Extension of the New START Treaty
Stewart Prager, 1 December 2020

Proposition: The US and Russia should extend the New START Treaty which is scheduled to expire on February 5, 2021. The Treaty was signed in 2011 for a ten-year duration, with an option for a five-year extension.

Arguments in favor
Maintaining the cap on Russian and US nuclear arms limits the risk of onset of nuclear war and sets the stage for further arms reductions: The New START Treaty limits the number of deployed US and Russian warheads within the triad in the US and Russia at 1550 each (with each heavy nuclear bomber counted as one warhead). The number of deployed launchers in the triad is limited to 700, and the number of deployed plus nondeployed launchers is limited to 800. The agreement secures the vast reduction in the number warheads from its six-fold larger value in the 1980s. Although the current arsenal is still unfathomably large and dangerous in its lethality, the risk of the outbreak of nuclear war (due to accident, miscalculation or intention) likely diminishes as nuclear arsenals diminish in size. Given the unacceptable magnitude of the current arsenals, the most significant effect of the Treaty is that it sets the stage and provides a framework for negotiations for further arms reductions.

The Treaty verification procedures provide a level of transparency into both nuclear arsenals: The monitoring and verification procedures provided by the treaty is stabilizing. The realistic assessments of nuclear capabilities avoid the danger of worst-case analyses of adversary’s strengths, provides realistic information for planning, and maintains a level of open communication between Russia and the US. In addition to National Technical Means (e.g., satellites), the Treaty allows for inspections to provide confidence in the number and location of warheads and launchers. For example, the Treaty allows each side to perform annually 18 short-notice, on-site inspections of individual missiles per year (10 inspections of deployed armaments at ICBM, submarine, and air bases and 8 inspections of nondeployed armaments at other locations), and requires notification of new missiles. Without these inspections, a substantial and expensive increase in U.S. intelligence capabilities would be necessary to gather information on Russian strategic forces.

Expiration of the Treaty would eliminate the last bilateral constraint on US/Russian nuclear arms, potentially fueling a new arms race: Perhaps the benefit of the Treaty extension is most clearly illustrated by the danger that would be introduced by its absence. With the prior collapses of the ABM and INF treaties, expiration of New START would leave the US and Russia with no constraints on nuclear weapons for the first time in 50 years. This would open a path to the escalatory buildup of defensive and offensive capabilities. The current strengthening and modernization of forces in both nations presages that a new and dangerous arms race might well be propelled by the demise of the New START Treaty.

Counter-arguments and responses
The Treaty should include China, the third superpower: China is in many ways a geopolitical adversary of the US. It currently has a nuclear deterrent which it is in the process of strengthening and modernizing. Its technological prowess and economic resources are such that,
if it so chooses, it could readily increase its arsenal to be on parity with those of the US and Russia. Extending the Treaty as a bilateral agreement only, will leave China free to expand its nuclear arsenal. To prevent such an outcome the New START Treaty Improvement Act has been introduced in the Senate (by Senators Cotton and Cornyn, S.1433) and House (Rep Cheney, HR 2707) to withhold funds from Treaty extension unless it includes China and all of Russia’s strategic and non-strategic systems.

Response: To maintain deterrence, China possesses an arsenal of strategic nuclear warheads which is about 6% the size of the US and Russian arsenals. China’s estimated stockpile of about 90 strategic warheads and 65 – 90 strategic launchers is far less than the 1550 strategic warhead and 700 launcher limits set by the Treaty. There have been no reports of Chinese intention for dramatic expansion of its arsenal toward the vicinity of the New START limits. Thus, incorporating China into the New START agreement would have no effect on China’s nuclear weapons plans. A trilateral (or multilateral) agreement capping arsenals would be beneficial, and make sense, when the stockpiles in the US and Russia are reduced to levels closer to that of China. China has stated that it “will not participate in any negotiation for a trilateral nuclear disarmament agreement,” and it calls on the countries with the “world’s largest nuclear arsenals… to drastically reduce their nuclear stockpiles…”2 Thus, requiring the inclusion of China would only serve to disrupt the current stabilizing bilateral treaty.

The Treaty should include new weapon systems that are under development in Russia: Russia is developing new weapons systems aimed to evade US missile defense. These include a new ICBM with expanded capabilities, hypersonic boost-glide weapons, air-launched hypersonic weapons, an underwater torpedo, and a nuclear-powered cruise missile. The Treaty does not include these new weapons, leaving Russia free to expand its capabilities essentially in violation of the spirit of the Treaty.

Response: The Treaty provides the best opportunity for limiting and monitoring Russia’s new weapons.3 The new ICBM and the hypersonic boost-glide system clearly fall within the countable items in the Treaty, and would be subject to verification procedures. The underwater torpedo and the nuclear-powered cruise missile are unlikely to be deployed during the five-year Treaty extension period. That leaves the air-launched hypersonic vehicle as the main system of concern with regard to the Treaty. Whether this system falls within the Treaty depends upon the range of the carrying aircraft (whether greater than 8,000 km) and whether it would be considered a “new kind” of strategic offensive weapon that should be incorporated into the Treaty. These issues would be a subject of negotiation. The current Treaty provides the best framework available to negotiate controls on specific new strategic weapons. The likelihood of success is far greater than starting new negotiations in an adversarial environment with no existing constraints or verification procedures in place, and no structure to build upon. Indeed, the head of US Strategic Command, General Hyten, has stated that the Treaty provides “unbelievably important” insight into Russia’s nuclear capabilities through its “eyes-on, hands-on ability to look at something.”4

Timeliness
This issue is very timely since the treaty expires on February 5, 2021. In December, 2019, Putin stated that “Russia is ready to extend the New START treaty immediately, before the year's end and without any preconditions.”5 Thus, all that is needed is the signature of the US president. The

This paper discusses topics of interest to the Physicists Coalition for Nuclear Threat Reduction, but represents only the views of the author.
issue is active in Congress. Extension of New Start enjoys bipartisan support, as expressed in bills introduced in Congress (HR2529, sponsored by Engel and McCaul) and S. 2394 (sponsored by Van Hollen and Young) which state that the US “should seek to extend the New START Treaty so long as Russia remains in compliance.” It is notable that the US government has concluded that Russia, to date, has been in compliance with the Treaty. The near-term expiration date ensures that this will be a fast-moving issue.

5https://www.militarytimes.com/flashpoints/2019/12/06/putin-offers-us-an-immediate-extension-to-key-nuclear-pact/