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NUCLEAR DISARMAMENT: A SLOW MARCH ON A LONG ROAD

The latest bilateral treaty addressing Russian and American strategic nuclear forces will most likely be the last major step towards disarmament in a while. Further negotiations between Washington and Moscow will prove very difficult, the remaining nuclear weapons possessors appear unwilling to reduce their atomic arsenals, and multilateral agreements seem unpromising for now. Patience is the key word on the long road towards a world free of nuclear weapons.



U.S. Secretary of State Hillary Clinton and Russian Foreign Minister Sergei Lavrov exchange the documents of ratification for New START, February 5, 2011. REUTERS / Michael Dalder

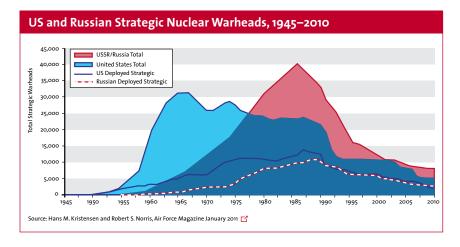
Reminiscent of Cold War practices, the current U.S. administration attempted to once again recalibrate the U.S.-Russian dialogue around nuclear arms control negotiations. In addition, the American president outlined an ambitious vision of nuclear disarmament. These developments raised hopes for swift progress. The latest strategic treaty between the United States and Russia (New START) entered into force in February 2011. However, it is likely to be the last achievement for some time on the long road towards nuclear disarmament.

Further bilateral steps between Washington and Moscow will involve complex and time-consuming tradeoffs. While both sides state their commitment to further negotiations, internal politics and genuine security concerns make subsequent bilateral steps significantly more difficult and slow. The other seven nuclear weapons possessors (China, the United Kingdom, France, India, Pakistan, Israel, and North Korea) appear rather immovable. Progress seems slightly less improbable on the multilateral front, though it will certainly come slowly and in small increments. Only tiny steps were made at the last major meeting reviewing the nuclear regime. The entry into force of a treaty banning nuclear testing remains possible but remote. An agreement on prohibiting the production of fissile materials for nuclear weapons is out of sight for now.

Thorny Russian-American voyage ahead

New START offered Moscow and Washington a temporary platform to work on strengthening their overall bilateral relationship. It also increased transparency (and thus confidence) through the maintenance of a bilateral verification regime. It reduced deployed strategic warheads and delivery vehicles: no more than 1550 strategic warheads and 700 intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and heavy bombers equipped for nuclear weapons delivery can be maintained under this treaty.

Swift results could be achieved by pursuing further reductions within the same framework, cutting arsenals to 1000 deployed strategic warheads. This task would be a challenge in itself, as it would require the two states to marry their divergent preferences regarding numbers of warheads and delivery vehicles, to redesign cumbersome counting rules for strategic bombers, and to regulate U.S. ambitions to mount conventional warheads on ballistic missiles. However, political and security concerns push both sides away from this option, towards a lengthier and broader process centered on limiting the overall (deployed, in storage, or retired) number of warheads, and thus including discussions about tactical nuclear weapons (TNW), missile defenses (MD), and other thorny concerns (CSS Analysis no. 53 ₫).



Even assuming that the Obama administration wants to take further disarmament steps, in order to secure New START ratification, the U.S. government has already pledged \$100 billion over the next decade to modernize the strategic deterrent and \$85 billion for the nuclear weapons complex. Little institutional enthusiasm should be expected for synchronizing these investments with further reductions. In addition, the 2010 Nuclear Posture Review (NPR) refused to envisage retiring ICBMs, SLBMs, or heavy bombers from the U.S. forces mix and provided for only limited wiggle room for further steps within New START constraints (CSS Analysis no. 74 Z). Thus, Washington is likely to play for time, preferring an all-encompassing approach, and to push for the inclusion of TNW in the next round of negotiations.

Russia has even less of an incentive to seek rapid progress. New START provides both a political framework for bilateral relations and a confidence-building platform for managing strategic questions. Moscow perceives a transatlantic arms control dialogue as key to its superpower standing. Nonetheless, further reductions would close the gap to the remaining nuclear possessors, thus diminishing Russia's perceived status. While a delivery systems cutback would be unproblematic, Moscow will certainly link deployed warhead reductions to regulating U.S. missile defense deployments in Europe and addressing a perceived NATO conventional weapons superiority. Finally, there is little reason to rush before the 2012 U.S. presidential election: a Republican administration might either be less willing to engage on arms control or likely to pocket any concessions and thus weaken Moscow's hand.

During the Cold War, both the United States and the Soviet Union deployed

thousands of TNW, short-range arms designed to hinder enemy advancement on the battlefield. Over the last 25 years, Washington and Moscow pursued massive unilateral reductions, but TNW continue to be the least-regulated category of nuclear weapons. Besides being vulnerable to theft and unauthorized use, TNW generate strategic instability: they are a potential facilitator of escalation in conflict and an insecurity source due their limited control through political leadership. The United States maintains a few hundred militarily insignificant TNW. However, numerous U.S. allies view these weapons as an important proof of American commitment to their security.

Russia's TNW remain in the thousands. Whether key to offset conventional qualitative imbalances towards NATO and numerical inferiority towards China, or just a useful equalizer on the high seas and a political instrument, TNW reduction remains a topic Russia avoids talking about. Given domestic political pressures, allies concerns, and strategic considerations, Washington will aim at significant cuts in TNW arsenals within the next round of negotiations. Moscow already appears to be stalling by linking future talks to a unilateral withdrawal of U.S. TNW from Europe.

If all nations had perfectly functioning missile defenses, mutual deterrence could be abolished and nuclear weapons eliminated. Since the beginning of the nuclear age, this dream has been favored by optimists willing to spend billions to overcome colossal technical challenges and opposed by pessimists pointing to the instability generated during a process with such an uncertain outcome. The Bush administration intended to deploy in Central Europe missile defenses aimed at defending U.S. territory, a plan strongly opposed by Russia. The Obama administration outlined a narrower and technologically more feasible design, insisting that its objective is to defend against the limited threats posed by states such as Iran. However, Moscow's strategists fear that by agreeing to a small and unproblematic system today, it might make it difficult for them to prevent its expansion in the future (CSS Analysis no. 86 ^{C2}).

Within the New START negotiations, Moscow finally settled for recording its missile defense concerns in a non-binding paragraph in the preamble of the treaty. Washington extracted this concession only because Moscow remains convinced that technological progress over the decadelong life of New START will only generate deployments that would not jeopardize Russia's strategic forces. However, the interceptors scheduled to be commissioned from 2018 are reason for Russian concern. The unpredictability of technological development also leads to Moscow striving to maintain its flexibility. With missile defense being highly politicized in Washington, any restraints will face opposition in Congress. Increased U.S. transparency and a real effort to foster bilateral cooperation could nurture consensus. Nevertheless, while Moscow favors joint command and control of a common system, Washington assesses that Russian capabilities are lagging behind, is concerned that such intense cooperation would deem the system useless, and itself faces pressures from the industrial complex to avoid such cooperation.

While concerns related to missile defenses and tactical nuclear weapons will continue to take center-stage, a plethora of interconnected issues will propel or burden further negotiations. Updating the rules governing conventional weapons in Europe to account for the changed security architecture generated by the NATO expansion could diminish Russian concerns. Addressing the anxieties of Central European NATO allies generated by Russia's rise would ease opposition to the withdrawal of American TNW (CSS Analysis no. 85 ☑). Reducing non-deployed warheads that are currently maintained at storage sites and generate instability by offering a breakout option will require a thorough review on both sides. Dealing with non-deployed warheads and TNW will demand verification measures substantially more intrusive than those contained in past treaties. Thus, the process before us will be far more complex and protracted, instead of eleven months that it took for New START negotiations to be completed, the next round is likely to take several years.

Bringing in unwilling nuclear possessors

Russian officials recently suggested that any further talks would also need to involve China and, eventually, all other nuclear possessors. However, the chances for progress on this front are small. While Beijing has a long-stated policy of support for nuclear disarmament, over the next years it appears more likely to continue its modest expansion of its nuclear arsenal rather than seeking to join multilateral arms control. On the one hand, China seems to view its nuclear forces as important to its standing within the international system. On the other hand, its leaders appear to believe that deterrence does not require high levels of force, but only the ability to ride out a first strike while retaining a retaliatory option. As U.S. conventional capabilities, anti-satellite weapons, and missile defense systems improve, China is likely to work towards improving the survivability of its operational nuclear forces. Diversification of delivery systems and an increased reliance on secrecy are the likely outcomes. Transparency and further reductions do not appear to be in China's interest in the near future.

While it decided to maintain its nuclear deterrent in the foreseeable future, the United Kingdom indicated that it would be willing to participate in multilateral arms control talks. Nonetheless, having recently decided to reduce its operational warheads from 160 to 120 over the next decade, it is questionable how much lower London can go whilst maintaining a credible deterrent. While it postponed a decision on whether to replace its four Vanguards-class submarines, the UK will be able to maintain this platform for at least two more decades.

France, on the other hand, has shown little enthusiasm for either multilateral arms control or nuclear disarmament as an ultimate goal. While it cut its arsenal in half to less than 300 warheads since the end of the Cold War, Paris still maintains four submarines and a fleet of nuclear equipped aircraft, and could, in principle, agree to further cuts without losing its deterrent. Nonetheless, the fact that France regularly states the importance of its nuclear weapons, deploys new warheads and delivery systems, and modernizes its research facilities, is a poor indicator of imminent progress.

Attitudes in India, Pakistan, and Israel, the three nuclear-armed countries that never joined the Nuclear Non-Proliferation Treaty, and North Korea, which withdrew from the treaty in 2003, are even less encouraging. India sees both its rising role within the international system and its regional security guaranteed by nuclear weapons. Pakistan has made it clear that it will retain nuclear weapons as long as India does and currently perceives its arsenal even as a balance to New Delhi's superior conventional forces. Both countries are believed to own arsenals of fewer than 100 warheads, but still produce fissile materials for additional weapons and work on longerrange delivery systems, including ballistic missiles, cruise missiles, and even submarines (India).

Israel perceives its arsenal in regional security terms. Over the last few years, it most likely worked towards establishing its own nuclear triad of land, sea, and air based delivery systems. Given proliferation concerns and the instability of numerous neighboring states on the one hand, and Jerusalem's posture of absolute secrecy regarding its nuclear weapons and its desire to maintain unconditional military superiority within the region on the other, neither unilateral nor multilateral reductions are likely.

Despite having tested twice and having produced enough plutonium for approximately a dozen nuclear bombs, North Korea still has to demonstrate that it has a functioning nuclear arsenal. While Pyongyang is not thought to be capable of delivering a nuclear warhead on top of a missile, there is little to suggest that it will follow through with its proposal to give up its weapons in exchange for a settlement with the United States any time soon.

Multilateral action: Limited and incremental

Members of the 1968 Nuclear Non-Proliferation Treaty (NPT) met in May 2010 to review the last five years' implementation of the agreement and to discuss modalities for the future. Distinguishing between five nuclear possessors and nuclear abstainers, the treaty commits the "haves" to work towards nuclear disarmament and prohibits "have-nots" from acquiring nuclear weapons. Given the utter failure of

Key documents

- I New START Treaty ☑
- U.S. Nuclear Posture Review Report (NPR) ☐
- I Treaty of the Non-Proliferation of Nuclear Weapons (NPT)
 □
- Comprehensive Nuclear-Test-Ban Treaty (CTBT) □^{*}

the 2005 meeting and growing concerns over the future of the treaty, most participants wanted a happy-ending based on the restatement of earlier pledges, but almost nobody was willing to pay the dues of additional commitments to advance the NPT's bargains (CSS Analysis no. 65 2). In the end, progress on the disarmament front has meant little more than the noting of a proposal to consider a nuclear weapons convention as a possible future instrument or the recognition of the fact that nuclear abstainers had a legitimate interest in receiving legally-binding assurances that atomic weapons will not be used against them. With further incremental steps usually galvanized in the run towards the next conference, other steps should be looked for somewhere else before 2015.

Opened for signature in 1996 after many decades of debate, the Comprehensive Nuclear-Test-Ban Treaty (CTBT) bans all nuclear explosions in all environments. Brought into force, the treaty would impede proliferation and hold back the further refinement of existent arsenals. Signed by 182 and ratified by 153 states, the treaty awaits the consent of another nine specific countries whose approval is needed for the test-ban to enter into force. While President Obama pledged to work to pursue U.S. CTBT ratification, Democrats lack the necessary Senate votes, Republicans are not prone for concessions, the 2012 presidential elections cycle will focus resources towards other areas, and the price for New START has been so high that only few aces are still up the White House's sleeve. An optimistic assessment suggests U.S. ratification just before the 2015 NPT conference is possible. While Indonesia, China, and maybe even Israel are likely to follow up quickly, the situation is far from rosy when it comes to India, Pakistan, Egypt, Iran and North Korea. U.S. ratification will deprive the remaining holdouts of a convenient excuse to postpone thinking about their options. Ultimately, international pressures and security considerations will move even these countries towards ratification. However, these dominoes are most likely to fall in slow motion.

An arms control measure that has been under consideration for decades and under discussion in the Geneva Conference on Disarmament (CD) for more than fifteen years is a treaty banning the production of fissile material for nuclear weapons. After a decade of stalling, a delicate compromise was woven in 2009, with the Obama administration revising its position on the un-verifiability of a Fissile Material Cutoff Treaty (FMCT), China and Russia delinking it from negotiating a treaty regulating the presence of weapons in space, and the abdication of a negotiating mandate for security assurances by the Non-Aligned Movement. After the adoption of a tentative program of work in 2009, there was genuine hope that negotiations would finally take off. However, Pakistan is preventing further action over the international community's favoring of nuclear trade with India. Currently there is little hope that this stall will end.

With the rules of the 65-State CD requiring unanimity on all decisions, we might witness FMCT talks being taken out to another negotiating body. Even if negotiations commence, states' positions vary considerably on issues like the inclusion of already produced fissile material or the specifics of verification. A lengthy process is the most probable outcome. With progress most likely to be slow on both the bilateral and the multilateral fonts, patience is the magic word when considering the world-free-of-nuclear-weapons vision heralded by U.S. President Barack Obama in Prague in April 2009.

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