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The START Follow-On Agreement and Beyond

Background Briefing for Reporters

Contact: Daryl G. Kimball, Executive Director *For Immediate Release: June 19, 2009*

(Washington): From July 6-8, U.S. President Barack Obama and Russian President Dimitry Medvedev will meet in Moscow to evaluate and advance progress toward a new strategic nuclear arms reduction treaty that would replace the Strategic Arms Reduction Treaty (START), which is due to expire on Dec. 5.

The landmark 1991 START agreement reduced excess nuclear stockpiles and provided greater predictability and stability. START slashed each nation's strategic warhead deployments from about 10,000 to less than 6,000, and it limited each country to no more than 1,600 strategic delivery systems. START helped build the confidence and stability necessary to eliminate Cold War-era tensions.

Since then, however, U.S. and Russian leaders have missed opportunities to reach new agreements that would require deeper, irreversible cuts in warhead, missile, and bomber stockpiles. They failed to conclude the START II agreement and failed to negotiate the START III framework agreement largely because of differences over U.S. strategic missile defense plans.[1]

The 2002 Strategic Offensive Reductions Treaty (SORT) requires that each side deploy no more than 1,700-2,200 strategic warheads by 2012. But the agreement expires the same day that the warhead limit takes effect. Unlike START, SORT does not require the elimination of excess missiles and bombers. Worse still, it failed to establish new verification mechanisms, relying instead on those contained in START.

For some time, Russia has shown interest in deeper reductions: less than 1,500 warheads each along with specific limits on delivery systems. Unfortunately, the George W. Bush administration rejected lower ceilings on deployed warheads and further limitations on missiles and bombers.[2]

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[1] START II called for reducing deployed strategic arsenals to 3,000-3,500 warheads and banned the deployment of destabilizing multiple-warhead land-based missiles. START II would have counted warheads in roughly the same fashion as START I and would have required the destruction of delivery vehicles but not warheads. Both the Senate and the Duma approved START II, but the treaty did not take effect because the Senate did not ratify the 1997 protocol and several ABM Treaty amendments, whose passage the Duma established as a condition for START II's entry into force. Following the U.S. withdrawal from the ABM Treaty, Russia declared itself no longer bound by START II. In March 1997, U.S. and Russian leaders agreed to a framework for START III, but those talks never got off the ground. START III was supposed to lead to verifiable limits of deployed strategic warheads to 2,000-2,500. Significantly, in addition to requiring the destruction of delivery vehicles, START III negotiations were to explore "the destruction of strategic nuclear warheads…to promote the irreversibility of deep reductions including prevention of a rapid increase in the number of warheads."

[2] "START Decision Put Off to 2009," by Wade Boese, *Arms Control Today*, December 2008.

In contrast, the Obama administration has made it clear the United States will now pursue reductions in deployed strategic warheads beyond the lower end of the SORT limit (1,700), along with lower ceilings for strategic nuclear delivery systems.[3] A new bilateral nuclear arms control agreement along these lines would be a step forward.

START Follow-On "Phase I" Is Taking Shape

At their inaugural meeting April 1, Presidents Barack Obama and Dmitry Medvedev formally launched the process of "resetting" their relationship, beginning with the conclusion of negotiations on a new START follow-on agreement before the year's end.

Their April 1 joint statement said the subject of "the new agreement will be the reduction and limitation of strategic offensive arms" at a level "lower than" those outlined in SORT, and will include "effective verification measures" drawn from START.

At least four rounds of detailed talks will have occurred before the meeting of the two presidents in Moscow, when the negotiators are to report on their progress.

It is possible that a framework for the new agreement may be reached in time for the Moscow summit in July, even so, the final agreement will not likely be concluded until the fall. Consequently, it is highly unlikely that the new agreement will be concluded soon enough for signature and ratification by the U.S. Senate before START expires.

If an agreement cannot be concluded by December, Secretary of State Hillary Clinton told the Senate Foreign Relations Committee January 13 that "a mutually acceptable means should be found to give the negotiators more time without allowing key measures, including essential monitoring and verification provisions, to lapse."

Current U.S. and Russian Nuclear Forces

It has been nearly 20 years since the United States and Russia concluded a meaningful, serious nuclear arms reduction agreement and its is past time to update the legal framework regulating the world's two largest nuclear arsenals.

Washington and Moscow are no longer enemies, yet today each country still deploys at least 2,200 strategic nuclear warheads deployed on roughly 1,000 strategic nuclear delivery systems, many of which are primed for a quick launch to deter a surprise attack by the other.

According to their April 2009 START declarations, the United States has 550 land-based ICBMs, 432 sea-based missiles on 14 submarines, and 216 bombers, which together can deliver 5,576 warheads. Russia possesses 469 nuclear-armed land-based ICBMs, 268 sea-based missiles on eight submarines, and 79 nuclear-capable bombers, which together can deliver 3,909 warheads.

[3] "U.S., Russia Agree on Path for New Arms Cuts," by Cole Harvey, *Arms Control Today*, May 2009.

In practice, not all of these systems are "operationally deployed," and many missiles and bombers carry less than a full complement of warheads. As a result, the United States is believed to deploy at least 2,200 strategic warheads, with a comparable number of warheads in reserve.

The exact number of deployed Russian strategic warheads is not available but is believed to be between 2,000-3,000. In addition, Russia has at least 2,000 additional nonstrategic nuclear bombs available for use and another 8,000 in reserve or awaiting dismantlement. The United States has several hundred nonstrategic nuclear bombs for possible "battlefield" use.

Current U.S. and Russian nuclear capabilities are out of step with present day realities. Massive arsenals that are capable of annihilating entire nations within an hour are more of a liability than an asset because they breed mistrust and worst-case assumptions among other states. They also perpetuate the risk of an accidental or unauthorized launch. Nor do nuclear weapons serve any practical role in dealing with non-nuclear adversaries or terrorists.

As the Arms Control Association and others have said for many years[4], the United States and Russia can and should reduce their total strategic nuclear warhead holdings far below the numbers outlined by SORT: to 1,000 or fewer within the next few years. There is no practical strategic justification for U.S. and Russian leaders to maintain thousands of nuclear warheads. It is estimated that no other country possesses more than 300 nuclear warheads

Bipartisan Support for Further Reductions

While there is debate about how low the United States and Russia should reduce their nuclear arsenal and whether and how they should engage with other nuclear-armed states to verifiably eliminate their nuclear arsenals, a large majority of Republican and Democratic Senators along with a most leading U.S. foreign affairs and security experts support a new legally-binding treaty to further reduce U.S. and Russian strategic nuclear stockpiles below the lower range of SORT.

For instance, the bipartisan *Final Report of the Congressional Commission on the Strategic Posture of the United States* released in April said: "The United States and Russia should pursue a step-by-step approach and take a modest first step to ensure that there is a successor to START I…. [involving] a modest incremental reduction in operationally deployed strategic nuclear weapons."[5]

Leading Republicans including Sens. John McCain (R-Ariz.) and Richard Lugar (R-Ind.), as well as former National Security Adviser Brent Scowcroft, have called for a new, verifiable U.S.-Russian strategic arms reduction treaty.[6]

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[4] "What Are Nuclear Weapons For? Recommendations For Restructuring U.S. Strategic Nuclear Forces," An Arms Control Association Report by Sidney D. Drell and James E. Goodby, April 2005 (and updated October 2007).

[5] Page xviii.

[6] On June 3, Senator John McCain delivered an eloquent and important speech on the Senate floor in which he said, in part: "… the Cold War ended almost twenty years ago, and the time has come to take further measures to reduce dramatically the number of nuclear weapons in the world's arsenals. In so doing, the United States can – and indeed, must – show the kind of leadership the world expects from us, in the tradition of American presidents who worked to reduce the nuclear threat to mankind. As the

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Nevertheless, a few U.S. commentators and Senators doubt the need for a new U.S.-Russian nuclear arms reduction treaty.[7] They are wrong.

Maintaining the status quo by simply extending START for another five years is not a realistic option.[8] According to published reports, Moscow is not interested in an extension of START, in part because the Ministry of Defense wants to ensure that new ballistic missiles that do not conform to START requirement can begin to replace aging Cold War missile systems. Nor does the Pentagon believe it is in the United States' longer-term interests to keep in place certain START limitations on U.S. strategic forces.

Nor is allowing START to expire a prudent option. If a new treaty is not concluded and the 1991 START is allowed to expire as scheduled on Dec. 5, there will effectively be no limits on the two countries' still bloated nuclear stockpiles, which constitute 95% percent of the world's total.

Furthermore, START's monitoring and verification provisions—including twelve types of on-site inspections, data exchanges, a ban on non-interference with national technical means of intelligence, and more—provide valuable predictability and transparency. Without a START-like verification system, neither side would be able to confidently predict the size and location of the other's nuclear forces, adding another dangerous irritant to strained U.S.-Russian relations.

And, as President Obama argued in his stirring Prague speech on April 5, a new START agreement is one of the essential, immediate next steps toward fulfillment of the nuclear weapons states' nuclear Nonproliferation Treaty (NPT) Article VI disarmament obligations and the realization of a world without nuclear weapons. Progress on disarmament is vital to regaining the credibility needed to build the international support necessary to strengthen the NPT.

Goals and Constraints Affecting the START Follow-On Agreement

The contours of the next round of START follow-on talks and the issues and decisions that will be left for future rounds of disarmament talks have become clearer over the past several months.

In describing the President's overall nuclear arms control objectives before and after the 2008 election, senior Obama administration officials have said they "will seek deep, verifiable reductions in all U.S. and Russian nuclear weapons—whether deployed or nondeployed, strategic or nonstrategic. As a first step, we will seek a legally binding agreement to replace START." [9]

Administration reviews its nuclear weapons posture, it should, I believe, seek to reduce the size of our nuclear arsenal to the lowest number possible consistent with our security requirements and global commitments. This means a move, as rapidly as possible, to a significantly smaller force."

[7] "A Fast Way to Lose the Arms Race," by John Bolton, *The New York Times*, May 26, 2009.

[8] Article XVII paragraph 2 of the START, which allows for the two parties to extend the treaty "for a period of five years unless it is superseded before the expiration of that period by a subsequent agreement on the reduction and limitation of strategic offensive arms."

[9] Responses of Secretary of State-designate Hillary Clinton to questions for the record from Senator John Kerry, January 13, 2009.

This approach recognizes the reality that, as we reduce U.S., Russian, and global nuclear stockpiles to lower and lower levels, it is essential that we eliminate the somewhat artificial distinction between strategic and nonstrategic warheads, especially those held by the world's other nuclear-armed states.

In his April 5 Prague speech, President Obama said that "to put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy and urge others to do the same." Obama has also said that "ending the Cold War practice of keeping nuclear weapons ready for launch on a moment's notice should also be a priority."[10]

Several factors will affect the outcome of the START follow-on talks, including the following:

Short Time-Frame: the short time-line available for the completion of the START follow-on agreement will limit what the negotiators can achieve in this round. For instance, it is unlikely that the two sides will make progress on some long-overdue areas such as reductions in substrategic warhead stockpiles, which have never been regulated by an arms control treaty.

Russia's belief that such weapons are necessary to compensate for U.S. and NATO conventional military superiority makes progress in this area all the more challenging.

As Assistant Secretary of State for Verification, Compliance, and Implementation Rose Gottemoeller noted at the Carnegie Nonproliferation Conference on April 7, "My own view is that the immediate START follow-on negotiations will not be the area where that issue is immediately pursued." [11]

But she added: "I certainly believe we should begin exploring the issues with the Russian Federation and decide how to fit that into the agenda." She also said that President Obama believes that "this is an area that should be" dealt with at some point.

The Nuclear Posture Review: there is broad agreement that yesterday's nuclear doctrines are no longer appropriate for today's realities and there are strong arguments for reducing the role of U.S. nuclear weapons in deterring nuclear attack by others.

However, given that the Congressionally-mandated Nuclear Posture Review (NPR) will not be completed until the end of 2009, the Obama administration will not likely seek a START follow-on that reduces the number of U.S. strategic deployed warheads *dramatically* below the lower end of the SORT range limit: 1,700.

Senior administration officials have said that the President's revised approach to U.S. nuclear weapons policy "may not take shape until the NPR is completed" but "negotiations on the next

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[10] "*Arms Control Today* 2008 Presidential Q&A: Responses of Candidate Barack Obama," Sept. 10, 2008 < http://www.armscontrol.org/epublish/1/v38n10 >.

[11] "Battlefield nukes left out of arms talks," *The Washington Times*, April 16, 2009, by Nicholas Kralev < http://www.washingtontimes.com/news/2009/apr/16/battlefield-nukes-not-in-play/ >

step in the arms reduction process—replacing the current START Treaty—can begin even while the posture review is underway."[12]

Force Structure Considerations: over the past several years, reductions in deployed U.S. warhead numbers have been achieved by downloading the warheads from MIRV-capable platforms. As a result, the United States has significant excess strategic payload capacity and a relatively large active reserve strategic warhead arsenal, creating a greater "upload potential" than Russia.

Russia by contrast is working hard to replace aging ICBM systems with more modern systems and deploys a smaller number of ICBMs and SLBMs. These systems have relatively less excess warhead delivery capacity.

It is estimated that with or without a new strategic arms reduction treaty, Russia's strategic ballistic missile force will slowly shrink and will not be capable of carrying more than 1,800-2,000 strategic warheads by 2012, of which about 70 percent will be deployed on obsolete delivery systems or launchers with an extended service life.[13]

Russia is not worried about the United States storing warheads *per se*, but rather the number of launchers that remain in deployment and the number of warhead re-entry vehicles that it would be possible to "upload" on those launchers. Russia will seek means by which it can achieve some reassurance about the U.S. upload potential. This could be achieved by relaxing the existing START rules on "downloading" to allow each side to meet lower warhead ceilings by verifiably reducing the number of warheads deployed on certain strategic missiles.

U.S. negotiators, on the other hand, will be looking for relatively easy and inexpensive ways to download warheads to reach lower ceilings and/or to reduce the number of treaty-accountable submarine-launched ballistic missiles (SLBMs) while maintaining the same or a slightly lower number of submarines. This could potentially be achieved by verifiably limiting the number of SLBMs carried on U.S. Trident and Russian Delta-Class submarines below their capacity. (Under this approach, the Trident would carry 12 instead of 18 SLBMs.)

Conventional Payloads on Strategic Missiles: The new agreement will also need to take into account any strategic ballistic missiles that are converted from a nuclear to a conventional, "prompt global strike" mission. Given that the United States plans to deploy a relatively small number of ballistic missiles with nonnuclear payloads, such systems should simply be counted under the START-plus ceilings.

Missile Defenses: while the relationship between offensive and defensive arms will be discussed by the two governments, the START follow-on agreement will only address strategic offensive systems.

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[12] Responses of Secretary of State-designate Hillary Clinton to questions for the record from Senator John Kerry, January 13, 2009.

[13] "New Presidents, New Agreements? Advancing U.S.-Russian Strategic Arms Control," by Alexei Arbatov and Rose Gottemoeller, *Arms Control Today*, July/August 2008.

As President Obama and President Medvedev made clear in their April 1 joint statement, "differences remain over the purposes of deployment of missile defense assets in Europe," but they agreed to discuss "new possibilities for mutual international cooperation in the field of missile defense, taking into account joint assessments of missile challenges and threats, aimed at enhancing the security of our countries, and that of our allies and partners."

However, absent limits on the eventual size of U.S. strategic interceptor system and capabilities or a genuinely cooperative U.S.-Russian missile defense partnership, missile defenses will affect how deeply Russian military and political leaders will agree to reduce their strategic nuclear arsenal below the 1,500-1,700 deployed strategic warhead level already projected for 2012.

At the same time, the administration has made it clear that any missile defense system, including the one proposed by the Bush administration for Eastern Europe, must be proven to work and have the full support of NATO allies before it spends billions of dollars to deploy it.

Flight-testing for the strategic interceptors proposed by Bush for deployment in Poland has not begun and will not be completed before the end of 2011 at the earliest. This allows time for Moscow and Washington to find cooperative approaches to counter Iran's missile potential and possibly agree to limit the overall number of strategic interceptors.

What to Expect from the START Follow-On Process

Taking into account the various goals and constraints on the START follow-on talks, it is clear that:

- the START follow-on will be a hybrid approach, limiting operationally deployed strategic warheads and strategic nuclear delivery systems;
- the START follow-on will establish new warhead accounting formulas and limits on the number of warheads permitted on specific strategic delivery systems to reduce the potential for uploading of nondeployed warheads;
- the START follow-on will not limit strategic missile interceptors, though the two sides will surely discuss the relationship between strategic offensive and defensive systems;
- Russia will resist a START follow-on that results in reductions of deployed strategic warheads below the level that would be adversely affected by possibly more robust U.S. strategic missile defense capabilities;
- the START follow-on will not cover nonstrategic warheads;
- monitoring and verification of the START follow-on will be based on existing START practices and START principles, but could involve some new verification concepts and procedures, including monitoring of deployed strategic warheads and declarations of total warhead holdings; and

- a bridging mechanism will need to be negotiated to ensure that "essential" START verification and monitoring provisions are maintained until the new agreement formally enters into force.

It is likely that the START follow-on agreement will reduce operationally deployed nuclear weapons in each country by at least 30% from SORT's 2,200 ceiling, in other words to about 1,400 deployed strategic warheads.

The maximum allowed number of strategic delivery systems will likely be cut in half below the current START ceiling of 1,600 to approximately 800-1000 each.

Thus, the START follow-on should be seen as a bridging agreement, limited in its scope by the short time-span available for its negotiation, and limited as a result of differences on key issues that have befuddled U.S. and Russian leaders for years, including strategic missile defenses, conventional force balances and tactical nuclear weapons.

START Follow-On Phase II

The two governments should not stop with the START follow-on. At the conclusion of the START follow-on agreement, U.S. and Russian leaders should outline the goals and scope of their next round of nuclear arms reduction talks.

Key topics include:

- lower limits on all strategic nuclear warheads, including limits on the number of warheads held in reserve and procedures for dismantlement of excess warheads;
- accounting for and limitations on nonstrategic nuclear weapons;
- joint measures to increase the warning time available for each side and to lower the alert levels of deployed nuclear forces;
- revised limits on the number, location, and capabilities of strategic missile interceptors; and
- a process for engaging other states in the nuclear arms reduction process.

Progress will require some fundamental rethinking about the role of strategic and nonstrategic nuclear weapons and the meaning of "deterrence" for the United States, Europe, and Russia.

Current policies, which call for the possible use of nuclear weapons to defend U.S. forces and allies against massive conventional attacks and counter suspected chemical or biological weapons threats are counterproductive and unnecessary given the United States' conventional military superiority and the indiscriminate and disproportionate effects of nuclear weapons.

Two decades after the end of the Cold War, there is no plausible reason for U.S. and Russian leaders to maintain thousands of strategic nuclear weapons with large numbers on high alert.

As an eminent National Academies of Science panel concluded more than a decade ago, "[T]he only remaining, defensible function of U.S. nuclear weapons in the post-Cold War era is 'core deterrence': using the threat of retaliation to deter other countries that possess nuclear weapons

from using them to attack or coerce the United States or its allies."[14]

If Obama directs the Pentagon to conduct the new NPR on the basis of this "core deterrence" mission, then Washington and Moscow could each slash their respective arsenals to 1,000 or fewer total warheads within the next few years.

As outlined in ACA's 2007 "What Are Nuclear Weapons For?" report, the United States could downshift to a strategic triad of some 288 warheads on a fleet of three or more Trident submarines on patrol, 100 warheads on 100 land-based Minuteman missiles, and about two dozen nuclear-capable strategic bombers. Comparable numbers of nondeployed warheads could serve as a "responsive" force.

Rather than encourage states, like China (which has never sought a large strategic nuclear arsenal) to catch up with the U.S. and Russia, such reductions would open the way for a high-level dialogue among all the declared nuclear-weapon states on how to move toward meaningful reductions and the eventual elimination of all nuclear weapons.

Other nations beyond the United States and Russia also have important disarmament responsibilities. NATO can and must reconsider whether it will continue to station U.S. substrategic nuclear bombs in Europe as an anachronistic symbol of NATO unity, or whether it should withdraw these obsolete battlefield weapons to make a concrete contribution to nuclear disarmament and help open a dialogue with Russia (and possibly other states) on accounting for and reducing these weapons.

Restarting the U.S.-Russian nuclear arms control process will help repair frayed U.S.-Russian relations, open the way for dramatic reductions in the overall number of nuclear weapons, and improve global cooperation to help meet other nuclear threats.

[14] *The Future of U.S. Nuclear Weapons Policy*, Committee on International Security and Arms Control, National Academy of Sciences, 1997.