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Text:

The memo presents possible scenarios should the New START Treaty expire without extension. Special attention is being paid to confidence building measures to implement without a treaty-like legal basis. The memo also considers the build-up potential of strategic nuclear forces of Russia and the US.

Key findings:

- The removal of the agreed numerical ceilings would not automatically trigger an immediate arms race; but the demise of the Treaty would make it possible both politically and technically. In the short and medium term, the focus would be on the upload potential rather than the production of new delivery systems. In practical terms, it would mean the deployment of the currently non-deployed delivery systems and efforts to increase the number of warheads mounted on each missile.
- Should the United States **reject any bilateral strategic arms limitation and arms control arrangements with Russia**, it would be next to impossible for Moscow to promote the arms control agenda. Nevertheless, it would be in Russia's best interests to **continue taking part in the remaining nuclear threat reduction mechanisms. A unilateral declaration that Russia would not seek to ramp up its strategic nuclear forces** until and unless the United States does it first would be the next step in a successful series of similar Russian initiatives. .
- If the United States does not want any formal arms control arrangements with Russia, but is **willing to preserve the status quo** by means of **political commitments**, Russia and the United States could make a joint or a simultaneous announcement that they **have no plans of ramping up their strategic arsenals beyond the ceilings** agreed in the treaty. An arrangement that would allow the parties to **preserve the inspections regime** after the New START expiration would be the most ambitious goal under this scenario.
- Formalizing such complex arrangements **would require a political agreement** between Russia and the United States. Such an agreement could be signed for an indefinite term and remain in effect until the entry into force of the next US-Russian strategic arms control treaty. To hold regular discussions on the technical issues pertaining to any such arrangements (information exchange, NTMs, inspections, etc.) the two parties would also need to **establish a standing body** similar to the Bilateral Consultative Commission set up under New START. [Read](#)

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If the New START Treaty Expires with no Extension: Scenarios For Russia



Policy memo by PIR Center (brief version)

May 26, 2020

The Russian-US Treaty on Further Reduction and Limitation of Strategic Offensive Arms, commonly referred to as the New START treaty, is due to expire on February 5, 2021. Moscow has proposed to extend the treaty for additional five years, but Washington has been reluctant to agree so far. In view of the ongoing coronavirus epidemic and the upcoming presidential election in the United States later this year, a decision on a New START extension may well be left for the next US administration to take – either the second Trump administration or the new Democratic one. All the Democratic contenders, including the current favorite Joe Biden, have promised to seek an extension should they win the White House. The current president, however, has shown little interest in the treaty, and some of his advisors have voiced their opposition to extending New START in its current form.

The outcome of the next US presidential election and Donald Trump’s decisions are hard to predict, and New START may well be allowed to lapse. Should that happen, Moscow and Washington will not be bound by any strategic offensive arms limitation treaty for the first time since 1991. In view of the significance of the nuclear factor for Russian national security, that scenario requires careful analysis and preparations.

In this context PIR Center has prepared a policy memo titled “If The New Start Treaty Expires With No Extension: Scenarios For Russia” envisaging two possible scenarios in case the New START Treaty is not extended. We bring to your notice the highlights of the policy memo.

The potential for a new arms race



In military-political terms, the expiration of the New START treaty would lift the numerical limitations on Russia’s and America’s ability to ramp up their strategic nuclear arsenals. The two countries would also stop sharing information about their arsenals and end the verification of that information. The removal of the agreed numerical ceilings would not automatically trigger an immediate arms race; after all, the Ronald Reagan administration’s decision to abandon the SALT II ceilings in 1986 did not cause any major increase in the US strategic nuclear capability. Nevertheless, the demise of New START would make another arms race possible both politically and technically. In the short and medium term, the focus would be on the upload potential rather than the production of new delivery systems. In practical terms, it would mean the deployment of the currently non-deployed delivery systems and efforts to increase the number of warheads mounted on each missile.

US Upload Potential

Each of 200 Minuteman-III ICBMs can carry an additional two warheads. The Trident-II submarine-launched ballistic missiles (SLBMs), which are currently equipped with 4 or 5 warheads each, can carry as many as 8. The United States could also deploy up to 60 additional Minuteman-III ICBMs (carrying up to 180 NW between them) and up to 116 additional Trident-II SLBMs (up to 928 NW) – but the size of the existing US active reserve of

warheads (1922 strategic warheads, according to open-source reports) makes this scenario unlikely. Based on these figures, 3,570 warheads would be a realistic estimate of the existing US breakout potential.

Loading up each existing delivery system with additional warheads would benefit the United States more than it would Russia (see the Annex for details). According to open source information, if Washington were to deploy all its currently stockpiled warheads on strategic delivery systems, its deployed warhead count would top 3,500. If Russia were to load all its existing delivery systems to their maximum capacity, its own count would be approximately 3,200 warheads – but we don't know how many warheads it actually has, and the real number is probably lower than 3,200. Meanwhile, the United States has enough strategic delivery systems to carry 4,900 warheads.

The existing gap between the US and Russian breakout potentials is gradually closing because Russia is phasing out its older single-warhead Topol-M ICBMs with the latest Yars missiles, which carry multiple independently targetable reentry vehicles (MIRVs). Also, Moscow holds the advantage in terms of its ability to produce new missiles. Over the past five years, the Russian forces received over 140 new ICBMs. The US forces, meanwhile, deployed their latest ICBM (the Minuteman-III) as far back as 1978, and the deployment of the next generation of US strategic land-based missiles is not expected before 2030.

Russian Upload Potential

Russia would be able to respond by increasing its own strategic offensive weapons count from the current 1,570 to 3,037-3,205 nuclear warheads by means of mounting extra warheads on its existing delivery systems; by deploying an additional 22 UR-100NUTTKh and Yars ICBM; and by loading up the SLBMs of the Knyaz Vladimir ballistic missile submarine (which is scheduled to enter into service in 2020) to their maximum capacity. According to independent US experts, the breakout potential of the Russian strategic offensive arsenal is limited to 2,440 warheads in the short term.

At the same time, the existing uncertainty about the US and Russian capabilities points to another problem: lacking reliable information about each other's arsenals would force both parties to prepare for the worst-case scenarios. Each would seek to ramp up its strategic arsenal, leading to a strategic arms race. In the case of the US, the situation is complicated by the fact that Washington is in the final phases of planning the structure of its nuclear forces for the next several decades. At present, these plans are contingent on the existing New START ceilings; they include a reduction in the number of SLBM launchers on the Columbia-class submarines and mounting only a single warhead on the new American ICBM. But these plans can be revised if an arms race breaks out.

For Russia, the main objective in the event of New START lapsing in 2021 would be to minimize the potential damage. Its options would heavily depend on the choices made by the United States. Two major scenarios come to the fore.

Scenario 1: The minimum we must achieve

The first scenario assumes that the United States will **reject any bilateral strategic arms limitation and arms control arrangements with Russia**. Such a stance would be an extension of the America First policy, which seeks to achieve victory in the great-power rivalry. In such a case, it would be next to impossible for Moscow to promote the arms control agenda.

Nevertheless, it would be in Russia's best interests to **continue taking part in the remaining nuclear threat reduction mechanisms** so as to minimize the risk of an unintentional armed conflict. These mechanisms include the 1987 agreement on establishing the nuclear threat reduction centers; the 1988 agreement on ICBM launch notifications; and the 1989 agreement on notifications of major strategic drills.

A unilateral declaration that Russia would not seek to ramp up its strategic nuclear forces until and unless the United States does it first would be the next step in a successful series of similar Russian initiatives. Such a declaration would be welcomed by the international community; it could also be used as an argument by the US opponents of ramping up the American nuclear arsenal.

An exchange of information about the state of the nuclear forces with the United States should be made conditional on maintaining the ceilings agreed in the New START treaty. The information asymmetry would be to Russia's benefit because of Washington's greater openness about its nuclear forces, necessitated in part by the US legislative process.

It cannot be ruled out that the US stance on arms control will shift in another four years' time following the arrival of another administration in the White House. To that end, it would be important to **preserve the infrastructure required for a swift return to negotiations and a rapid implementation of any new deal**. It would be especially important to preserve the resources of the National Nuclear Risk Reduction Center, even though its workload would fall sharply following the New START expiration.

Scenario 2: The maximum we should aim for

The second scenario assumes that the United States does not want any formal arms control arrangements with Russia, but is **willing to preserve the *status quo*** by means of **political commitments**. This scenario will also be possible should Washington seek to negotiate a follow-up treaty to the New START, and to preserve some of the New START provisions in the interim. Such a solution could be a compromise between the US political leadership, which does not want an extension of a treaty signed by the previous administration, and the professional US bureaucracy, especially the DoD. In such a case, even political commitments that place the US arsenal under certain arms control restrictions would serve Russia's interests.

Immediately after the expiration of the New START treaty, Russia and the United States could make a joint or a simultaneous announcement that they **have no plans of ramping up their strategic arsenals beyond the ceilings** agreed in the treaty – and that they would notify the other party should they begin to formulate such plans.

It would also be useful for Russia and the United States to continue **exchanging information** on their strategic delivery systems and warheads in the framework of political commitments. Under the Russian federal law "On State Secrets", such information sharing would require a simple government discussion. The US Atomic Energy Act requires the administration to inform Congress of such an arrangement, and a simple majority in both chambers raising no objections – which seems entirely realistic. Moscow and Washington would also need to reach a mutually acceptable arrangement on the confidentiality of the information being shared.

Russia and the US could also reach an agreement on **not impeding each other's national technical means of verification** (NTMs). There is a clause to that effect in New START, but it will lapse once the treaty expires. Despite their limited capability, NTM would be useful for the verification of some commitments to be undertaken by the two parties (regarding the deployment of new warheads on silo-based ICBMs, for example).



An arrangement that would allow the parties to **preserve the inspections regime** after the New START expiration would be the most ambitious goal of the talks. The key issue at stake here is the immunity that is normally granted to inspectors by international treaties. Nevertheless, immunity clauses are actively used for inspections under the politically binding 2011 Vienna Document (VD) on Confidence- and Security-Building Measures, in which both Russia and the United States participate.

The inspectors working in the VD framework are granted immunity and privileges in accordance with the Vienna Convention on Diplomatic Relations. VD inspections are currently conducted in Russian territory and at the US military bases in Europe, so the parties would have to confirm the possibility of conducting similar inspections in the US mainland.

Formalizing such complex arrangements **would require a political agreement** between Russia and the United States. Such an agreement could be signed for an indefinite term and remain in effect until the entry into force of the next US-Russian strategic arms control treaty. To hold regular discussions on the technical issues pertaining to any such arrangements (information exchange, NTMs, inspections, etc.) the two parties would also need to **establish a standing body** similar to the Bilateral Consultative Commission set up under New START.

The political measures proposed in this paper are to a large extent unprecedented. Nevertheless, the existing record of implementing other political arrangements, such as the Joint Comprehensive Plan of Action on the Iranian nuclear program, demonstrates that even the most challenging provisions can be implemented without a legally binding document if all the parties involved want to make it happen.

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Annex

RUSSIAN AND US STRATEGIC OFFENSIVE ARMS: THE BREAKOUT POTENTIAL IN THE EVENT OF NEW START EXPIRATION

The US arsenal currently includes approximately 1,750 strategic nuclear warheads (NW). Should the New START treaty expire, Washington would be able to mount additional warheads on the already deployed delivery systems. Each of its 200 Minuteman-III ICBMs can carry an additional two warheads. The Trident-II submarine-launched ballistic missiles (SLBMs), which are currently equipped with 4 or 5 warheads each, can carry as many as 8. The United States could also deploy up to 60 additional Minuteman-III ICBMs (carrying up to 180 NW between them) and up to 116 additional Trident-II SLBMs (up to 928 NW) – but the size of the existing US active reserve of

warheads (1922 strategic warheads, according to open-source reports) makes this scenario unlikely. Based on these figures, 3,570 warheads would be a realistic estimate of the existing US breakout potential.

Delivery system	Number of delivery systems	NW per delivery system, max.	NW total	
			Current	Potential
LGM-30G Minuteman III	400			
Mk12A	200	3*W78	200	600
Mk21/SERV	200	1*W87	200	200
Total on ICBM	400	-	400	800 (700)
Trident II D5-LE	220	-		
Mk4A		8/14[1] W76-1/0		1,486[2][3]
Mk4A (low-yield)		2 W76-2		50
Mk5		8 W88		384
Total on SLBM	220[4]	-	1,050	1,920
B-52H Stratofortress	44 (79)[5]	12 air-launched cruise missiles		528
B-2A Spirit	12	gravity bombs		322
Total on HB	56		300	850
SNW total			1,373 (1,750)[6]	3,570 (3,470)

Should the United States sharply increase its nuclear arsenal, Russia would be able to respond by increasing its own strategic offensive weapons count from the current 1,570 to 3,037-3,205 nuclear warheads by means of mounting extra warheads on its existing delivery systems; by deploying an additional 22 UR-100NUTTKh and Yars ICBM; and by loading up the SLBMs of the *Knyaz Vladimir* ballistic missile submarine (which is scheduled to enter into service in 2020) to their

maximum capacity. According to independent US experts, the breakout potential of the Russian strategic offensive arsenal is limited to 2,440 warheads in the short term.

Delivery system	Number of delivery systems	NW per delivery system, max.	NW total	
			Current	Potential
RS-20 Voyevoda	46	10		460
UR-100NUTTKh	2 (30)	1/6 [7]		30/170[8]
RS-12M Topol (road-mobile)	45	1		45
RS-12M2 Topol-M (silo-based)	60	1		60
RS-12M1 Topol-M (road-mobile)	18	1		18
RS-24 Yars (road-mobile)	135	4		540
RS-24 Yars (silo-based)	14	4		56
Total on ICBMs			810	1,191/1,349
RSM-50	16	7		112
RSM-54 Sineva	96	4		384
RSM-56 Bulava	48 (64)[9]	10		640
Total on SLBMs			560	1,136
Tu-95MS	21	16 air-launched cruise missiles		336
Tu-95MSM	18	14 air-launched		252

		cruise missiles		
Tu-160	11	12 air-launched cruise missiles		132
Total on HB			200	720 (580)[10]
SNW total			1,426 (1570)	3,205 (2,440)[11]

Sources: New START Treaty Aggregate Numbers Fact Sheet, Bureau of Arms Control, Verification and Compliance, Department of State; U.S. Nuclear Forces 2020; Russian Nuclear Forces 2020; Russian Strategic Nuclear Arms; Yaroslav Vyatkin. Termination of the New START treaty: Who wins? *Voyennoye Obozreniye*.

[1] A Trident-II SLBM can carry a maximum load of 14 W76-0 warheads.

[2] The figure could be as high as 2,600 warheads if the W76-0 warheads are used. Such a sharp increase is unlikely because the United States has a total of only 3,822 nuclear warheads, including the sub-strategic ones. Hans Kristensen estimates that only 1,750 of them are currently deployed, and approximately 2,050 are kept in active reserve. Also, the W76-0 warheads are being gradually decommissioned over doubts about their reliability.

[3] Kristensen estimates that the US Navy has 1,600 W76-1 warheads.

[4] The US could potentially deploy up to 328 SLBMs because some of the Trident-II SLBM launchers have not been converted under the New START procedures.

[5] Russia does not regard the conversion of 41 B-52H bombers for non-nuclear missions as irreversible.

[6] Under the New START counting rules/actual number.

[7] Using only Avangard warheads / using MIRV warheads

[8] Using all 30 ICBM with Avangard warheads / using 28 missiles with MIRV warheads

[9] The count includes the *Knyaz Vladimir* ballistic missile submarine, which is expected to enter into service with the Northern Fleet in June 2020.

[10] Kristensen estimates that Russia has a total of 580 warheads suitable for use with heavy bombers.

[11] Kristensen estimates that Russia has 1,570 deployed warheads and approximately 870 strategic nuclear warheads that are kept in reserve