside governments and to the larger public; improve the ability to prevent clandestine proliferation programs and continue to stigmatize overt proliferation; and address systematically the reasons leading specific nations to pursue nuclear weapons.

After many years of enjoying relatively stable relations among nuclear armed states, during which time many of us who work on nuclear security issues focused primarily on countering nuclear terrorism, we find ourselves in a time of heightened and increasing state-level nuclear threats. Without setting aside the concerns about nuclear terrorism, we must devote more attention to arms control, disarmament, and nonproliferation. To that end, I begin with my understanding of current bilateral relations between the United States and Russia with respect to arms control and disarmament. Second, I address international arms control and nonproliferation. And third, I touch briefly on the prohibition treaty and discuss what we in the technical policy community can do in this context.

Eight years after President Barack Obama's Prague speech expressing America's commitment to seek the peace and security of a world without nuclear weapons, we

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are collectively in a difficult time for arms control and disarmament. This is a result of both philosophical and real-world developments.

In the United States, policy reviews are conducted by each new presidential administration. The current reviews promise more fundamental examinations of goals, methods, and means, and they are expected to reflect President Trump's perspective. Trump says that the United States military has endured years of decline and depletion and is backed by an outdated nuclear arsenal. He presents this as a dangerous situation that emboldens enemies of the United States and its allies and weakens the United States' negotiating position inside and outside of crises. The Nuclear Posture Review and Ballistic Missile Defense Review led by the Department of Defense along with policy reviews by the National Security Council are being held close, with few or no public disclosures, but we can speculate that the internal discussions reflect the external debates on several points.

First, with the accusations that Russia has violated the Intermediate Nuclear Forces Treaty, policy analysts in Washington argue forcefully both for and against withdrawal from the treaty. Some say plainly that we cannot be party to a treaty if our counterpart does not abide by the terms of the treaty. Others say that, at least for now, the treaty places some constraints on Russia's deployment of intermediate-range nuclear missiles, and withdrawing from the treaty would free Russia to deploy a menagerie of intermediate forces that threaten U.S. allies. Such deployments could trigger another arms race. The United States has sought discussions with Russia to address and resolve the violations, but Russia has made counter-accusations and has declined talks pending U.S. disclosure of additional information on the basis for U.S. accusations. The United States says that it has provided sufficient information and there are no signs of progress. Experts in the United States and Russia are privately sharing worries that the INF Treaty might dissolve in months.

The pessimism about U.S.-Russia relations is reinforced by reactions to President Putin's approach to foreign policy, which is seen in the United States as driven by domestic politics but nonetheless returning us to an adversarial world. Putin has built his popularity on the image of a resurgent Russia that is a counterweight to the United States, which he characterizes as having hegemonic aspirations, and to NATO countries, which are characterized as the United States' European client or puppet states. Russia's increasing use of military might and unconventional engagements to intimidate and destabilize its neighbors and potential adversaries are coupled with bellicose talk and reported aggressive war planning strategies that utilize escalation and brinkmanship for advantage.

Despite bad and worsening bilateral relations, inspections under New START have continued to proceed smoothly in both Russia and the United States. This is good news, but the agreement expires on Feb. 5, 2021. It has a provision for extension for up to 5-years without returning to the Russian Duma and U.S. Senate for approval if both presidents agree. In July 2017, U.S. Under Secretary Shannon and Russian Deputy Foreign Minister Ryabkov committed to convening the New START Bilateral Consultative Commission and they have quietly begun

holding strategic stability talks. One can hope that such meetings will lay the foundation for a 5-year extension of NewSTART.

The overall bleak picture for U.S.-Russian arms control did not emerge suddenly or even quickly. In general, a contentious international security environment conceals new initiatives and makes the parties question existing commitments. The worsening security environment became increasingly apparent as Russia reacted to increased U.S. influence in former Soviet States, and as the United States and its allies supported (morally and, in some cases, militarily) overthrows of authoritarian governments in the Middle East and North Africa. Russia perceived both of these types of U.S. actions as profoundly threatening.

Russia's assertion of influence or control in Ukraine, to the point of annexing Crimea and providing manpower and materiel in support of breakaway groups in the Donbas, triggered a more severe and sustained U.S. response than the response to Russo-Georgian war in 2008. The White House was determined to make clear that Russian-sponsored actions in Ukrainian sovereign territory violated international law, international norms, and the trust of the international community, including an explicit treaty obligation in the Budapest Memorandum on Security Assurances. Therefore a "no business as usual" policy was imposed. As a result, military-to-military contacts were halted and a long list of U.S.-Russian cooperative efforts was suspended, including types of cooperation that proceeded even during tense times in the Cold War. The U.S. allowed exceptions for cooperation on security and other essential matters (space launch, for example), but the Russian government partly responded to U.S. restrictions by saying that Russia would engage in cooperative efforts only if the full portfolio of cooperation was resumed, not just the topics that were U.S. priorities.

Obama's strategy of deemphasizing the role of nuclear weapons in U.S. security also seems to have exacerbated rather than alleviated Russian concerns about U.S. intentions. Although the United States maintains a nuclear deterrent against strategic threats, it has elevated other military capabilities, such as conventional long-range precision weapons, against the other threats that tend to dominate U.S. security planning. Some in Russia entertain the idea that the United States is strengthening its cruise missile strike and European ballistic missile defense capabilities to enable a U.S. bolt-from-the-blue thrust and parry against Russian strategic forces. The Russian scenario has a U.S. attack with precision conventional weapons disabling a large fraction of Russia's nuclear forces (silo-based and mobile ICBMs, and submarines) and U.S. and NATO missile defense systems blocking Russia's counterstrike with its surviving nuclear forces. This fear is totally unfounded in the view of the U.S., but—warranted or not—that fear has become a reality both constraining and aggravating relations between our two countries.

We are told that the same Russian voices speculate that the United States might think that Russia would not respond to a conventional attack on its nuclear forces with a nuclear counterattack. I know of no American who agrees with these claims.

Others in Russia see U.S. policies as steps toward delegitimizing nuclear weapons, and shifting to a new potential battlefield in which the United States has an established technological advantage. Russia has, so far, rejected such a shift, and

undertaken efforts that underscore the centrality of nuclear forces in Russia's security plans. Russia is said to be developing and deploying new delivery vehicles, including the 100-ton RS-28 Sarmat, a 10-warhead MIRVed missile.

Turning to nonproliferation, North Korea is regarded by many in the United States as the greatest threat today to international peace and security. In an aggressive test program surpassing all except the U.S. and Soviet programs at the height of Cold War, North Korea has launched missiles with ever greater range, and detonated nuclear explosives of significant yields. Observations indicate that North Korea has tested a missile with intercontinental range, although it is less clear that their missiles can strike their intended targets reliably. The most recent nuclear explosive test appears to have had a yield of hundreds of kilotons. A nuclear arsenal is of grave concern even with lower ranges and yields.

It is reported that North Korean officials say that their leader, Kim Jong Un, learned the lessons of Iraq and Libya. The argument goes that Kim sees nuclear weapons as a guarantee that preserves his regime, unlike Saddam Hussein and Muammar Qaddafi, who gave up their WMD. Looking at the timeline and the actual circumstances, however, one could equally argue that giving up WMD bought Saddam Hussein about 10 more years in power (and might have had more if he had clarified that he did not possess WMD prior to the second conflict) and Muammar Qaddafi got about 7 more years in power and ultimately was toppled by a civil war, not an invasion.¹

To be clear, the United States seems to have little insight into actual North Korean thinking and reasoning, which itself increases the risk of miscalculation and accidental conflict. Still, we can hope that official DPRK statements do not reflect genuine belief that the United States seeks to invade and overthrow North Korea. It is true that there is no peace treaty formally ending the Korean War, but it is also true that the United States did not pursue military options when the DPRK was at its weakest in the 1990s and early 2000s. The United States has placed preconditions on negotiations for a peace deal to include the affected people in the negotiation (South Korea) and to reduce the potential for catastrophic conflict. Rather than guaranteeing the continuation of his regime, North Korea's development of nuclear weapons has only increased the risk of conflict.

The other major nuclear nonproliferation priority for the United States is Iran. Iran secretly developed enrichment capacity in violation of its commitments under the NPT. It has since reached an agreement, the Joint Comprehensive Plan of Action (JCPOA) with China, France, Germany, Russia, United Kingdom, United States, and the European Union. IAEA inspectors and the parties to the JCPOA have determined in each report that Iran has abided by the explicit, narrow

¹Saddam Hussein's programs were dismantled in the early 1990s. He stayed in power until the completion of the invasion of Iraq in 2003, an invasion predicated on a claim (later shown to be incorrect) that he had reconstituted his WMD programs. Qaddafi gave up his weapons program in 2003–2004 under a threat of serious consequences. He stayed in power until 2011 when civil war broke out in Libya as part of the Arab Spring, against which a nuclear weapon would have been beside the point.

requirements of the agreement, including granting access to sites where inspections have been requested.

As of the finalization of this paper, there are reports that Trump will decertify Iran's compliance with the JCPOA and that the agreement is in the United States' national-security interests, and that he will seek to renegotiate the agreement.² If this is correct then it not only has a difficult path to achieving its goals. It creates a difficult situation with the U.S. Congress with little room for alternatives, except reimposing sanctions or succeeding in renegotiation. Opening a renegotiation would require convincing all of the other parties to participate when they disagree with the U.S. position. Reimposing sanctions under present circumstances may set a more dangerous precedent and do more damage to nonproliferation than anything in the JCPOA does.

Both Iran and North Korea make statements and take actions that threaten their neighbors and peace and stability, but Iran has entered into an agreement to assuage concerns about its nuclear programs. North Korea, on the other hand, has taken provocative acts at every opportunity and actually developed and tested nuclear explosives. Which alternative do we wish to encourage? Sanctions are only effective if there is a realistic prospect of alternative actions leading to relief from those sanctions, so one threatens the sanctions regime if the agreement is not followed. What would be the lesson of Iran?

In this context, it is difficult for the United States and the other members of the P5 to make progress on arms control and disarmament. The governments also say that they cannot engage the ban movement because however well-intentioned the movement may be, the Treaty on the Prohibition of Nuclear Weapons ignores the realities of the international security environment, it does not provide a path to its goal, and therefore they argue it is counterproductive. While agreeing with many of those points, I argue that there are reasons to pursue both progress on arms control and engagement with those who support the ban treaty.

Congratulations are due to those promoting the Ban treaty both on their accomplishment in getting sufficient support to open the treaty for signature and for receiving recognition from the Nobel committee. These successes express many people's deeply held feelings against nuclear weapons and dissatisfaction with progress on disarmament.

The prohibition seeks to delegitimize nuclear weapons, but it does not address the conditions that lead nations to seek or depend on nuclear weapons. It does not say how to proceed with reductions or elimination. It also has minimal verification provisions (it does not even require parties to the treaty to sign on to the Additional

²The decision and the reasoning will be known by the time of publication. We can note now that some who are opposed to the deal argue that we should never have established, and cannot establish, the precedent of allowing Iran to keep an enrichment capability, diminished though it is for the next eight years, because during that period Iran will gain more expertise and after the sunset of those provisions, Iran will be unconstrained. Critics also note developments outside of the agreement, such as Iran's ballistic missile advances and its sponsorship of non-state actors that attack civilians of Iran's neighbors. These are matters that do need to be addressed.

Protocol) and has only weak enforcement provisions. The Nuclear Weapon States already have commitment under Article VI the Nuclear Non-Proliferation Treaty to pursue negotiations for disarmament. Many of the Non-Nuclear-Weapon States are dissatisfied with the lack of progress on the commitment, as are many people in the nuclear weapons states and so-called nuclear umbrella states. But the Prohibition Treaty does not focus on the obstacles (the actors and situations) that make it challenging to fulfill (not only pursue, but act on) the Article VI commitments. For example, it does little to pressure Russia, which has more nuclear weapons than any other country and which has been the greatest obstacle to further reductions. As noted above, North Korea offers a parallel logic, that they need nuclear weapons more than ever at the present time.

Many of the people who support the treaty believe that terrible as nuclear weapons are, we need a nuclear deterrent against North Korea. In every nation, nearly any organization, and even in governments that seem monolithic, there are multiple perspectives. It makes sense to strengthen the hand of those inside who share your feelings and goals. This is true for the P5 governments and it is true for those who support the ban movement, and that is reason enough for those who support the Prohibition Treaty and their P5 counterparts to engage in dialogue. Perhaps the movement can use the enthusiasm and support for prohibition not only to pressure the governments (particularly Russia) on nuclear weapons but also to work on the real factors that motivate nations to have nuclear weapons and serve as major obstacles to arms control and disarmament, beyond just the inability to conceive of a world without nuclear weapons.

The nuclear policy community, including the subset with technical training, is accustomed to operating with a pessimistic mind and an optimistic heart. We can see the realities of the challenges that we face, but because of the importance of success we continue to devote ourselves to efforts whose rewards and progress are measured in the terrible things that have not happened. Taking this commitment as a given, the question is What can we and should we do? I offer here four suggestions actions.

- I. We should work with other sectors and with counterparts in other countries to promote better understanding and to identify opportunities and options for cooperation, collaboration, and coordination.

This suggestion should not be mistaken for a superficial gesture and a naïve hope that we will all just get along if we better understand each other. Many of our disagreements are rooted in genuine differences in goals and perspectives. But the National Academy of Sciences Committee on International Security and Arms Control (CISAC) has found that technically based engagements have led to successes in part because of the common language and agreed forms of reasoning and evidence. Engagement among academic, scientific, military, and diplomatic sectors in different countries involves hard work to learn about the technologies and the situation, do analyses, share them, understand the perspectives and analyses of

others, and develop new ideas. Because of the unique challenges and the possible benefits, CISAC is always looking for additional opportunities to do this work.

- II. We should ensure that our input is relevant and timely inside governments and to the larger public.

We need to address questions that decision makers and even those who advise them are not permitted to consider (by time or mandate) or are not equipped to consider. This includes addressing both nuclear challenges (such as monitoring, dismantlement, disposition, and verification) and the broader security concerns, which I return to in a moment.

- III. We should improve our ability to prevent clandestine proliferation programs and continue to stigmatize overt proliferation. This is in the mutual interest of nations around the world.
- IV. We should address, systematically, the reasons leading specific nations to pursue nuclear weapons.

The reasons may have little to do with nuclear weapons, per se. In some cases, they are to address regional issues, which the world at large could alleviate or exacerbate, depending on their actions. More dialogue and joint efforts leading to increased entanglement may offer opportunities.

Our overarching goal must be international peace, stability, and prosperity to enable people to live healthy, fulfilling, and meaningful lives. This implies, among other things, respect for international law and for everyone's security. As we act on Article VI obligations, our treaty obligation to "pursue negotiations in good faith on effective measures relating to... nuclear disarmament," I know that some of the parties to the NPT with and without nuclear weapons will continue to examine their own and their allies' comprehensive security picture, and evaluate whether nuclear reductions and disarmament improve or worsen that security. If they conclude that they are less secure pursuing nuclear reductions and disarmament, then leaders may see it as their responsibility to avoid that path until the security picture changes.

So, to make progress, we need to address broader security concerns even as we deal with the unique challenges of nuclear weapons.

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