The New Treaty on Strategic Offensive Arms: One Step in the Right Direction

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The successful signing in April 2010 of a new Treaty on Strategic Offensive Arms by the presidents of Russia and the United States in Prague is a major step in the controlled reduction of nuclear weapons, following an almost twenty-year break after the conclusion of the START I Treaty in 1991.

It should be kept in mind that the START II Treaty (1993), the framework agreement for START III (1997) and the Strategic Offensive Reductions Treaty (SORT) (2002) were either ratified by the two sides at different times and in different forms and then later abrogated or never took the form of legally binding treaties with counting rules and proper verification regimes.

The reactivation of the U.S.-Russian Joint Data Exchange Center on Missile and Space Launches and the renewal and broadened scope of joint research by Russia, the United States and NATO on theater anti-missile defense can not only prevent a new anti-missile crisis in relations between Russia and the United States, but also enable the transformation of relations based on mutual nuclear deterrence into more constructive forms for a strategic relationship.
and the United States receded from the main stage of American policy. The United States did not consider it expedient to discuss further steps in this area (after the expiration of SORT in 2012) and withdrew from the 1972 Anti-Ballistic Missile Treaty, effectively breaking off the entire regime of limitations and reductions of nuclear weapons.

The Prague Treaty on Strategic Offensive Arms: Strategic Aspects

The signing in July 2009 at the Moscow summit of the Joint Understanding on Further Reductions and Limitations of Strategic Offensive Arms testified both to a certain progress in the strategic dialogue between the United States and Russia, and to significant problems that still remained to be resolved. These problems were connected with the well-known disagreements between Russia and the United States on issues of anti-missile defense, of equipping strategic DV launchers with precision-guided conventional warheads, and of the upload (reconstitution) potential of American strategic offensive arms after the conditions of the new Treaty have been fulfilled. In particular, these disagreements led to a broad divergence of positions on ceilings for strategic launchers (500-1,100) and warheads (1,500-1,675).

As a result of significant efforts by both sides, however, these obstacles on the path to the new Treaty on Strategic Offensive Arms have been overcome. Its full name is the “Treaty between the Russian Federation and the United States of America on Measures for the Further Reduction and Limitation of Strategic Offensive Arms.” As opposed to its predecessor, START I, Article II of the new Treaty stipulates as basic limitations only the limits on warheads on deployed DVs (1,550), on the number of deployed delivery vehicles (700) and on the total number (800) of deployed and non-deployed launchers, including heavy bombers, intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs).

There are no limitations on structures, nor are there any sub-limits on strategic nuclear forces (SNF). The counting rules for warheads have undergone substantial changes (Article III) in comparison with those of START I: their number is defined by the actual ICBM and SLBM equipment, regardless of the number of reentry vehicle places on the dispensing launch platforms of multiple warhead missiles. Nuclear weapons on heavy bombers count as a single warhead. To change the status of missile-carrying submarines (from deployed to non-deployed), there is no need either to cut out the SLBM launcher sections of the hull completely, or to pull the launchers out of them, as was specified under the conditions of the previous treaty. It is enough to remove the launch tube hatches, their associated superstructure fairings, and, if possible, the gas generators (Treaty Protocol, Chapter III, part IV, para. 1).

To remove a submarine from strategic offensive arms status, if all its launchers are converted in such a way that they cannot be used to launch an SLBM (by converting them to launch cruise missiles, for example), the fact of conversion is considered sufficiently demonstrated when shown in a manner chosen by the side that is carrying out the conversion (Treaty Protocol, Chapter III, part IV, para. 7).
The new Treaty on Strategic Offensive Arms does not place any limits on the modernization and substitution of strategic offensive systems. It is necessary to give notice only concerning a new type of ICBM or SLBM that differs from those previously identified in at least one technical characteristic: number of stages, type of fuel, length of missile (without the nose cone), length of the first stage or change of diameter of the first stage by more than 3% (Protocol, Chapter I, para. 42). This provides a significantly wider scope for modernization and missile warhead loading conversion than under the terms of the START I Treaty.

Almost all previous limitations on space and time parameters for the basing and deployment practices for mobile land-based ICBMs have been removed, something to which Russia attached great importance at the negotiations.

One of the issues, even before the start of the negotiations, as well as during the process, was the American plan to equip some SLBMs and ICBMs with precision-guided non-nuclear warheads. As the text of the Treaty makes clear, the United States has agreed to include missiles with conventional warheads in the total ceilings on the numbers of strategic arms. This means that the United States does not plan to deploy non-nuclear SLBMs and ICBMs in quantities that would significantly lower the nuclear capability of strategic offensive arms.

At the same time, Washington has not accepted any limitations on strategic submarines and heavy bombers (B-1s and an additional number of B-52s) converted for sea- or air-launched cruise missiles with conventional warheads, nor any methods of including them in the count.

Significant changes have been instituted in the systems of inspections and notifications agreed upon by the two sides. The frequency of inspections was lowered from 28 to 18 per year. In accordance with Chapter IV of the Protocol, the scope of notification relating to current, initial data on the condition of strategic weapons, their movements and inspection activity has been significantly reduced: 42 types of notification instead of 152, as required by START I.

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Extended discussions on the necessity of exchanging telemetric information resulted in an agreement by the two sides to provide tapes with in-flight data recordings on at least five missile launches per year, with each side choosing on which of its own specific launches it would provide the data. This fully allayed Moscow’s concern that flight tests of new ICBMs and SLBMs, from which data had to be provided to the other side, were only being conducted in Russia, while no new developments were expected in the near future in the U.S.

It seems, however, that the Russian position has not demonstrated great foresight. On the one hand, flight tests of SLBMs and ICBMs with non-nuclear, precision-guided warheads are planned in the U.S., and information on the characteristics of this type of combat loading could be useful to Russia. On the other hand, until now flight
tests of the new Russian “Bulava” SLBMs and the “Yars” ICBMs have still been conducted under the terms of the START I Treaty, with telemetric data being given to the American side, so reference to the possibility that some new data might be uncovered is virtually groundless.

Whereas under the START I Treaty there were 39 agreed statements, only 10 remain under the new Treaty (Protocol, Chapter IX), and they are largely connected with inspection activity and procedures for making weapons available for inspection, including the inspection of SLBM launchers that have been reequipped for cruise missiles, as well as the traditional ban on rapid reloading of missile launchers (Declaration V).

Political Factors Influencing the Negotiations on Strategic Offensive Arms

Unlike the situation during the Cold War, relations between Moscow and Washington are not dominant, but are just one of a number of key issues in international relations, in U.S. foreign policy (to a lesser extent), and in Russian foreign policy (to a greater extent). In the same manner, the strategic nuclear balance and the relevant negotiations are no longer the central issue of international security, but only one of several principal issues (on par with terrorism, the proliferation of weapons of mass destruction and their delivery systems, local conflicts, etc.). The approach to agreements about strategic offensive arms has become correspondingly less exacting and captious: the two sides have left a number of issues and disagreements in the background or for future consideration.

Further, a unique feature of the new Treaty is the fact that during the negotiations the United States did not seek to eliminate, reduce or limit any of the other side’s weapons or programs in particular (such as, for example, Soviet or Russian heavy ICBMs or mobile missiles, which were the focus of talks in previous times), but strove mainly to preserve a regime of maximum transparency.

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The “liberal” regime of limitations and verification can be explained in large part by the vast experience in monitoring and evaluating each other’s strategic forces accumulated by the two sides under START I, which has made it possible to reduce the numbers of prohibitions and limitations on strategic arms significantly, curtail inspection activity and prescribed confidence-building and transparency measures, and simplify counting rules. Further, political circumstances have also affected the nature of the new Treaty.
and limitations, Russia had no bargaining chips to exchange for concessions from the U.S. side (limitations of anti-missile defense, counting rules, procedures for weapons reduction and elimination, limitation of strategic conventional systems, etc.).

The Democratic administration has had to prepare itself, moreover, to face stiff Republican opposition to the ratification of the Treaty. The Russian leadership, in turn, has also had to reckon with the country’s internal moods and has not felt it possible to concede much with respect to the inspection regime (permanent monitoring of Votkinsk missile plant, telemetry encryption, and so on). In the end, the parties reached compromises on these issues, since both were also interested in the new Treaty for political reasons: maintaining strategic parity and predictability, nuclear disarmament commitments, President Obama’s pre-election promises, his Nobel Peace Prize, and the expectations of the Review Conference of the Treaty on the Non-Proliferation of Nuclear Weapons in May 2010. Time was also a factor: in light of the expiration of START I in December 2009, the schedule of the negotiations was tight.

The new Treaty has demonstrated a most important point where Moscow’s and Washington’s nuclear policies specifically coincide: the absence of the intent in the foreseeable future to make deep cuts in either side’s strategic weapons substantially below the level already set in 2002 in the Moscow SORT Treaty (1,700-2,200). The reduced level of warheads under the new Treaty is to a great extent the result of changes in the counting rules for warheads on heavy bombers. While, for example, the American B-52 force can actually hold 1,120 cruise missiles (warheads) and was counted as having 672 warheads under the rules of the START I Treaty, now the number of warheads is counted as 56 in all. In the same manner, the number of warheads (more than 850) on the 77 deployed Russian heavy bombers of both types, TU-160 and TU-95ms, is counted as 77 warheads.

Aside from the political relations between the two sides, the issue of further reductions in SNF is connected not only to the dynamic balance of strategic offensive arms, but also, and to a greater extent, to progress on other important, closely related problems, in particular, anti-missile defense, tactical nuclear weapons and conventional forces in Europe, and the strengthening of nonproliferation regimes.

The new Treaty stipulates a significantly smaller volume of reductions in actually deployed SNF on both sides than that which was called for by START I, START II, the framework agreement for START III, and even the levels of SORT (see diagram).

Nonetheless, the levels of SNF, which are 75-80% lower (in numbers of warheads) than those the two sides actually had in the early 1990s, on the eve of START I, provide a reading by which to measure the Prague Treaty. Further, the ceiling for warheads under the new Treaty is 75% lower than under START I and 55% lower than the ceiling for deployed launchers (according to the counting rules). By comparison with the SORT Treaty (for which counting rules were never agreed), the ceiling for warheads has now been formally lowered by 30%.

A significant reduction in the SNF of both sides has taken place over the past twenty years, both under the influence of unilateral
decisions by Russia and the United States on the restructuring of strategic capabilities after the end of the Cold War, and under the pressure of the sequence of treaties on strategic offensive arms and strategic offensive capability, which were themselves the embodiment of new military and political relations between the two powers. Such is the complex dialectic of nuclear weapons, treaties and politics in our times.

**Prospects for Further Reductions**

Aside from the political relations between the two sides, the issue of further reductions in SNF is connected not only to the dynamic balance of strategic offensive arms, but also, and to a greater extent, to progress on other important, closely related problems. In particular, it is essential to resolve the task of combining efforts in the field of anti-missile defense within the United States-Russia-NATO format. It will also be necessary to hold parallel discussions on tactical nuclear weapons and conventional forces in Europe, which are closely linked to each other. The major powers’ joint actions on the issues of Iran and North Korea, and the strengthening of nonproliferation regimes overall will play a great role. Some limitations and confidence-building measures will be necessary with respect to the nuclear forces of third nuclear states.

**Reduction of strategic forces by Russia and the United States, and ceilings on Strategic Offensive Arms/Strategic Offensive Capacity (warhead numbers). New START — the new Treaty on Strategic Offensive Arms, 2010**
As for further reductions in strategic arms per se, these will be influenced by several key points. First, regarding the period after 2020 (or after the middle of the current decade, if the process is accelerated), they will be affected by the two powers’ SNF development programs till 2030 and beyond. The American systems that are now in active service will approach the end of their useful lives, and that will raise the question of their replacement with weapons of the next generation. It is likely that Washington will then be interested in deeper joint reductions of ceilings for SNF launchers and warheads for the sake of budget savings (assuming China shows restraint in the development of its nuclear forces).

At the same time, the United States is developing a major upload capacity and a large number of strategic conventional systems. The prospects for the next treaty on strategic offensive arms will depend in no small measure on the ability of the two sides to reach agreements on limitations and confidence-building measures with respect to upload capacity and non-nuclear, precision-guided weapons on strategic launchers.

Russian SNF, by contrast, will have been almost totally renovated during the 2020s. It is likely that Moscow will thus come to prefer further reductions not by means of eliminating launchers, but through “off-loading” a part of its multiple warhead missiles and converting DVs to carry non-nuclear warheads. The two sides will once again switch places with respect to their strategic preferences, as has happened more than once in the past. Further, some innovative measures might be very important, such as reciprocal steps to reduce the threat of a launch-on-warning attack, through verifiable organizational and technical reduction of the SNF alert rate and “hair-trigger” launch readiness.

The signing of the Prague Treaty between Russia and the United States is of great political and strategic military importance, insofar as it has broken a long pause in the strategic dialogue between the two nuclear superpowers and demonstrated the relaxation of political tension between them (which reached a peak during the 2008 crisis in the Caucasus), as well as their ability to reach compromises on relatively complex problems.

In addition, the new Treaty has demonstrated the two powers’ lack of intent, for the foreseeable future, to implement radical reductions in their strategic arms to levels much lower than in the Moscow SORT Treaty of 2002.

In the coming years, the search for agreement on problems of anti-missile defense and other issues connected with it is apparently considered a more important task than further reductions in SNF. The decisions made by the Russian and American leaders on collaboration in the sphere
of anti-missile defense are not yet being implemented as actively as they should and are concentrated on the joint assessment of probable missile threats. Despite the fact that the potential for collaboration in the deployment of regional and global anti-missile defense systems is diminishing with time, it still remains significant, above all in the area of integration of information systems.

Mutual mistrust and bureaucratic obstacles still impede the acceleration of collaboration. They may be expediently overcome first of all by reestablishing those elements of collaboration that were lost in recent years. The Missile Launch Data Exchange Center project, agreed upon 12 years ago, must be reactivated without delay. The joint computer exercises on theater anti-missile defense by Russia, the United States and NATO must be resumed, with the subsequent expansion of these exercises to test ranges and beyond the limits of the theater of military operations.

The steps set out above would not only make it possible to avoid a probable new anti-missile crisis in relations between Russia and the United States toward the end of this decade, and the resulting deadlock in the sphere of SNF, but also facilitate the transformation of the two powers’ relations of mutual nuclear deterrence into more constructive forms of strategic cooperation.