



Next Steps on U.S.-Russian Nuclear Negotiations and Nuclear Non-Proliferation

*Recommendations from the June 23 Meeting of
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Introduction and Background

Several key events have occurred with regard to nuclear arms reductions, security and non-proliferation since the beginning of 2010. Presidents Obama and Medvedev signed the New START Treaty on April 8; the April 12-13 nuclear security summit addressed steps to secure highly-enriched uranium (HEU) and plutonium stocks; and the NPT review conference was held from May 3-28. Moscow released its new military doctrine, and Washington released its nuclear posture review.

Given their focus on ratification of the New START Treaty, both sides have not yet begun serious planning for the next stage of U.S.-Russian negotiations. They are, however, exploring dialogues on stability and transparency regarding nuclear forces, plus a dialogue on missile defense cooperation.

The nuclear security summit produced an action plan designed to ensure that all HEU and plutonium is fully secured by 2014. The plan includes steps to consolidate smaller holdings and eliminate excess stocks of HEU and plutonium, and to broaden participation in a variety of multilateral arrangements to control nuclear materials and prevent nuclear smuggling and terrorism. The next step is a December 2010 meeting of the nuclear sherpas, who will review progress since the April summit, looking toward another meeting of heads of state in 2012.

The 2010 NPT review conference defied expectations and produced a consensus final document. Of particular importance, it calls on the nuclear-weapons states to move rapidly toward reductions in all types of nuclear weapons, diminish the role and significance of nuclear weapons, enhance transparency, and take steps to reduce the risk of nuclear conflict or accidental use. The document calls for a conference in 2012 on the establishment of a WMD Free Zone in the Middle East. It also calls on states to comply fully with IAEA safeguards and ensure that the IAEA has the resources to meet its responsibilities. It encourages remaining holdouts to ratify the Comprehensive Test Ban Treaty (CTBT) and seek its early entry-into-force, and reaffirms the importance of a Fissile Material Cut-off Treaty (FMCT).

The United States and Russia could jointly take a number of steps to build on these achievements and further strengthen their positions as leaders in the effort to reduce nuclear weapons and constrain nuclear proliferation. Of utmost importance would be actions to prepare for the next round of U.S.-Russian nuclear arms negotiations; to explore U.S.-Russian cooperation in the area of missile defense; and to build on the April nuclear security summit and May NPT review conference to further strengthen the non-proliferation regime.

Stability and Transparency Dialogues

The two sides should consider informal exchanges on stability and transparency regarding nuclear forces. These would open new channels for discussion that could bridge to—and prepare the way for—the next round of formal U.S.-Russian nuclear negotiations. Several subjects would be appropriate for these discussions.

Deterrence and Strategic Stability. The U.S. and Russian governments could consult on the U.S. nuclear posture review and Russian military doctrine, including on the meaning of those documents for U.S.-Russian nuclear relations. Nuclear weapons and deterrence remain factors in the bilateral relationship, albeit in a very different manner than was the case during the Cold War. It would be useful for the sides to discuss how each views deterrence and strategic stability—in terms of the relationship with each other as well as in relations with third countries and non-state actors—and steps that might further diminish a possibility of nuclear war. In this context, they might explore their respective understandings of the interrelationship between offense and defense, strategic and substrategic weapons, and nuclear and conventional systems and forces.

A candid discussion of each side's policy could point out areas of identical or similar approaches as well as steps each believes would maintain effective and stable deterrence in light of the changing nature of the nuclear threat. To the extent that the United States and Russia come to share a conceptual understanding on deterrence and strategic stability, that could facilitate the process of reaching agreement on future arms reductions.

The Implications for Strategic Stability of Long-Range, Conventional Precision-Guided Weapons. Long-range, conventional precision-guided weapon systems are gaining some capabilities to strike targets—including the strategic nuclear forces of the other side—that previously were targeted with nuclear weapons. They thus can affect strategic stability. The New START Treaty dealt with conventional warheads on strategic ballistic delivery vehicles (by counting them together with nuclear warheads under the treaty's 1550 warhead limit). But New START did nothing to address other types of long-range, conventional precision-guided weapons, such as cruise missiles. U.S.-Russian consultations on such weapons could foster transparency and consider steps—such as confidence-building and possible deployment measures and regulations—to ensure that this issue does not hinder further strategic arms reductions.

Space and Strategic Stability. The United States and Russia could discuss current and future space strategies with a view to minimizing concerns about the implications of those strategies for strategic stability. This U.S.-Russian dialogue could address security issues related to outer space and steps to prevent an arms race there.

Covering All Nuclear Weapons. The U.S. government has indicated that it will raise the issue of tactical nuclear weapons and non-deployed strategic warheads in the next round of negotiations. That would mean that, for the first time, U.S.-Russian negotiations would address *all* nuclear weapons, not just those deployed on strategic launchers. The Russian government has indicated its interest in limiting non-deployed strategic warheads and has called for the relocation of all tactical nuclear weapons to centralized storage depots on national territory.

Formal U.S.-Russian negotiations will not resume until New START has been ratified and, perhaps, entered into force. Meanwhile, the U.S. and Russian governments could explore questions that will arise in the formal negotiations. These include definitions, transparency on warhead numbers, verification and dealerting measures. In this area, joint preparatory efforts of both sides might make their future negotiations more efficient.

Definitions. U.S. and Russian experts might explore whether they could develop a common terminology for categorizing nuclear weapons. This would be useful if the next stage of negotiations gets into limits that go beyond those on deployed strategic warheads and launchers to capture all nuclear warheads.

Transparency. The Pentagon's disclosure of the total number of weapons in the U.S. nuclear stockpile as of September 2009 (except those slated for dismantlement) was a positive step. The Russian MOD should consider a similar declaration. Moreover, the sides should consider greater transparency on warhead numbers, if not publicly than privately with one another.

If the next round of negotiations will address all nuclear warheads, strategic and non-strategic, deployed and non-deployed, the sides most likely will have to declare those warhead numbers to each other.* Doing so earlier would allow each side to begin assessing the credibility of the other's numbers and build confidence for subsequent formal negotiations. Transparency on numbers could also allow the sides to develop better-informed proposals for the negotiations.

The sides could consider declaring to one another the number of nuclear warheads in four categories:

- deployed strategic nuclear warheads (nuclear warheads on ICBMs and SLBMs plus air-launched cruise missiles and bombs located at airbases with deployed heavy bombers equipped for nuclear armaments);
- non-deployed strategic nuclear warheads (all other strategic nuclear warheads at depots and storage sites);

* It is assumed that negotiations of limits on non-strategic nuclear forces would focus on the warheads, not the delivery systems, as most U.S. and Russian delivery systems for non-strategic nuclear warheads are dual-capable and can be used to deliver conventional warheads.

- non-strategic nuclear warheads (deployed abroad, or on national territories in depots at or near military bases, at centralized storage sites and at manufacturing plants—including nuclear weapons for tactical aircraft, short-range missiles, long-range sea-launched cruise missiles and other nuclear weapons, air defense and anti-ballistic missile nuclear warheads, among others); and
- retired warheads (awaiting dismantlement).

Another way of looking at categories of nuclear weapons from the angle of arms control and verification possibilities would be to divide them into two groups:

- deployed strategic nuclear weapons (nuclear warheads on ICBMs and SLBMs); and
- all other nuclear weapons at different types of storage sites and in varying degrees of readiness status (air-launched cruise missiles and bombs at heavy bombers' airbase storage sites, tactical missiles and bombs at airbases for tactical strike aircraft, tactical nuclear weapons at naval bases, strategic and non-strategic nuclear weapons in centralized storage sites and at manufacturing plants).

Verification Measures. New START found the right balance between sufficient verification provisions to give the sides confidence that a militarily significant violation would be detected in a timely manner and streamlining measures so as to minimize the impact on operational practices. Should the next round of negotiations produce limits on non-strategic nuclear warheads and/or non-deployed strategic warheads, the sides will need to consider verification measures that go significantly beyond those in New START, START I or the INF Treaty.

Without prejudice to the nature of the limits on non-strategic nuclear warheads and/or non-deployed strategic warheads that might be agreed in negotiations, the sides could begin to discuss possible verification measures. Work in this area could give the sides a head-start and facilitate negotiation of a new treaty. As a point of departure, the sides might look at work that was done in the 1990s in bilateral discussions on making nuclear reductions transparent and irreversible, such as methods to allow confirmation to the other side that a nuclear weapon had been disassembled without compromising sensitive design information.

Dealerting. Although the concept of dealerting strategic forces has been around for some time, the United States and Russia have not taken steps in this regard. The U.S. nuclear posture review specifically ruled out dealerting steps now but said studies have been initiated that “may lead to future reductions in alert postures.” The sides might use stability and transparency discussions to explore possible measures to dealert a portion of their land-based and sea-based deployed strategic forces, with a view to later determining whether such measures should be taken up in formal negotiations. It should be kept in mind that high alert postures (in particular, launch-on-warning postures) are motivated by the other nation's posture and, more importantly, by the other's counterforce capabilities.

The sides might also consider whether there are steps other than dealerting that would increase decision time in the event of warning of attack (e.g., reducing a threat of short-warning or undetectable strikes, improving transparency regarding strategic postures and operations, enhancing emergency communications between political leaders and military commands, etc.).

Third-Country Nuclear Forces. It is a given that, if the United States and Russia continue to reduce their nuclear forces, at some point Washington and/or Moscow will insist that other countries need to be limited. The sides may want to have an informal exchange on what that point is, with a view to determining whether one more round of negotiating purely U.S.-Russian reductions is possible. The U.S.-proposed strategic dialogue with China and possible Russian strategic dialogues with China, Britain and France may promote third-country acceptance of some transparency and confidence-building measures regarding their strategic forces and programs.

Possible Recommendations. In the stability and transparency discussions, the sides might take up the following topics:

[1] U.S. and Russian concepts of deterrence, strategic stability and the interrelationship between offense and defense, as well as between nuclear and conventional systems and forces, with a view to identifying where the sides' concepts converge and the implications for future arms reductions.

[2] The implications for strategic stability of long-range, conventional precision-guided weapons, including possible confidence-building, transparency and other measures and regulations.

[3] Current and future space strategies and their impact on strategic stability, including measures related to preventing an arms race in space.

[4] Definitions of different types of nuclear warheads, with a view to developing a common method of categorizing them.

[5] Disclosure to one another of the numbers of deployed strategic nuclear warheads, non-deployed strategic nuclear warheads, non-strategic nuclear warheads and nuclear warheads awaiting dismantlement.

[6] Concepts for monitoring data and limitations on non-deployed strategic nuclear warheads and non-strategic nuclear warheads.

[7] Possible measures to dealert strategic nuclear forces or otherwise increase decision time for the launch of nuclear weapons.

[8] Defining the threshold for U.S.-Russian reductions at which limits on third-country nuclear forces must be included.

Missile Defense Cooperation

Missile defense remains an area of potential—but thus far, unrealized—cooperation between the United States and Russia. The sides should as a matter of priority make the Joint Data Exchange

Center operational, either in Moscow or, if the Russians prefer, at an alternate location. The Center should become the venue for exchanging missile launch warning information in real time. The sides should also use missile defense discussions to explore how they might cooperate in this area.

Principles. It would be useful for the sides to explore principles that could guide missile defense cooperation. This could be done informally, and both sides should understand that discussion does not connote *a priori* acceptance of deployment of particular missile defense systems by the other. The principles could include:

- A focus on detecting and defending against intermediate- and shorter-range ballistic missiles. This focus would leave aside cooperation on strategic defenses, insofar as neither side would have confidence that such cooperation would not undermine its own strategic nuclear deterrent.
- Transparency with regard to systems designed to defend against intermediate- and shorter-range ballistic missiles and deployment plans for such systems. This would include the Standard SM-3, Patriot PAC-3 and THAAD as well as the S-300, S-400 and S-500 plus associated radars and sensors.
- Transparency with regard to possible deployment options for these systems.
- A focus on regional threats to Europe, including European Russia. This would address the ballistic missile threat of greatest worry to Washington (Iranian missiles) as well as a threat sometimes cited by Russian experts (Pakistani missiles). A Europe focus might also minimize Chinese concern that U.S.-Russian cooperation was directed against Beijing's missile force. (Cooperation on theater ballistic missile defenses for protection of U.S. Far Eastern allies and the Asian part of Russia could be a follow-on stage, including with the engagement of China, India and other interested nations.)
- Complementary rather than "joint" defense. The goal would be to make U.S. and Russian missile defense systems in the European region complementary, so that they could operate in a combined system. This would be different from a joint system, in that each side, while sharing launch detection and missile trajectory information, would retain control over the launch of its missile interceptors. There would be no dual-key; indeed, given the short flight times, there would be no time for consultation to produce a joint decision to launch an interceptor.
- Responsibility for interceptions. The United States would have responsibility for intercepting ballistic missiles aimed at NATO members; Russia would have responsibility for intercepting missiles aimed at Russia. U.S. interceptors would not be launched at missiles aimed at Russia without prior Russian authorization, and Russian interceptors would not be launched at missiles aimed at NATO members without prior U.S. or NATO authorization (except missiles launched at the United States over Russian territory).

NATO Role. The United States seeks to embed its missile defense system in Europe in a NATO structure. U.S.-Russian discussions might address whether U.S.-Russian missile defense cooperation—if it were to be agreed—should be conducted bilaterally or placed in a NATO-Russia context, using the NATO-Russia Council.

Possible Recommendations. In missile defense consultations, the sides could consider:

[9] Discussion of the principles for missile defense cooperation to protect Europe, including European Russia.

[10] Discussion of whether missile defense cooperation makes more sense as a U.S.-Russian or NATO-Russian project.

Nuclear Security Summit Follow-up

The April nuclear security summit outlined a broad plan of action to secure nuclear materials around the world. The United States and Russia could consider how they might cooperate to build on that summit. For example, to demonstrate leadership and set an example for others countries to do the same, the United States and Russia could both request IAEA-led International Physical Protection Advisory Service missions to review their physical protection of fissile materials. As the countries with the largest stockpiles of materials, and the greatest expertise in securing them, the sides could jointly forge an international “gold” standard for fissile material security. They could cooperate to help other countries implement all of their UN Security Council Resolution 1540 obligations, which require all countries to provide “adequate effective” security and accounting for all nuclear stockpiles.

The United States and Russia could continue to work together on regulations, including appropriate nuclear security and accountability systems, which might be shared with third countries. They might also consider joint threat briefings by American and Russian nuclear experts to describe potential nuclear security vulnerabilities and—perhaps working through the World Institute for Nuclear Security—create a shared database of unclassified information on actual security breaches that offer lessons learned to policymakers and nuclear facility managers.

Possible Recommendation:

[11] The sides should consider steps they might take jointly to build on the April nuclear security summit, looking for opportunities to demonstrate joint leadership before the December 2010 sherpas meeting.

NPT Review Conference Follow-up

The consensus achieved at the review conference showed meaningful support for the NPT but left much work to be done on specific measures to strengthen the nonproliferation regime. Many of these recommended measures are goals long advocated by the United State and Russia, as well as others.

At the same time, the review conference demonstrated a great need for the NPT nuclear weapon states, foremost the United States and Russia, to coordinate their policies and agree on common priorities, besides fulfilling their obligations under NPT Article VI.

To build the cooperation needed to achieve the non-proliferation goals, the most important action for the United States and Russia is continued, rapid progress on disarmament. Simultaneously, the United States and Russia could cooperate on specific measures to improve enforcement of the NPT. These include:

Reinforce Nonproliferation Institutions. The review conference underscored the importance of the IAEA, encouraged states to bring into force the additional protocol, and called on states to improve national capabilities to counter illicit nuclear trafficking. (However, actually getting greater commitment from states will require action outside of the NPT review process.)

The United States and Russia should promote universal adherence to IAEA comprehensive safeguards. They could require adherence to the 1997 additional protocol as a precondition for continuing access to peaceful nuclear technologies. They also could incorporate dismantling and/or return clauses into nuclear trade arrangements in the event a recipient state withdrew from the NPT. The United States and Russia could join forces in persuading the Nuclear Suppliers Group countries to include both conditions in model contracts for all future deals on peaceful nuclear cooperation.

The United States and Russia might hold discussions on ways to implement UN Security Council Resolutions 1540 and 1887, and continue working to increase the budget of the IAEA to help it meet its growing obligations.

Bring the CTBT into Effect. Entry-into-force of the CTBT is long overdue. The review conference encouraged the remaining Annex 2 states to ratify the treaty, all states to refrain from taking actions that undercut the CTBT, and the CTBT Organization to fully develop the International Monitoring System. The United States remains the key holdout. Ratification should be a top priority for the U.S. government next year. To facilitate Senate consent to ratification, the United States and Russia could reaffirm their understanding that the CTBT bans all test explosions of nuclear weapons. Once the United States ratifies, Washington and Moscow should encourage the remaining holdouts, particularly China and India, to follow suit. They should continue their moratoria on nuclear explosive testing. The United States and Russia, along with other major nuclear supplier states, could also consider declaring that it is their policy to discontinue nuclear trade with any country that conducts a nuclear test explosion.

Work Toward an FMCT. The final document of the review conference stressed the “urgent necessity” of an FMCT, and reaffirmed that the Conference on Disarmament (CD) should agree on a program of work and immediately begin negotiations. The United States and Russia should urge their friends and allies to adhere to a work plan and make progress toward an FMCT. A special focus should be Pakistan, which is currently blocking the treaty at the CD.

The final document encourages nuclear-weapons states to declare all excess fissile material and bring them under international safeguards arrangements. The United States and Russia, with the

biggest fissile material stockpiles, could take the lead by increasing transparency regarding their stockpiles and working to verifiably and irreversibly reduce these stocks. They could also work with other countries to encourage moratoria on the production of fissile material for weapons purposes until an FMCT can be negotiated.

In order to facilitate the universalization of the 1997 Additional Protocol and progress on an FMCT, the United States and Russia could encourage all NPT nuclear weapon states to submit on a voluntary basis all their enrichment and reprocessing facilities to IAEA safeguards.

Possible Recommendations. In following up on the NPT review conference, the sides could consider:

[12] A broad political resolution to coordinate their policies on non-proliferation and agree on common priorities.

[13] Actions to reinforce the IAEA, including universal adherence to the Additional Protocol, and to build upon relevant UN Security Council resolutions.

[14] Joining forces to persuade Nuclear Suppliers Group countries to condition all their future deals on peaceful nuclear cooperation on dismantling and/or return clauses.

[15] Steps to bring the CTBT into force.

[16] Cooperation to launch early negotiations on an FMCT.

[17] Encouraging all NPT nuclear weapon states to submit on a voluntary basis all their enrichment and reprocessing facilities to IAEA safeguards, in order to facilitate the universalization of the 1997 Additional Protocol and progress on an FMCT.

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Taken together, the above measures would comprise a useful and substantive agenda for U.S. and Russian officials to work on, beginning in fall 2010.