INTRODUCTION

The United States and Russia concluded the New Strategic Arms Reduction Treaty in 2010. New START entered into force in 2011, and by February 2018 each side is required to reduce its strategic forces to no more than 1,550 deployed warheads on no more than 700 deployed strategic missiles and bombers. Since the conclusion of New START, however, there has been little progress toward further nuclear arms reductions.

Apart from the general deterioration in U.S.-Russian relations, the absence of further progress results from the two countries having different goals. Washington has sought to lower the New START limits and to bring nonstrategic nuclear weapons and reserve strategic warheads into the negotiations. Moscow prioritizes constraining missile defenses and precision-guided conventional weapons, which Russian analysts believe can carry out missions that formerly required nuclear warheads.

The United States and Russia are implementing New START without reported problems, reflecting recognition in each capital of the value of some constraints on, and transparency regarding, the other’s strategic forces. One can expect interest in extending New START or replacing it with a roughly comparable agreement in 2021, when the treaty will expire. In order to make progress toward deeper reductions, however, the two sides must reconcile their goals.

U.S. OBJECTIVES AND PRIORITIES

Upon signing New START in April 2010, President Barack Obama expressed interest in a new negotiation that would involve all U.S. and Russian nuclear weapons—strategic and nonstrategic, deployed and nondeployed. In June 2013, he proposed reducing the New START limits by as much as one-third, which would have cut the deployed strategic warhead limit from 1,550 to 1,000–1,100. Whether the next administration will seek further reductions remains to be seen.

The Obama administration has been prepared to discuss missile defense in the context of the offense-defense relationship and in 2013 offered Moscow an executive agreement on transparency regarding missile defense programs. It has rejected Russian proposals for a legally binding treaty on missile defense. Given Senate Republican opposition to limits on missile defense, such a treaty would have no prospect of ratification.

Another priority for Washington is bringing Russia back into compliance with the 1987 Intermediate-Range Nuclear Forces Treaty. Russia has violated the treaty by testing a ground-launched cruise missile to intermediate range. If Russian compliance is not restored, obtaining Senate consent to ratification of any new treaty would be difficult.

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RUSSIAN OBJECTIVES AND PRIORITIES

Moscow has expressed little interest in further nuclear reductions. It instead prioritizes limiting missile defenses and has proposed a legally binding treaty in which the United States and Russia would agree not to target their missile defenses against the other’s strategic missiles. The treaty would include “objective criteria,” by which the Russians mean limits on the number, velocity, and location of missile interceptors.

The Russian focus has been on SM-3 missile interceptors deployed in or near Europe, even though those interceptors lack the velocity to engage strategic ballistic missile warheads. This presumably reflects Moscow’s opposition to the deployment of U.S. interceptors and infrastructure on the territory of new NATO member states and concern that existing SM-3s might be replaced by faster interceptors in the future.

Russia has an active missile defense program of its own, including a system around Moscow. It advertises the S-400 and planned S-500 interceptors as having significant capabilities against intermediate-range ballistic missiles. The U.S. military has voiced little concern about Russian missile defenses.

Moscow has also expressed concern about advanced U.S. conventional strike capabilities. These include systems such as prompt global strike—which the U.S. military does not deploy at present—and existing precision-guided cruise missiles. Some Russian analysts postulate that, in a future crisis, the United States might employ what they refer to as “conventional strategic weapons” to strike Russian command and control nodes and strategic systems, such as silo-based intercontinental ballistic missiles.

Russian officials have also cited the lack of an agreement limiting conventional armed forces in Europe as a reason for not proceeding with further nuclear reductions. They have said that the next nuclear arms negotiation should be multilateral.

THE CHALLENGE TO NUCLEAR ARMS CONTROL

Unless the United States and Russia reconcile their different arms control agendas, little may be achieved other than a possible extension of New START’s limits (the treaty can be extended for up to five years beyond its 2021 expiration). Even that could prove controversial if Russia remains in violation of the INF Treaty.

Russia is in the midst of a major strategic modernization program, involving production of new ICBMs, submarine-launched ballistic missiles, and ballistic missile submarines. Much of this program aims to replace existing missiles and submarines, many of which are well past their retirement dates. Assuming that New START limits remain in place and the United States proceeds with modernization of its own strategic forces, which will accelerate in the 2020s, the Russian strategic modernization program offers no reason for great concern. (The Pentagon could even pare down some aspects of its planned modernization.)

More worrisome are Russian nonstrategic nuclear programs. These include shorter-range ballistic and cruise missiles armed with nuclear warheads. These developments are taking place against the backdrop of Moscow’s nuclear saber-rattling and its “escalate to deescalate” doctrine, which postulates use of low-yield nuclear arms to terminate a conventional conflict on terms favorable to the Kremlin. This suggests the threshold for Russian use of nuclear weapons could be lower than that of the United States.

For its part, the United States is modernizing the B61 gravity bomb, the only nonstrategic weapon in the U.S. nuclear arsenal now that nuclear-armed sea-launched cruise missiles have been retired. Some American analysts advocate the development of other nuclear weapons, including low-yield weapons, earth penetrators, and revived nuclear-armed SLCMs. Doing so would be inconsistent with the Obama administration’s policy of introducing no new capabilities into the nuclear arsenal. (NATO’s nuclear force posture will be based on the coming deployment of the F-35 and modernization of the B61 bomb. European allies likely would not welcome new U.S. nuclear weapons.)
A continuing lack of limits on nonstrategic nuclear weapons will raise concerns among U.S. allies. Moreover, when consenting to ratification of New START, the Senate indicated that the next negotiation should address nonstrategic as well as strategic arms.

**U.S. POLICY AND POLITICAL CONSIDERATIONS**

Over the past forty-five years, U.S. arms control efforts with the Soviet Union and Russia have aimed to promote stability and reduce weapons stockpiles. New START will cut U.S. and Russian deployed strategic weapons to their lowest levels since the early 1960s.

New START and policy choices by the Pentagon produce a relatively stable U.S. force structure. The majority of U.S. deployed warheads are on ballistic missile submarines, which are highly survivable when at sea. Moreover, the decision to “download” 400 Minuteman III ICBMs so that each carries only a single warhead dramatically reduces the incentive that Russia might have to launch a first strike. The current Russian force structure—which conducts ballistic missile “patrols” at dockside and maintains a significant number of warheads on MIRVed, silo-based SS-18 and SS-19 ICBMs—is less conducive to stability. That may change as Russia deploys newer submarines and replaces older ICBMs with newer, mobile missiles. But the development of the large, MIRVed Sarmat ICBM to replace the SS-18 is not an improvement.

Continued reductions in nuclear arms are in the U.S. interest, given American advantages in conventional forces, particularly power projection and high-tech weaponry. Moreover, as long as nuclear deterrence remains the basis for U.S.-Russian strategic relations, there is a possibility of failure that could have catastrophic consequences for the United States.

Despite the Joint Comprehensive Plan of Action with Iran, the nuclear nonproliferation regime is under some stress. If the United States and Russia are not reducing their nuclear stockpiles—which, at some 4,500 weapons each, are fifteen times the size of any third-country arsenal—it could be more difficult to sustain pressure against further proliferation. Frustration with the slow progress in nuclear reductions has energized a movement for a convention banning nuclear arms, now supported by 120 countries.

Domestic politics will influence U.S. policy. A number of Republicans in Congress question the wisdom of nuclear reductions, even those mandated by New START. They may be able to block ratification of a new nuclear arms agreement, particularly if the Russian violation of the INF Treaty is unresolved. Democrats tend to be more interested in arms control, and that interest could grow as Congress comes to realize the full cost of the planned U.S. strategic force modernization. Some estimates assess the total cost of modernizing and operating U.S. nuclear forces at $1 trillion over the next thirty years.

During the 2010 New START ratification debate, Republicans used the administration’s desire for ratification to secure commitments to fund modernization of the strategic triad and its supporting infrastructure. In the future, Democrats might condition their support for nuclear modernization on support for further negotiated arms limitations with Russia.

**BRINGING RUSSIA BACK TO ARMS CONTROL**

Russian interest in nuclear arms control may revive around 2019 or 2020, as the 2021 expiration date for New START approaches. Moscow seems to value constraints on U.S. nuclear forces, and as the U.S. strategic modernization effort moves into high gear in the early 2020s, Russia could be keen to maintain arms limits.

U.S. negotiators could try to use Russian interest in extending New START (or replacing it with a comparable agreement) to secure additional reductions in deployed strategic forces and/or constraints on nonstrategic nuclear weapons. But incentivizing Moscow to pursue deeper reductions or to come back to the negotiating table prior to 2019 or 2020 may require a U.S. readiness to engage directly on key Russian concerns.
THE AGENDA FOR FUTURE U.S.-RUSSIAN ARMS CONTROL

Resolving INF Treaty Concerns
A prerequisite for a new treaty aimed at reducing nuclear weapons will be a resolution of the Russian violation of the INF Treaty and also the three Russian countercharges of U.S. violations. First, Russian officials say that U.S. use of intermediate-range missiles as targets for missile defense tests violates the treaty, though Article VII of the treaty has a provision permitting such use. Second, the Russians charge that armed unmanned aerial vehicles are, in effect, ground-launched cruise missiles, an argument that appears to have little merit given the differences between UAVs and cruise missiles. In any event, Russia is developing its own long-range armed UAV. The third Russian charge is that the Mk 41 vertical launching system for SM-3 missile interceptors based in Romania (and slated for deployment in Poland in 2018) is similar to those on U.S. Navy ships and can launch cruise missiles. The Pentagon says that is not possible.

To resolve concerns about INF Treaty compliance, Washington and Moscow could agree on language clarifying the differences between permitted missile defense target missiles and prohibited intermediate-range ballistic missiles, and the differences between UAVs and ground-launched cruise missiles. The United States might offer transparency measures regarding the SM-3 vertical launch boxes, for example, allowing the Russians periodically to choose two of the 24 tubes to be opened to confirm they held an SM-3, not a cruise missile. In return, Russia could end its testing of an intermediate-range ground-launched cruise missile and perhaps offer transparency measures to help confirm its termination of the prohibited activities.

Nuclear Reductions
The next logical step for a U.S.-Russian nuclear arms reduction negotiation is to bring all nuclear weapons under a single aggregate limit, with a sublimit on deployed strategic warheads, which are the weapons that could be most readily used. For example, the next negotiation could seek to cut each side’s arsenal from about 4,500 nuclear weapons to no more than 2,000 to 2,500 total weapons, with a sublimit of 1,000 deployed strategic warheads—a level of total weapons seven to eight times that of any third country.

These kinds of reductions, however, appear ambitious for Russia’s current stance. An alternative approach might continue New START’s limits or, preferably, reduce them to 1,000 deployed strategic warheads and 500 deployed strategic missiles and bombers, while addressing nonstrategic nuclear weapons and reserve strategic warheads in a separate regime. That regime could begin with a limit capping the combined total of each side’s nonstrategic nuclear weapons and reserve strategic warheads, with reductions to be negotiated in a subsequent round. A more cautious approach would begin with transparency and confidence-building measures regarding such systems.

Nuclear Posture
The United States and Russia could conduct discussions on their respective nuclear postures. One subject might be avoiding a sudden surge of ballistic missile submarines out of port and mobile ICBMs out of garrison in a manner that might suggest preparations for a nuclear strike. Another topic could be aligning policies regarding launch of ICBMs under attack or on tactical warning. A number of analysts advocate that the United States abandon launch under attack, in part because it is highly unlikely that any president would make that decision in the time available.

A separate issue for discussion could be nuclear doctrine. The United States should seek to better understand Russia’s doctrine of “escalate to deescalate.” While Moscow’s publicly stated policy is to use nuclear weapons only in the event of an attack with weapons of mass destruction on Russia or one of its allies, or a conventional attack on Russia in which the existence of the state is at stake, there are indications that the Russian military might consider using low-yield nuclear weapons at an earlier stage of a conflict. A doctrinal discussion would provide an opportunity to underscore the importance of maintaining a high threshold for nuclear use. It would allow U.S. officials to make the point that the use of any nuclear weapon—no matter how low the yield or how discriminate the targeting—would bring about dire consequences.

Missile Defense
At some future point, if the United States and Russia continue to reduce their strategic forces by treaty, it might make sense to accept the Russian position that missile defenses also be constrained in a legally binding manner. For the foreseeable
future, however, missile defenses on either side will not pose a threat to the other’s strategic offensive forces. When New START limits take full effect in February 2018, Russia will be able to maintain some 1,500 deployed strategic warheads on its ICBMs and SLBMs. Meanwhile, the United States will have deployed just 44 missile interceptors in Alaska and California with the velocity necessary to engage a strategic ballistic missile warhead.

In 2013, the United States proposed an executive agreement regarding transparency on missile defenses. Under that agreement, the United States and Russia would exchange annual notifications providing the numbers of key missile defense elements—such as interceptors, launchers, radars—as well as the projected numbers for each of the subsequent ten years. The idea was to give each sufficient information to judge whether there would be a future threat to its strategic ballistic missiles. The Russians did not engage on the proposal.

Washington could return to this offer, but it might not suffice for Moscow. Short of a treaty with legally binding limits, the United States could offer, as a matter of policy, to cap the number of SM-3s in Europe. That might interest Moscow. While Iran thus far has not accepted constraints on its ballistic missile program, a conventionally armed Iranian ballistic missile poses far less of a threat to Europe than a nuclear-armed missile. The United States might offer some transparency measures as well.

**Precision-Guided Conventional Weapons**

Moscow has expressed concern about conventional prompt global strike systems, though the U.S. military does not possess them at present. The Pentagon has ruled out placing conventional warheads on ICBMs and SLBMs. Were it to change its mind, such warheads would be constrained by New START, as the deployed strategic warhead limit draws no distinction between nuclear and conventional warheads.

The United States is developing a hypersonic glide vehicle, which the Pentagon correctly argues would not be captured by New START because it does not fly a ballistic trajectory. Such a missile might, however, come close to replicating the capabilities of an ICBM. Hypersonic missiles would be an expensive way to deliver conventional warheads to intercontinental ranges, and the Pentagon has said this would be a niche capability, requiring only a couple dozen systems. The United States might offer to allay Russian concerns by negotiating an ancillary agreement to New START (or its successor) capping the number of such weapons.

Another area of concern to Russia is the large number of U.S. conventionally armed SLCMs and air-launched cruise missiles, which some Russian analysts say raise the possibility of a conventional strategic attack. It is not clear whether Russia’s concern is genuine. Moscow would almost certainly have tactical warning of a large-scale cruise missile attack, and the ability of conventionally armed cruise missiles to destroy or disable hardened targets such as ICBM silos is debated.

Given the importance of cruise missiles to U.S. power projection, and the difficulty in verifying limits on such missiles, the United States has avoided negotiations on them. Whether the U.S. position will change, in view of Russia’s demonstration in Syria of its conventionally armed SLCMs and ALCMs, remains to be seen but seems unlikely. It might be sensible for the sides to discuss the implications of conventionally armed cruise missiles for the strategic nuclear balance, even if negotiated limits are not on the horizon.

**Conventional Forces and Confidence-Building Measures in Europe**

Moscow has cited the breakdown of the Conventional Armed Forces in Europe Treaty regime as one reason for its refusal to address nonstrategic nuclear weapons. On the conventional side, Russia and NATO members are below the treaty’s overall limits on tanks, armored personnel vehicles, artillery, attack helicopters, and aircraft and are below the overall limits in the Adapted Conventional Armed Forces in Europe Treaty, which never entered into force.

The urgent need regarding conventional forces in Europe is in the area of confidence-building measures, such as notifications, observations of exercises, and inspections. The United States and Russia, working with NATO members and other European states, could examine the Vienna Document on confidence- and security-building measures with a view to lowering the threshold for notifications and observations and other measures that would increase transparency and reduce the risk of miscalculation. Alternatively, NATO might try to engage Russia on a multilateral agreement based on the 1972 Incidents at Sea and 1989 Prevention of Dangerous Military Activities agreements.
It is not clear, however, that the Russians would engage on these ideas. They may regard a degree of calculated risk as part of their effort to intimidate NATO with large numbers of exercises, including snap exercises and flybys by bombers and other aircraft.

**Multilateralization**

Moscow has said that the next nuclear arms reduction negotiation should be multilateral. Washington argues that, given the difference between U.S. and Russian nuclear weapons numbers and those of any third state, there is room for at least one more bilateral round.

It is difficult to see how a multilateral arms control treaty would be structured. If participants such as China insisted on equal limits, there is little chance that Russia or the United States would agree. Third countries would likely not accept an agreement that codified unequal limits.

An alternative path would couple another round of U.S.-Russian nuclear reductions with an effort to secure political statements by at least Britain, France, and China that they would not build up their nuclear arsenals, as long as the United States and Russia were reducing their nuclear weapons numbers. This would be a first step toward bringing third countries into the nuclear arms reduction process, which cannot forever remain only a U.S.-Russian enterprise. A parallel move would aim to secure some basic data declarations from the third countries, such as total nuclear weapons numbers.

**OUTLOOK**

Objectively, prospects for further U.S.-Russian nuclear reductions in the near term are not bright. The two countries’ different agendas regarding next steps, coupled with the tense political environment, pose a serious hindrance. Both sides seem interested in continuing to observe New START limits, and economic pressure on their military budgets may engender interest in a new treaty. But until Washington and Moscow can find a way to bridge the difference in their overall approaches, expectations for further substantive steps on arms control should remain modest.

**NOTES**

1. The U.S. government reported that the U.S. nuclear stockpile totaled 4,717 weapons as of September 1, 2014. According to Hans Kristensen and Robert Norris of the Federation of American Scientists, as of early 2015, the Russian arsenal numbered about 4,500 total nuclear weapons. (These figures do not include weapons that the two countries have retired and which are awaiting dismantlement.)