ARMS CONTROL TODAY July/August 2008

New Presidents, New Agreements? Advancing U.S.-Russian Strategic Arms Control

the poker players in Washington and Moscow effectively laid down their strategic arms control cards for the last time in the Bush and Putin administrations. They reiterated their intention to carry out further reductions in strategic offensive arms, they pledged to continue development of a legally binding post-START arrangement, and they restated their commitment to Article VI of the nuclear Nonproliferation Treaty (NPT), which calls for eventual total elimination of nuclear weapons.¹

They also agreed to disagree on missile defenses, with Russia continuing to object to the U.S. proposal to establish defense sites in Poland and the Czech Republic and reiterating its own proposal regarding the Gabala and Armavir radar sites. What was absent from the statement was any indication of an intent to press forward and fin-

ish the negotiations in time for President George W. Bush to sign a new treaty before he leaves office in January 2009.

In one sense, this slow motion is worrisome because START will go out of force in December 2009, giving the new U.S. president and his Russian counterpart, Dmitry Medvedey, only 12 short months to decide

on the follow-on to START. Without START, the Strategic Offensive Reductions Treaty (SORT) signed in May 2002 will lose the verification and counting provisions that had made this short and streamlined treaty somewhat meaningful. Senator Richard Lugar (R-Ind.) expressed this concern very well in a speech in January 2008: "We must not forget that this new concept (SORT) was buttressed by...the START Treaty... In other words, the conceptual underpinning of the Moscow Treaty depends upon something that is about to expire."²

In another sense, this lack of progress at Sochi is a good outcome. The major difference between the two sides on the future of START remains the Bush administration's insistence that verification and monitoring measures should be binding only politically; the agreement itself may be legally binding, but its accompanying monitoring regime would not be. Moreover, the administration's concept for monitoring evidently focuses on a number of transparency measures-visits to missile deployment sites, for example—without a rigorous definition of what activities would be permitted once such an on-site visit was underway. Clear definitions characterized the START verification regime, and the Russians are at ease with such an approach.

Alexei Arbatov is head of the Center for International Security at the Russian Academy of Sciences' Institute of International Economy and International Relations and a scholar-in-residence at the Carnegie Moscow Center. He previously served as a deputy in the lower house of the Russian parliament, the State Duma. Rose Gottemoeller is director of the Carnegie Moscow Center, former deputy undersecretary of energy for defense nuclear nonproliferation in the Department of Energy, and a member of the board of directors of the Arms Control Association.



President George W. Bush and then-Russian President Vladimir Putin prior to a April 6 press conference in Sochi, Russia. The two met to discuss ways to reach a legally binding agreement following the 2009 expiration of START.

They are not at ease with a simple transparency regime. In Russian strategic culture, transparency for the sake of trust is an alien notion. The Russian interagency establishment accepted a transparency regime only once, in the Open Skies Treaty, but that step was decided mostly to supplement the verification regime for the Conventional Armed Forces in Europe (CFE) treaty, which did not include the territory of the continental United States, while the Open Skies transparency regime did. The secretive Soviet and now Russian system has traditionally viewed transparency as a way for the other side to acquire intelligence information not available through the usual channels.

Moreover, although Russia currently plays somewhat fast and loose with the rule of law—Medvedev calls this tendency "legal nihilism"—the Russians are sticklers for international treaty law. A legally binding international treaty generally overrides domestic Russian law and regulation, thus a treaty is necessary for successful implementation. In particular, it provides for the access of foreigners to sensitive military and nuclear sites, which would never be permitted under a simple transparency regime agreed on an informal basis.

The mood in Moscow, therefore, is one of wait and see. Russian experts both in and out of government appear to believe that this essential difference concerning legally binding verification measures will not be resolved with the Bush administration. Perhaps more importantly, Russian analysts voice a great deal of concern about

the administration's proposed missile defense deployments in Poland and the Czech Republic. They are concerned about the long-term impact of unconstrained missile defenses in Europe on the Russian strategic arsenal. They do not believe that the currently proposed deployments, an X-band radar of limited range and 10 anti-missile launchers, will have such an effect, but they do worry that the longterm outlook will not be good once the United States begins such deployments. In particular, they have become neuralgic with concern that U.S. missile defenses in Europe could eventually deny a secondstrike capability to the steadily weakening Russian offensive forces.4

Waiting for the New President

Along with the conclusion that they cannot "get to yes" with the Bush administration on these issues, the Russians have been watching with great interest relevant developments in the U.S. presidential campaigns. Senator Barack Obama (D-Ill.) was first out of the box with a clear statement of intent to pursue further deep reductions. He pledged his allegiance to the goal articulated by George Shultz, William Perry, Henry Kissinger, and Sam Nunn to begin decisive steps toward achieving a world free of nuclear weapons.⁵ Obama also took steps to solidify his own agenda in this regard, authoring a piece of legislation with Senator Chuck Hagel (R-Neb.) that would speed up U.S. efforts to denuclearize.6

What took many in Moscow by surprise

was Senator John McCain's (R-Ariz.) evident willingness to join the denuclearization camp. In a speech at the University of Denver in May 2008, he declared his own allegiance to the goals laid out by Shultz and his colleagues, referring back to their origins with President Ronald Reagan at the Reykjavik summit in 1987.7 The Russians were particularly surprised at the Denver speech because they were still chewing over McCain's speech in Los Angeles six weeks earlier when he had roundly criticized Russia and pledged once again to throw the country out of the Group of Eight (G-8) highly industrialized countries.8 To the Russians, the vigorous agenda of nuclear arms reductions that McCain proposed did not compute with his urge to throw them out of the G-8. With whom did he expect to negotiate?

Russians recall many U.S. political campaigns that have spurned Russia and then returned to achieve agreements at the negotiating table. The most well-known version of this narrative involves Reagan himself, who reached an agreement to denuclearize with President Mikhail Gorbachev at the Reykjavik summit after a long journey launched when he declared the Soviet Union to be the evil empire.⁹

Some Russians seem to believe, therefore, that McCain's anti-Russian rhetoric will be tempered should he take office, and this conviction is growing now that the Denver speech is on the table. Ironically, the talking point still exists in Moscow that Russia can make more headway with a Republican administration than a Democratic one, whose members might be overconcerned about issues such as democracy and human rights—this after eight years of a rather determined Republican campaign of democracy building.

Consensus to Move Forward, but Not on Next Steps

Although action in the negotiations is on hold for the moment, both sides seem to have ample will to move forward once Bush leaves office and the U.S. presidential transition is underway. Certainly neither country is resisting the notion that a follow-on to START must be found and urgently. Each country clearly recognizes the deadline of December 2009 and seems to accept that a successful extension or replacement of START will do much to create a positive environment when the next nuclear Nonproliferation Treaty (NPT) review conference

gets underway in the spring of 2010.10

That said, several different options are already on the table, and others continue to be developed. For example, Shultz, Perry, Kissinger, and Nunn called for a straightforward extension of key provisions of the existing START in their Wall Street Journal oped published in January 2008.11 Russia and the United States, meanwhile, have agreed to the more ambitious goal of seeking a follow-on agreement to START, not merely an extension of the current agreement. Worries exist in both capitals about whether such an agreement can be negotiated, ratified by the two legislatures, and brought into force in a period of little more than a year. For that reason, some experts have called on Russia and the United States to take unilateral steps to extend the life of START and also perhaps to achieve further reductions. For those seeking to achieve a negotiated agreement, the options also range across a spectrum determined by START at one end and SORT at the other.

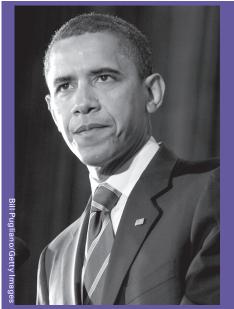
The pros and cons of these various approaches deserve to be widely debated. Several points may be highlighted to inform the discussion.

• A simple extension of START for the five years called for in Article XVII of the treaty would be the most straightforward approach and would create time and space to achieve a reasonable, negotiated outcome. According to the terms of START, if this step is to be taken, it will have to be decided by the end of December 2008, one year before the treaty goes out of force. Both governments, however, already have moved beyond this position. Each has its own arguments for saying that START is too cumbersome, a Cold War-era treaty that should not be extended. The Russians base their arguments mainly on the expense and complexity of the START Verification Protocol. They are fond of saying that a number of the notifications and inspections required no longer make sense and should be dropped from a future agreement for a streamlined and less expensive verification arrangement. The U.S. side makes a broader argument about the treaty being no longer relevant to the more friendly environment of the current era. Although this argument has become strained in recent years, it continues to be at the center of the Bush administration's argument against extending START.

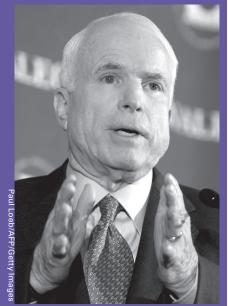
• Agreed steps to continue the main constraints of START, such as the limitations, counting rules, and major verification provisions, on an informal basis could be a valuable goodwill gesture should negotiations continue without success after the December 2009 deadline. In fact, they could play a significant role in ensuring confidence in the contin-

ued implementation of SORT, which has depended on START remaining in force "in accordance with its terms." In particular, such steps would ensure that further reductions in strategic forces are mutually transparent and correspond to SORT guidelines. An agreement of this kind also would address the complication that START signatories include Belarus, Kazakhstan, and Ukraine, who would have to agree to a formal extension of START.

• Another proposal has emerged to base further reductions in strategic nuclear forces on parallel unilateral statements made by the two presidents either immediately before the START deadline or after the deadline has passed. For example, the U.S. president might unilaterally state his intention to reduce U.S. strategic nuclear forces to 1,000 operationally deployed warheads while declaring his intention to eliminate warheads in storage. Such a declaration might begin to assuage Russian concerns about the upload potential of U.S. nuclear systems, a point to be discussed further below. Experts from both countries, however, have raised questions about such an approach. Similar to the transparency problem, Russians tend to see unilateral measures as a trap, forcing in motion reductions or changes in their nuclear







(Left to right) Presumptive Democratic presidential nominee Sen. Barack Obama (D-III.) June 16 in Flint, Mich.; Russian President Dmitry Medvedev April 9 in Moscow; and presumptive Republican presidential nominee Sen. John McCain (R-Ariz.) June 28 in Washington, D.C. Medvedev and either McCain or Obama will be facing the expiration of START at the end of 2009.

arsenal that the United States might very well escape by reversing a unilateral decision. Some U.S. experts, by contrast, argue that the United States should never give something for nothing where the Russian nuclear arsenal is concerned, and the only way to ensure that the two countries are giving and getting in equal measure is through a legally binding negotiated reduction.

• "START-Plus" is another option for which some experts have been arguing.¹³ This concept may include extending START until such time as a new treaty is negotiated, building further reductions in launch vehicles and warheads into the START structure, instituting a streamlined START verification regime, and accounting for conventional ballistic missiles under existing START counting rules. At a later stage, it would involve dealing with the problem of nondeployed warheads, for example by placing further limits on the number of delivery vehicles or creating a regime to verify nondeployed warheads, an idea the United States proposed in 1997 as the underpinning for a START III. Russian experts have not been particularly enthusiastic about the START-Plus idea because as in the case of a simple START extension, it will create both military-technical and political problems for Russia. Russian experts believe that START generated some difficulties for operating their strategic nuclear forces and in the future may hamper its planned modernization, in particular the deployment of Topol-M-type ICBMs with multiple warheads, formally called multiple independently targeted re-entry vehicles (MIRVs). A reworked START, for that reason, would not be the preferred approach in Moscow.

The Idea of an Enhanced SORT

An alternative approach, which we prefer, would be to pursue an enhanced SORT. This would not be a simple extension of SORT, which is six years old and was agreed by the past administration in Moscow and soonto-be past administration in Washington. An enhanced SORT would not return to the complexities of START, however, which, as the Bush team is fond of repeating, was

U.S. and Russian Force Structure Options Under an "Enhanced SORT"

Under a proposed new U.S.-Russian arms reduction treaty ("Enhanced SORT") each country would be allowed a maximum of 1,700 deployed nuclear warheads. Each of the countries, however, would face difficult choices in how to structure their forces within this limit. For example, Russia could maintain its current triad of strategic weapons systems or decide to no longer operate a strategic bomber force, leaving it with only a strategic dyad. The United States would likely choose to meet the limit in part by equipping the Trident missiles on its nuclear-armed submarines with fewer warheads. Those missiles currently carry eight warheads each. Depending on how many warheads it is permitted and decides to remove ("download") from each missile, the United States could end up operating more or fewer nuclear-armed submarines, ICBMs, and bombers.

Weapon System	Launchers	Warheads
Option 1, Russia: Triad		
Intercontinental ballistic missile (ICBMs)	300	700
Submarine-Launched Ballistic Missiles (SLBMs)	136-148 (8-9 boats)	600
Bombers	50	400
TOTAL	486-498	1,700
Option 2, Russia: Dyad		
ICBMs	350	1,100
SLBMs	136-148 (8-9 boats)	600
TOTAL	486-498	1,700
Option 1, United States: Downloading Five Warheads		
ICBMs	300	300
SLBMs (3 warheads per SLBM)	336 (14 boats)	1,008
Bombers	40	400
TOTAL	676	1,708
Option 2, United States: Downloading Three Warheads		
ICBMs	200	200
SLBMs (5 warheads per SLBM)	240 (10 boats)	1,200
Bombers	300	300
TOTAL	470	1,700
*Trident-2 system		

* Irident-2 system

negotiated during the Cold War, now long over. We must emphasize that we do not love SORT and are joined in that view by other experts in Moscow and Washington. As one senior retired Russian diplomat commented during a recent meeting at the Carnegie Moscow Center, SORT "reflects the times, even if we are unhappy with it."

An enhanced SORT would in fact remedy SORT's major weaknesses while addressing the main disagreements that have sprung up between the two sides over its implementation. For the Russian side, the major goal would be to maintain a semblance of parity with the United States while addressing the basic problem with SORT, the lack of acceptable counting rules and corresponding verification procedures. For the U.S. side, the major goal would be to maintain sufficient transparency with respect to Russian strategic nuclear forces while making sure that force cuts would not be too expensive for the United States and would be acceptable in force structure



A Trident D-5 submarine-launched ballistic missile (SLBM) is launched from the nuclear submarine *USS Tennessee* Dec. 4, 1989. The United States could choose to reduce the number of warheads on its SLBMs to meet future arms control standards.

terms, i.e., would not require the United States to move immediately from a triad of nuclear forces to a dyad.

These goals may be achieved by structuring an enhanced SORT so that the upper limit allowed for strategic nuclear forces would be 1,700 deployed warheads, to be achieved by the end of 2012. Presently, this number is the lower end of the 1,700-2.200 reduction level called for in SORT. The main issue to be addressed within this limit would be the counting rules, in particular how to account for the possibility that conventional warheads could be placed on Trident-2 submarine-launched ballistic missiles (SLBMs) or other delivery platforms and how to understand the U.S. principle of counting only "operationally deployed" warheads.

For the conventional warheads, the United States should simply agree to count them as nuclear warheads. Otherwise, we will end up with verification measures that are much too intrusive and to which

neither Russia nor the United States would agree at the current time. Such a counting rule should be acceptable because the United States only plans to deploy a few tens of such conventional missiles. Although the overall treaty limit remains at 1,700, counting them as nuclear will only slightly impact the U.S. strategic nuclear potential.

As far as counting operationally deployed warheads is concerned, Russia is not particularly worried about the United States storing warheads, as also has been the case with all past strategic arms control and reduction treaties. Russia is most concerned about the number of launchers that remain in deployment and the number of warhead re-entry vehicles (RVs) that it would be possible to load on those launchers. Russian experts call this "upload potential."

In START, this problem was addressed through a rule on downloading, according to which not more than two warhead RVs could be removed from a launcher without converting the MIRV dispensing platform, called the "bus," to carry fewer RVs. Even then, the maximum number of warhead RVs that could be removed—and credited against START limits—was four. The number of types of missiles that could be downloaded and the overall number of downloaded warheads were limited as well.

Interestingly, at the time START was negotiated, Moscow was interested in much more liberal restrictions on downloading than Washington. Now, as has happened many times in the history of strategic arms control, the positions of the sides have reversed. Because converting MIRV platforms is an expensive and lengthy process that sometimes requires additional flight tests, this downloading rule is in fact a tangible constraint on upload potential, particularly if buses with a smaller number of warheads have not been earlier tested on a given missile type.

We are not proposing to adhere to this downloading rule but would look for a cheaper and more acceptable approach that would give the United States some flexibility and give Russia some reassurance about U.S. upload potential. For example, the two sides could agree to liberalize the START downloading rule: not more than 3-4 RVs could be removed without converting the bus and not more than 4-5 with such a conversion.

Russia could easily agree to a ceiling of 1,700 warheads because it would help to save money by not having to extend the service life of some obsolete systems. It would also allow Russia to allocate more funding to a reasonable force modernization, including early-warning and command and control systems. The Russian triad has been shrinking and, regardless of any treaty, will have no more than 1,800-2,000 warheads by 2012, of which about 70 percent will be deployed on obsolete delivery systems or launchers with an extended service life. Under an enhanced SORT, by 2012, Russia could have a more modern force with about 300 ICBMs (700 warheads), along with eight to nine submarines (600 warheads), and 50 bombers with 400 air-launched cruise missiles. As an option, Russia could make the transition to a more economically rational dvad that would include the same force structure at sea and 350 ICBMs (1,100 warheads) on land. In this case, the bombers would be removed completely from the strategic nuclear arsenal and converted for regional missions.

The United States might find it more difficult. With a limit of 1,700 warheads by 2012, its force structure might include 14 submarines with 336 Trident-2 missiles and approximately 1,000 warheads (3 per missile); 300 ICBMs of the Minuteman III type, with one warhead per missile; and about 400 cruise missile warheads on 40 bombers. (The remaining bombers would be redeployed to conventional missions.) If the United States decided to save money by making no changes in MIRV dispensing platforms, leaving 4-5 warheads on each SLBM, then it would have to reduce further the number of Minuteman III ICBMs and bombers with cruise missiles, or it would have to remove two to four submarines from the strategic nuclear forces.

Thus, the United States would find itself faced with some difficult choices. The more severe the constraints on downloading, the more money the U.S. side would have to spend on converting MIRV platforms, or the more ICBMs, submarines, and bombers it would have to retire from its strategic arsenal.

Much will depend here on the wisdom of Russian diplomacy to achieve an optimal outcome. Maybe even a large U.S. upload potential is less dangerous if it involves converting the Trident-2 MIRV bus, although Russia always finds it useful to achieve the maximum retirement of U.S. strategic weapon systems. In order to gain an outcome that would be more acceptable for Washington, it might be possible to give ground on some issues that are impor-

tant for Moscow, such as the idea of a ban on deploying strategic nuclear forces outside national territory, counting real loadings (instead of an agreed average number) of weapons on bombers, or limiting missile defenses in Europe.

Still, depending on the new downloading rules, U.S. upload potential would be considerable: 1,000-2,000 warheads. In order to hedge against this potential, Russia might rely on some military-technical options in addition to an enhanced SORT. Foremost among such measures would be maintaining a strategic weapons production base in case Russia must quickly respond to a U.S. upload campaign. Russia has only one option for such a response, deployment of mobile Topol-M missiles equipped with MIRVs. Construction of new silos for fixed ICBMs, bombers, or submarines would simply be too expensive and take too long. At the moment, Russia is maintaining a policy of "balanced modernization" among the three legs of its triad; as a result, it only has enough resources to produce five to seven Topol-M ICBMs per year.

If Russia could expand that production potential to 30-40 missiles per year, along with the necessary RVs, then it would be able to add 1,000 warheads to its deployed strategic arsenal over three to four years if it had to do so in response to a U.S. build-up. Such a missile force would have high accuracy and robust command and control potential and sufficient launcher survivability. It would also have efficient coun-

termeasures to any likely missile defense system. If Russia were able to maintain the production capability for such a force, then U.S. upload potential would not cause Moscow as much worry.

After 2012, Russia and the United States could consider deeper reductions, to a level of 1,000-1,200 deployed warheads, along with reasonable and verifiable reductions in strategic force readiness, which would have the added benefit of easing the transition in both countries from a triad to a dyad force structure. We should not fool ourselves; such measures are complicated by themselves, and they require a lot of work to resolve complex, interconnected problems, among them, what to do about missile defense systems, highly accurate long-range conventional weapons, space weapons, nonstrategic nuclear weapons ("tactical" nuclear weapons), the expansion of NATO and adaptation of the CFE Treaty, inclusion of third countries in further nuclear reductions, and strengthening of the nuclear nonproliferation regime.

Finally, the question of warhead elimination is crucial. Eliminating warheads will remain a largely symbolic activity and one expensive and difficult to verify if it is not taking place in the context of a fissile material cutoff treaty (FMCT). If an FMCT is negotiated, it will be possible to pursue agreed methods to verify and dispose of nuclear warheads and material. This is a completely new and hopeful but thus far largely unexplored sphere of nuclear disarmament.



Russian Topol-M missiles are displayed on Red Square during the country's Victory Day parade May 9 in Moscow. Russia could choose to rely more heavily on these missiles if it were to adopt a strategic dyad.

The New Offense-Defense Relationship

To address these complex problems, one must begin by exploring current U.S. and Russian views of the offense-defense relationship. Strategic stability in the final decades of the Cold War was based on a shared understanding of that relationship, which was first enshrined in the Anti-Ballistic Missile (ABM) Treaty and the first Strategic Arms Limitation Talks interim agreement (SALT I), both of which were signed in 1972. With the 2002 demise of the ABM Treaty, the United States initiated new missile defense deployments in the United States and in Europe and continues to develop new missile defense technologies for deployment either at the theater or the national level. At the same time, Russia continues to maintain its single national missile defense site with nuclear armed interceptors around Moscow and has been building, deploying, and selling highly effective theater defense missile systems, for example the S-300 and S-400.

At the Sochi summit in April 2008, the two sides continued to disagree about the need to deploy missile defense components in the Czech Republic and Poland, but they agreed to continue talking about how Russian and U.S. proposals to address the issue could be reconciled. In particular, they agreed to continue fleshing out confidence-building measures that would assuage Russian concerns about the Czech and Polish sites. Because one of the proposals—having Russian military observers at the deployment sites—would require the approval of Prague and Warsaw, the confidence-building proposals involve third parties and remain far from agreement. Nevertheless, even President Vladimir Putin, who had been the staunchest critic of the U.S. missile defense proposal, offered a "certain cautious optimism" during the Sochi press conference.14

Thus, the relationship between missile offense and defense has entered new territory, but there have been no real opportunities for Russia and the United States together to consider the full implications. For that reason, the two countries should sit down at an early time to discuss precisely this topic. The relationship between missile offense and defense could become the first subject of a new set of consultations on strategic stability.

We are aware that there are bad precedents. Strategic offense and defense

negotiations were conducted in parallel throughout the 1980s and early 1990s, and whereas the offense talks led eventually to START, the defense talks were largely sterile, devoted to a long exchange of angry views with little in the way of substantive outcome. That result is undoubtedly a product of the fact that neither side wanted to place new constraints on strategic missile defenses. In fact, some in the United States were already on the road to planning the demise of the ABM Treaty.

We should do what we can to avoid this precedent because a thorough and goodfaith airing of differences on the defense topic will be the key to developing the foundation for very deep reductions in offensive forces as a follow-on to a proposed enhanced SORT. Moreover, without such a good-faith exchange and eventual move toward consensus, it is difficult to see how progress can be made on the long-term goal of a world free of nuclear weapons, as called for by Shultz et al. In fact, the need to move toward agreement on missile defenses is a major point that has been reiterated by Russian experts at the Carnegie Moscow Center since these four senior statesmen published their first Wall Street Journal op-ed in January 2007.

At this time, we are not endorsing a new negotiated agreement on missile defenses, for there are too many issues to be explored before either side will be ready to make that commitment. Instead, we are proposing a serious and detailed strategic stability consultation that would first air differences, then turn to developing specific ways in which the United States and Russia might work together in the missile defense arena.

This consultation should have two parts. The first would be an assessment of ballistic missile threats to the Russian and U.S. homelands and threats to allied territories in the Asian and European theaters and a joint consideration of optimal sites and modes of ballistic missile defense deployments to counter these threats. To the extent possible, the assessment should include sensitive information provided by both sides, to back up their own analyses of the threat. This process may also include a joint examination of the missile tests of Iran and other countries of concern, capitalizing on the experience of the START negotiations. During that period, Russia and the United States dedicated

special attention to determining ways to verify the range and throw weight of ballistic missiles during tests.

The second part of the consultation would involve an exploration of how to develop significant cooperation between the United States and Russia on missile defenses. This aspiration, first expressed by Reagan at the time of his 1983 "Star Wars" speech, has never come to fruition, although progress has been made in some areas. In particular, the NATO-Russia Council has served as the umbrella for a productive working group on missile defense cooperation in the European theater. 15

This working group has developed joint definitions of terminology and procedures for interacting on missile defense training, examined how Russian and NATO technologies might be used together in a theater missile defense system, and exercised missile defenses together over the last five years. In the comments of one Russian military expert, NATO and Russia have progressed greatly toward missile defense interoperability in the European theater thanks to the activities of this working group.¹⁶

Unfortunately, the demonstrable successes of this group have done nothing to dampen tensions over U.S. plans to deploy missile defenses in the Czech Republic and Poland. The most successful technical discussions cannot overturn political disagreement, a reality with which the parties will have to grapple at the political level. Nonetheless, a detailed discussion of potential areas of technical cooperation, beginning with a thorough examination of the Russian Gabala and Armavir radar offers already on the table, ¹⁷ may play a useful role in addressing these tensions.

This area of consultation should also consider the legal and procedural issues that would facilitate the exchange of information and technologies that would be required to develop joint cooperation on missile defenses. Such issues have significantly complicated other areas of technical cooperation in the 15 years since the demise of the Soviet Union, such as interactions over the International Space Station. Nevertheless, the space program has resulted in successful technology cooperation between Russia and the United States, and its experiences should be mined to develop the agenda for legal consultations over missile defenses.

Although these consultations cannot

by themselves clear the air of the grievances that have built up in Russia over missile defenses in Europe, they would begin to develop a new dynamic environment for considering the future of the offense-defense relationship. Because the consultations will take some time to accomplish this result, they should be backstopped from the beginning with confidence-building measures related to missile defenses. These would help early on to

ing the JDEC was first signed by Presidents Bill Clinton and Putin at their June 2000 meeting in Moscow. Over the next several years, implementation of the center fell prey to bureaucratic issues between Moscow and Washington such as the question of which side would pay for upgrading the school building that had been selected for the site. In addition, the general disinterest of the Bush administration toward negotiated agreements with Russia, espe-

next administration to clear up these issues. We assume that if the Iranian missile threat is taken seriously in the United States, then it would be worthwhile to Washington to make concessions to Russia, to reassure it, and secure its cooperation, provided that Russian demands do not obstruct the very concept of defense. For example, Moscow's claim that the Gabala and Armavir radars are an alternative to the radar and interceptor sites in central Europe is groundless

Despite the poor political atmosphere between Russia and the United States, there are good opportunities to achieve a timely replacement to START and to begin developing new joint cooperation on national missile defenses. We have no time to lose, but we also have new potential to work together through this transition period.

develop a better political environment for the discussions and highlight issues that could be fed into the agenda of the consultations. The experience of the NATO-Russia Council working group on missile defenses already provides some good examples of fruitful U.S.-Russian bilateral cooperation in command-post exercises within the context of the broader NATO community.

Another precedent of confidencebuilding measures that has in fact never been exploited is the New York Protocols of 1997 on delineation of strategic and theater missile defense systems. Russia and the United States negotiated these technical criteria and measures to improve mutual confidence in the scope and nature of the missile defense systems then contemplated or in deployment. The measures particularly emphasized a detailed exchange of technical information about Russian and U.S. missile defense programs. It is time to re-examine these confidence-building measures to see if they could be modified to assuage contemporary concerns about missile defenses, whether in Europe or at the national level.18

A third idea for confidence building, which should be rather straightforward to implement, would be to proceed with long-running plans to open a Joint Data Exchange Center (JDEC) for monitoring missile launches. The agreement regard-

cially when negotiated by earlier presidents, served to shelve the JDEC further. The agreement remains intact, however, and the center could be rapidly established as a venue for confidence building on missile defenses.

A Solution on the Czech Republic and Poland?

This serious new examination of the offense-defense relationship could be accompanied in the near term by a formal diplomatic process to resolve the existing differences over the planned U.S. missile defense deployments in the Czech Republic and Poland. If the next U.S. administration decides to proceed with this plan, the basis of a compromise is already clear: Russia would agree to the assembly of the radar and construction of anti-missile base infrastructure as long as it receives technical assurances and is able to monitor on-site that this defense is not directed at Russian deterrence assets. The United States would agree to postpone deployment of interceptors until Iran successfully tests long-range ballistic missiles. Assessment of such tests would be done jointly, on the basis of work already accomplished in the consultative process outlined above, to provide objective analyses of range and throw weight.

Although the basis of a compromise exists, the two sides currently differ on technical details and the question of how to structure an agreement; it will fall to the

and should not be accepted. On the other hand, U.S. insistence on reciprocal on-site inspections at Moscow ballistic missile defense sites is purely political and should be dropped, because this system is of no concern to the United States or NATO.

If and when Russia and the United States reach agreement on this matter, the Gabala, Armavir, and Czech radars might be linked to each other and to the proposed Moscow JDEC and current NORAD command centers and, if need be, to a proposed NATO command center in Brussels. Also, real work could start on making U.S. ground-based interceptors in Europe, seabased Aegis systems, and other anti-missile systems interoperable with Moscow missile defense, S-300 and S-400 systems, thus laying the ground for the development of a joint or partially common ballistic missile defense. By that time, the work of the consultative groups outlined above should provide necessary and valuable input.

It may be that Russia and the United States never come to develop a new treaty on missile defenses but instead develop an array of cooperative programs that in essence succeed in managing both sides' understanding of this complicated issue as it relates to strategic offensive forces. In that case, Russia and the United States could proceed with deep reductions in offensive forces, having confidence that the other could not derive advantage on the defense side from that process. Thus, two decades

after the end of the Cold War, Russia and the United States would no longer need to sustain mutual nuclear deterrence as a foundation of their strategic relationship, and they would no longer worry about the destabilizing effect of ballistic missile defenses.

Conclusions

Although Russia and the United States are entering a negotiating interregnum, both sides have ample will to move forward once Bush leaves office and the U.S. presidential transition is underway. Neither country is resisting the notion that a follow-on to START must be found and urgently. Furthermore, interesting proposals are already on the table as to how to replace START and cooperate on future missile defense programs. Therefore, this pause can be thought of as a rare opportunity to think carefully about how to move forward on the strategic nuclear arms agenda.

This process can also be a cooperative one. Historically, when a new leader arrives in power in Washington or Moscow, new arms control proposals would be developed unilaterally, then presented with great fanfare in a speech by the new U.S. president or Soviet general secretary. The negotiations would then begin, but only after a sometimes lengthy period of summitry and ministerial consultations.

The transition this time may be different. First, the talks between the Bush and Putin administrations have been productive, already resulting in understandings on some key issues. In particular, the two sides have agreed not simply to sustain the existing START, but to negotiate a follow-on agreement that would streamline some of START's more complex verification measures. Furthermore, they have agreed that this follow-on must be legally binding in nature. Second, both sides recognize that there is only a short period in which to work before START expires in December 2009 and no time should be wasted in conducting the normal cycle of summitry and government consultations. Most importantly, communications between the two countries have improved markedly since the end of the Cold War. Although political tensions have sometimes been at nearly a fever pitch in the past year, close discussions have nevertheless continued and not only on a government-to-government level. Nongovernmental experts have also been able to work together more closely and productively than they could have in the past.

For these reasons, we urge that maximum cooperation between Moscow and Washington be maintained during this transition period so that talks can begin very early in the new U.S. administration on finding a follow-on to START and resolving differences over missile defenses. We propose the formula of an enhanced SORT, which we believe has the potential to satisfy current requirements for the strategic forces in each country while laying the groundwork for further and deeper cuts in the future. By building on the arms treaty signed by Bush and Putin, this approach also would incorporate results achieved by those administrations. Such a proposal, effectively an acknowledgement of the Bush-Putin contribution, could be important to gaining the broadest possible political support for the negotiations going forward.

Despite the poor political atmosphere between Russia and the United States, there are good opportunities to achieve a timely replacement to START and to begin developing new joint cooperation on national missile defenses. We have no time to lose, but we also have new potential to work together through this transition period. **ACT**

ENDNOTES

- 1. For the full text of the Sochi Statement, see Office of the Press Secretary, U.S. Department of State, "U.S.-Russia Strategic Framework Declaration," April 6, 2008.
- 2. See "Lugar Speech at Conference on Defense Against Weapons of Mass Destruction," January 30, 2008, found at http://lugar.senate.gov.
- 3. Of course, the verification disagreement is not the only difference between Moscow and Washington in the negotiations. The Russians are also very concerned about the lack of counting rules for warheads and launchers if START expires and SORT is left to stand alone.
- 4. For more on this issue, see George Lewis and Ted Postol, "European Missile Defense: The Technological Basis of Russian Concerns," *Arms Control Today*, October 2007, pp. 13-18.
- 5. For a summary of the steps contemplated, see George P. Shultz, Sidney D. Drell, and James E. Goodby, eds., *Reykjavik Revisited: Steps Toward a World Free of Nuclear Weapons* (Stanford: Hoover Institution Press, 2008). See also George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "A World Free of Nuclear Weapons," *The Wall Street Journal*, January 4, 2007, p. A15; George P. Shultz, William J. Perry, Henry A. Kissinger, and Sam Nunn, "Toward a Nuclear-Free World," *The Wall Street Journal*, January 15, 2008, p. A13. Both essays can be

found at www.nti.org/c_press/c3_opeds.html.

- 6. The full name of this legislation is the Obama-Hagel Nuclear Weapons Threat Reduction Act (S. 1977). U.S.-Russian strategic arms reduction is only one aspect of the legislation, which emphasizes securing nuclear weapons and weapons-usable materials worldwide by 2012. It also supports a new look at the Comprehensive Test Ban Treaty, pursuing a fissile material cutoff treaty, and other major nonproliferation goals. See "Senate Passes Obama-Hagel Provision Aimed at Preventing Nuclear Terrorism," September 18, 2007, found at http://obama.senate.gov.
- 7. McCain also stated his commitment to a broad agenda of arms control and nonproliferation goals, including seeking the reduction and perhaps elimination of tactical nuclear weapons in Europe and reconsidering the Comprehensive Test Ban Treaty with allies and the U.S. Senate. See "Remarks by John McCain on Nuclear Security," May 27, 2008, found at www.johnmccain.com.
- 8. See "Remarks by John McCain to the Los Angeles World Affairs Council," March 26, 2008, found at www.johnmccain.com.
- An excellent new history on this topic is Melvyn
 Leffler, For the Soul of Mankind: The United States, the Soviet Union, and the Cold War (New York: Hill and Wang, 2007).
- 10. For a thoughtful commentary on the failure of the 2005 NPT Review Conference, see Rebecca Johnson, "Politics and Protection: Why the 2005 NPT Review Conference Failed," *Disarmament Diplomacy*, No. 80, Autumn 2005.
- 11. See Schultz, Drell, and Goodby, *Reykjavik Revisited*, pp. 78-79.
- $12.\ Strategic\ Of fensive\ Reductions\ Treaty,\ art.\ II.$
- 13. This description of "START-Plus" is drawn from the presentation "START Anew: The Future of the Strategic Arms Reduction Treaty," by Daryl G. Kimball made at the Carnegie Moscow Center on May 12, 2008. The comments of the Russian experts are also drawn from this seminar.
- 14. Wade Boese, "Bush, Putin Leave Arms Disputes Unsettled," *Arms Control Today*, May 2008, pp. 27-28.
- 15. For more on this NATO-Russia working group, see "NATO Topics: Missile Defence," May 16, 2008, found at o.int/issues/missile_defence/index.html.
- 16. Russian military expert, conversation with authors, Carnegie Moscow Center, May 2008.
- 17. For a review of issues surrounding the Gabala radar offer, see "Putin Offers Further Missile-Defense Ideas," Radio Free Europe-Radio Liberty, June 8, 2007, found at www.rferl.org/feature-sarticle/2007/06/afd27c1c-8fcb-4484-a8c9-a56503c456bd.html.
- 18. For full texts of the protocols, which are related to national and theater missile defenses, see www.nti.org/db/nisprofs/russia/treaties/abmdescr.htm.