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Another New START?

Combining Deep Cuts in Strategic and Substrategic Nuclear Arsenals

Michael Paul

After the 2009 elections, the German coalition government promised to work within NATO to ensure that US nuclear weapons in Germany are withdrawn. This position has broad public support and is backed by a joint Bundestag resolution from March 2010 urging the government "to work vigorously" toward the implementation of that goal. But the proposal to withdraw nuclear weapons came both too early and was too ambitious for a 28-nation NATO, which has not yet answered the questions of how to maintain 21st century deterrence with concepts and techniques from the Cold War and how to reconcile deterrence and disarmament. However, the proposal could be turned to advantage if there were to be new negotiations with Moscow that further reduced nuclear arsenals. Such an approach would also fulfill President Barack Obama's obligation to start talks about a reduction of substrategic nuclear weapons before February 2012 by combining deep cuts for all types of nuclear weapons.

Over the last decades, several US administrations have sought to initiate talks with Moscow on substrategic nuclear weapons, but Russia's increasing reliance on nuclear weapons and NATO's own nuclear policy inertia have prevented progress. In early 2009, the Congressional Commission on the Strategic Posture of the United States concluded that, despite its concerns about Russia's non-strategic nuclear forces, the next step in bilateral arms control should be to ensure that there is a successor to the 1994 Strategic Arms Reduction Treaty (START), later renamed START I. It cautioned against overreaching for innovative approaches in the negotiations on that successor treaty, and instead envisioned discussing non-strategic nuclear forces in a follow-on to START-replacement negotiations. In March 2010 the United States and Russia concluded these negotiations. According to the US Senate's resolution to ratify New START, the United States will seek to initiate – following consultation with NATO allies but no 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. Following ratification of New START, President Obama

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has pledged to pursue further reductions in all types of US and Russian nuclear weapons – deployed and non-deployed, strategic and non-strategic. This task will not be easy, especially because – according to the Senate resolution – "it is the policy of the United States that such negotiations shall not include defensive missile systems."

The New START treaty

New START entered into force on February 5, 2011. It requires the United States and Russia to each reduce deployment of strategic nuclear warheads to 1,550. It also limits the number of fielded warhead delivery platforms to 700, with an additional 100 systems permitted in reserve. Looking at the data included in the first aggregate accounting of both nations' nuclear armaments – released in compliance with the New START pact – Russia's stockpile of deployed strategic nuclear warheads is already below the ceiling required by the treaty. As of February 2011, Moscow possessed 1,537 deployed strategic warheads, according to the US State Department fact sheet. Russia also came in under the treaty limit of 700 deployed strategic warhead delivery systems with 521 intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and heavy bombers. Russia in total had 865 deployed and non-deployed bombers as well as ICBM and SLBM launchers. The pact calls for a maximum of 800 delivery systems in the field or on reserve (700+100). The United States, meanwhile, counted 1,800 warheads placed on 882 delivery-deployed platforms. Its total number of fielded and reserve warhead carrier systems was 1,124.

These figures mean that the United States will have to reduce both launchers and warheads, while Russia would even be allowed to increase the number of long-range nuclear weapons it has in the field. Moscow is currently modernizing its strategic arsenal. In addition to new missile systems like the Topol-M and RS-24 (SS-27) ICBMs and Bulava-30 (SS-N-32) SLBMs, it is currently planning to deploy another heavy ICBM by 2020. But does a new version of the Russian SS-18, capable of carrying 15 warheads, make sense? Unfortunately, START II, which would have banned ICBMs with multiple independently targetable reentry vehicles (MIRVs), never went into force, whereas New START ignored them. As long as there is no mutual understanding on missile defense cooperation and no new START for further reductions in strategic nuclear weapons, the old problem of MIRVed ICBMs, which threaten to undermine crisis stability, may reappear in the form of heavy missiles with maneuverable warheads (maneuverable reentry vehicles – MaRVs). Actually, in his Presidential Address to the Federal Assembly of the Russian Federation in November 2010, President Dmitry Medvedev warned that an arms race could begin by deploying "new attack forces" if there is no agreement on missile defense.

Thus, New START represents an important – although quite modest – step toward the vision of a world free of nuclear weapons. US and Russian strategic forces will be constrained at levels significantly below those contained in the 1994 START I treaty due to declining force levels. New START is not so much a disarmament measure, but an instrument to restore – in a modified form – the START I transparency regime that expired in December 2009. It marks a new, although quite fragile, beginning in US-Russian relations and, by that, enhances further progress in nuclear arms control, non-proliferation, and disarmament.

There are still plenty of nuclear weapons: As of the end of 2009, experts estimated that there are approximately 23,360 nuclear weapons located at some 111 sites in 14 countries, but by far the largest concentrations reside in Russia and the United States, which possess 96 percent of the total global inventory. But maybe there will be another New START with respect to a category of nuclear weapons untouched since

the 1987 Intermediate-Range Nuclear Forces Treaty: substrategic systems.

Substrategic nuclear weapons

The Cold War is long over, but today there are still about 150–200 US tactical nuclear bombs on NATO military bases in Belgium, Germany, Italy, the Netherlands, and Turkey. Russia, which has an even larger stockpile of substrategic nuclear weapons, refuses to enter into talks to limit them, citing these US deployments in Europe. There is no doubt that, at least in the current security environment, tactical nuclear weapons serve no meaningful military role for the defense of NATO in Europe. The devastating power and inescapable collateral effects of such weapons make them inappropriate tools against non-nuclear targets, whereas the possible loss or theft of these weapons pose an unacceptable risk of nuclear terrorism. Nevertheless, Russia does not fully share this conviction and perceives tactical nuclear weapons as a means to balance its conventional inferiority toward NATO, not to mention China's growing military capabilities.

But what would another New START to reduce all types of US and Russian nuclear weapons – deployed and non-deployed, strategic and non-strategic – look like? There are a number of approaches to another round of US-Russian negotiations. Concerning a reduction of nuclear weapons, there are two main topics on the agenda: establishing more transparency and focusing on a combination of strategic and non-strategic weapons systems.

Transparency

Russia's lack of transparency contributes to widely varying estimates of the number of non-strategic weapons that it deploys or has stockpiled. In 2009 the Commission on the Strategic Posture of the United States cited unnamed Russian experts who have estimated that their country possesses some 3,800 non-strategic operational warheads. An even larger disparity in numbers was revealed in December 2010 by WikiLeaks; these estimates put "Russian totals at 3,000–5,000 plus," although the US embassy cable did not differentiate between deployed and non-deployed systems. Yet these numbers were quite correct; according to an updated assessment, Russia has an inventory of 3,700–5,400 non-strategic nuclear warheads – although most of them have probably been retired and are awaiting dismantlement. With or without arms control, it is anticipated that the Russian non-strategic arsenal might decline by as much as 50 percent over the next decade. Thus, deep cuts could be agreed on in another round of negotiations.

As proposed by the former US Secretary of State Madeleine Albright and Russia's former Foreign Minister Igor Ivanov, early consultations should prepare the ground for new negotiations. These should define what weapons fall into the category of "non-strategic" (although one might argue that this distinction is quite artificial because every nuclear weapon has a strategic effect); allow for the exchange of information on the numbers of weapons, their types, and their locations; and foster discussion on how both states store such weapons (in part, with a view to designing future verification techniques). Verification in the past focused on delivery systems rather than on the nuclear weapons. By concentrating on the reduction of warheads, a new monitoring regime must be established. A new treaty would require a declaration of warhead inventories, locations, and status (for all deployed and non-deployed warheads covered by the treaty); it would need baseline inspections to verify initial declarations; and requirements to report changes in warhead inventories, locations, and status. The goals of such a regime are to assess the feasibility of verifying treaty-accountable warheads in quantity during a baseline inspection and to maintain continuity of knowledge during transportation and storage of those warheads.

Currently, the implementation of New START affords the opportunity not only to be constantly in communication with Russia by sharing data and conducting on-site inspections, but – as a confidence-building measure – to broaden the implementation process toward a more comprehensive approach. Thus, US Assistant Secretary of State Rose Gottemoeller said recently that the United States would "like to increase transparency on a reciprocal basis with Russia." This reflects also a consolidation of views within the alliance: In April 2011, ten NATO permanent representatives wrote to the secretary general to express their support of a paper submitted by the Dutch, German, Norwegian, and Polish foreign ministers calling for increased reciprocal transparency regarding numbers, types, locations, command arrangements, operational status, and level of operational security on tactical nuclear weapons in Europe. It noted that transparency and confidence-building steps were "crucial for paving the way to concrete reductions," which should not be pursued unilaterally or be allowed to weaken the transatlantic link.

A combination of strategic and non-strategic weapons systems

As NATO nations stated in their 2010 Strategic Concept, "as long as there are nuclear weapons in the world, NATO will remain a nuclear alliance." Yet, the concept also commits the alliance to seek to create the conditions for further reductions in the number of nuclear weapons stationed in Europe. And, like the Senate resolution, any further reductions must take into account the disparity with the greater Russian stockpiles of short-range nuclear weapons. What does this mean for new negotiations? Parity in the number of substrategic weapons will not be achievable. But both sides' forces could be reduced and centralized to fewer sites; further reductions could be acceptable as long as European allies retain some forces on their soil – in Germany at least until 2020 (a final retirement date of the dual-capable Tornado aircraft has not been decided). Removing all nuclear weapons from Germany could trigger domestic political pressure in the other northern NATO countries – Belgium and the Netherlands – that could lead to the withdrawal of weapons from those countries as well, thus leaving substrategic weapons in Italy and Turkey only. Some analysts have suggested that such a consolidation might be a sensible step, at least on an interim basis, although it could trigger a "cascade effect" from five to two countries with nuclear weapons and dual-capable aircraft – and perhaps to one or zero. But as long as Russia perceives nuclear weapons as a means to counter NATO's conventional superiority and its planned missile defense, it will not remove tactical nuclear weapons from European soil. Assuming that reductions in NATO's nuclear arsenal are not pursued unilaterally, there is no alternative to multilateral conventional and nuclear arms control.

Salvaging the Conventional Armed Forces in Europe (CFE) Treaty regime will therefore be necessary to facilitate a reduction of tactical nuclear weapons because of the low levels and readiness of Russian conventional forces. Most experts agree that if CFE unravels completely, the Russian military will be able to argue even more convincingly, within Russia, for continued reliance on tactical nuclear weapons to defend itself in Europe. Instead of reducing substrategic weapons systems, there could be a new set of missiles threatening the Baltic States and Poland: In August 2011 Russia revealed its plans to procure up to 120 Iskander-M (SS-26) mobile tactical missile systems, which can reportedly carry conventional and nuclear warheads.

The US Air Force, on the other hand, intends to increase the lifespan of its B-61 nuclear bombs. As a result, the US non-strategic bombs currently deployed in Europe would return in 2018 as a life-extended version with improved military capabilities. Furthermore, as nuclear

weapons expert Hans M. Kristensen has reported, the bombs will be carried by both long-range bombers and short-range fighter-bombers: Thus, the B61-12 program will mark the end of the 60-year-old practice of the US military of having designated non-strategic or tactical nuclear warheads in the stockpile.

Increasing nuclear capabilities at a time when the United States and Russia are in the midst of implementing New START and Washington is looking for ways to start new talks about limiting and reducing non-strategic nuclear weapons seems counterproductive. Therefore, new approaches for conventional and nuclear arms control are necessary: The NATO-Russia Council could provide a platform to discuss conventional arms control issues, while bilateral talks could lead to the reduction of nuclear weapons in the strategic and non-strategic weapons arsenals.

Moscow will not be interested in negotiations about the reduction of tactical nuclear weapons unless it is compensated for relative advantages on the US side. Russian military experts are especially concerned about the "upload potential" (the capacity of putting more warheads on a single missile) of the United States. Former Secretary of Defense Bill Perry explained that situation on April 2010 in his testimony on New START, saying that the asymmetry in tactical nuclear weapons is primarily in favor of Russia but the asymmetry in strategic weapons in reserve is primarily in the favor of the United States: "We have the capability of rapidly uploading thousands of nuclear weapons onto our strategic forces if we choose to do so." As mentioned before, Russia already has fewer launchers as permitted under New START. Hence it is – today and in the future (due to ongoing problems with its new SLBMs) – confronted with a substantial US numerical advantage. On the one hand, these non-deployed nuclear weapons serve as a hedge against both technical and geopolitical uncertainties; on the other hand, they provide Washington with negotiating leverage to address non-strategic nuclear weapons: US readiness to accept a limit on non-deployed strategic nuclear warheads for Russian readiness to agree to a lower limit on non-strategic nuclear weapons.

An innovative approach for another New START

In the aftermath of the New START ratification debate in the US strategic community, a kind of consensus has formed around the idea that a follow-on to New START should include a further reduction in strategic nuclear weapons as well as a limitation on the total number of nuclear weapons. According to that, the Obama administration is interested in developing with Moscow a common terminology for categorizing nuclear weapons and whether or not a single overall limit on all nuclear weapons will be possible. If the Kremlin agreed to such a new innovative approach by addressing *all* nuclear weapons, the next step could be to pursue a proposal, like the one made by Steven Pifer, director of the Arms Control Initiative at Brookings, which calls for putting a limit on all strategic and non-strategic nuclear warheads – except for those that have been retired or are to be dismantled – of no more than 2,500 per side and a sublimit of no more than 1,000 deployed strategic warheads per side. According to Pifer, such a warhead limit and sublimit "would allow each side the freedom to choose between non-strategic nuclear weapons and non-deployed strategic warheads; Russia might retain more of the former, while the United States would likely prefer more of the latter." This approach would allow deep cuts in strategic nuclear arsenals and would also make new ICBMs with 15 warheads a relic of the past.

In NATO, substantive talks on reducing tactical weapons are to occur over the next months and to be wrapped up before the summit scheduled for May 2012 in Chicago. The discussions are held in accordance with the Defense and Deterrence Posture Review

of the alliance, which takes place parallel to a Pentagon review on further reductions in the US nuclear arsenal (albeit the Pentagon review shall be finished already at the end of 2011). Whatever changes are agreed to, they will need to be implemented in a manner that takes into account the security concerns of all NATO members. In the absence of a consensus for change, the status quo will likely prevail. Solidarity among NATO countries rests on the principle that allies share the burden of NATO's commitments, and that means the nuclear risks, too. Thus, the alliance will have to carefully consider how it would otherwise carry out the nuclear assurance and sharing policy that tactical nuclear weapons have served. But, assuming that Washington will try to start another round of nuclear arms reduction talks with Moscow, there are more questions that will play a critical role in future negotiations.

Imponderabilities: Third parties, missile defense, and strategic conventional systems

The deeper the cuts, the more problems arise: Nuclear arms control cannot remain a US-Russia-only enterprise. A nuclear arms reduction process concentrating on a combination of strategic and non-strategic weapons systems will necessarily involve British, French, and Chinese participation, perhaps starting with a data exchange among the five countries. Official disclosure of stockpile numbers is key to expanding agreements from a bilateral to a multilateral setting. But even such an ambitious approach may not be enough: Pakistan today has the fastest-growing nuclear arsenal in the world, and – according to Bruce Riedel from Brookings – may be "soon" one of the largest nuclear weapons states. It is far from clear whether Islamabad will reach a nuclear weapons stockpile with 150–200 warheads (a number comparable to the future British nuclear arsenal), but the trend is obvious: Nuclear arms control, not to mention disarmament, is going to become a much more complex process than in the past of bilateral negotiations.

Missile defense will be crucial for both new negotiations and future relations between Russia and the West. Berlin is a strong advocate of involving Russia. According to the German Minister of State, Werner Hoyer, "NATO-based missile defense can only further European security if Russia is on board." Clearly, there is an historic opportunity for a long-term and truly strategic improvement in NATO-Russia relations. The first step is a common threat assessment regarding joint missile defense. A NATO system scaled to the size of an agreed threat (and no larger) could reassure Russia that the system is not directed its way. But whether the potential for more cooperation will be used (from sharing technical information to the interconnection of surveillance and defense systems in various areas) is still open for discussion. In the meantime, separate but coordinated systems seem to be much more achievable. Sharing information – rather than hardware – may be an easier path forward, and could be realized by relaunching an old project: In 1998 US President Bill Clinton and Russian President Boris Yeltsin agreed to a Joint Data Exchange Center in Moscow; in June 2010 Presidents Obama and Medvedev issued a joint statement saying the two nations would continue their efforts to share early-warning data on missile launches. That effort is now seen as a way to advance US-Russian cooperation on ballistic missile defense and could also be transformed by establishing a NATO-Russia data center.

Strategic conventional systems are another obstacle to be overcome if deep cuts in the number of nuclear weapons are to be achieved. Russian officials are most concerned about the concept of prompt global strike (PGS), which seeks to provide the United States with the ability to strike targets anywhere on earth with conventional weapons in as little as an hour, without relying on forward-based forces, there-

by reducing reliance on nuclear weapons. Non-nuclear strike capabilities will increasingly become an important, though limited, tool in US military strategy for distant and time-sensitive targets like a critical terrorist location or a rogue state armed with a nuclear weapon. But PGS is a possible source of misunderstanding because the launch of a conventionally armed ballistic missile could be misinterpreted by Russia as a nuclear attack. There are several alternatives to ballistic missiles, but the problem remains that Moscow is concerned about the growing US capability to threaten Russian nuclear forces with conventional weapons – ranging from cruise missiles to missile defense. One can fully agree with the British defense strategist Sir Michael Quinlan, who once observed that Russia is perhaps the most vivid example of the problem created by the massive conventional strength of the United States. It leads Americans to the conclusion that they might be well suited by a non-nuclear world and "may lead others to feel that that is precisely why they would be disadvantaged by it."

Looking ahead

Finally, a crucial imponderability is time: Starting new negotiations before the 2012 presidential elections in Moscow and Washington is quite ambitious. For Moscow, the ratification debate on New START in the US Senate made the limits of the Obama administration abundantly clear. Republican gains in the mid-term elections and the fiscal battle in August 2011 over raising the debt ceiling have shown that the United States is in a deep crisis and its political elites are deeply divided along ideological lines. So an obvious conclusion in Moscow is to wait until the next election in the United States before undertaking any new talks. Both presidents, Medvedev and Obama, were personally very much involved in negotiating New START, making it a success of their foreign policy agendas. But in the United States, the engagement of President Obama could be his greatest impediment in getting another nuclear arms control process started, because the debate about another round of bilateral negotiations is becoming increasingly connected with the US presidential race. Thus, Michael Turner, chairman of the House Armed Services Strategic Forces Subcommittee, warned (in that case similar to Russian objections) against "rushing towards more reductions"; according to him it is "a misguided priority to focus on disarmament, and US disarmament in particular."

Similar to the herculean effort to win Senate ratification of the New START treaty, the process could be delayed again by the Republican opposition in the US Congress; another set of hearings about the implications of reductions in the US nuclear arsenal could easily be prolonged beyond the deadline for starting negotiations with Moscow in February 2012. In addition, the House of Representatives passed defense authorization legislation that would restrict the Obama administration's ability to cut deployed or non-deployed nuclear weapons below levels set by the New START accord; under certain conditions, the House measure could also prohibit the executive branch from eliminating weapons in the hedge force until the 2020s, when a new plutonium facility and a uranium plant are scheduled to be up and running. In the end, the president could be blamed for not having achieved a more far-reaching agreement on the reduction of substrategic nuclear weapons, leaving both the reset of US-Russia relations and another arms reduction treaty in limbo.

But even if there is an agreement with Congress and an understanding with Moscow, new negotiations will last not months – as with New START – but years. Most experts agree that another arms reduction treaty is likely to be out of reach for the Obama administration, even if it wins a second term. It will take more time to build trust within US-Russia relations. To make the reset successful, NATO should also

deepen the dialogue with Russia on security perceptions, doctrines, and transparency. There is still a lot to be discussed, and even more to be won by deepening the dialogue in preparation of another New START.

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