Almost four years have passed since President Obama made his speech in Prague, outlining an agenda of nuclear disarmament, nonproliferation, and counterterrorism that envisioned “the peace and security of a world without nuclear weapons.” His speech pledged a number of actions including: reducing the United States’ (and others’) reliance on nuclear weapons for national security, although he made clear that the United States would maintain “a safe, secure, and effective arsenal to deter any adversary and guarantee that defense to our allies;” negotiating a new Strategic Arms Reduction Treaty (START) with Russia, leading to further cuts with all nuclear states; seeking U.S. ratification of the Comprehensive Test Ban Treaty (CTBT); introducing a new treaty to end the production of fissile materials intended for use in nuclear weapons (now the proposed Fissile Material Cut-off Treaty, or FMCT); strengthening the Nuclear Non-proliferation Treaty (NPT) as a basis for cooperation; and expanding partnerships to lock down sensitive materials, break up black markets, detect and intercept materials in transit, and otherwise disrupt the illicit nuclear trade. “Because this threat will be lasting,” Obama said, “we should come together to turn efforts such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism into durable international institutions . . .” He also announced “a new international effort to secure all vulnerable nuclear material around the world in four years.”

Speaking about nonproliferation, President Obama could not avoid mentioning Iran’s nuclear and ballistic missile activity that posed “a real threat not just to the United States but to Iran’s neighbors and its allies.” He
praised, in this connection, the “courageous” behavior of the Czech Republic and Poland which agreed to host U.S. missile defense elements on their territories. Here he made a remarkable statement: “As long as the threat from Iran persists, we will go forward with a missile-defense system that is cost-effective and proven. If the Iranian threat is eliminated, we will have a stronger basis for security, and the driving force for missile-defense construction in Europe will be removed.”

By his speech, President Obama sent a very clear signal to Russia that he is ready to come back to a nuclear arms control agenda that was practically abandoned by his predecessor. (The 2002 Moscow Treaty, also known as the Strategic Offensive Reductions Treaty (SORT) does not count since it is not a full-fledged arms control treaty.) So, how has the President implemented the declared Prague agenda?

The Role of Nuclear Weapons

The Nuclear Posture Review (NPR) report, publicly released by the U.S. Department of Defense on April 6, 2010, shows a significant improvement in tone and direction over the review completed by the George W. Bush administration in 2001. The 2010 report, unlike its predecessor, records no need for research and development to enhance the military capabilities of nuclear weapons. Instead, it fixes a decision to start a “comprehensive national research and development program to support continued progress toward a world free of nuclear weapons.”

The document also features substantial strategic innovations. Highlighting the need to preserve nuclear deterrence, it narrows the role of nuclear weapons in U.S. national security policy and illustrates plans to cut U.S. nuclear weapons. Washington’s security assurances for its allies rest primarily on ballistic missile defense (BMD) and conventional weapons, including long-range precision-guided missiles. Acting in the interests of a nuclear-free world and countering nuclear proliferation and terrorism, the United States also intends to strengthen strategic stability, transparency, and mutual trust with China and Russia.

Nevertheless, the NPR continues to rely on old policies regarding deployment and modernization of nuclear forces (still comprising land, air, and sea components) and their infrastructure. Moreover, it projects reliance on nuclear forces as a central instrument of national security strategy for decades to come. No substantial changes are made in the deployment or alert states of the nuclear force structure of heavy bombers, land-based missiles, and ballistic-missile submarines.

As for modernization, the NPR takes a rather aggressive approach. It states that the United States plans to develop and deploy a new generation of nuclear
weapons delivery systems in the next two decades, including ballistic-missile submarines and land-based missiles; is replacing existing nuclear-capable fighter-bombers with the stealthy F-35 Joint Strike Fighter; will study whether and how to replace the current air-launched cruise missiles; will not accept limits on its ongoing missile defense program; and will preserve options for deployment of conventionally-armed missiles. A subsequent report to the Senate, in connection with new START ratification, states that “over the next decade the United States will invest well over $100 billion in nuclear delivery systems to sustain existing capabilities and modernize some strategic systems.”

The NPR also says that warhead “life extension work will proceed for the W76, deployed on submarine launched ballistic missiles; the B61, deployed on fighter-bombers; and the W78, deployed on land-based missiles.” While the NPR claims that the work will “not support new military missions or provide for new military capabilities,” in fact, life extension for W76 is adding to the capability to hit hard targets. Also, military capabilities do not depend on warheads alone, and there are ongoing improvements in delivery systems such as the targeting, command, and control systems of the F-35. Major investments in new weapons production facilities are also approved, supposedly to hedge against further reductions in deployed and non-deployed nuclear warheads. The administration plans to spend $80 billion up to 2018 on the nuclear weapons complex.

So judging by the NPR, the strategic goals of President Obama’s administration, in line with his declared Prague agenda, have undergone some changes. As for the substance of U.S. nuclear weapons policy, it remained practically unchanged, despite the lofty goals declared in Prague.

Substrategic Capabilities

In 2010, the new START Treaty was signed by Presidents Medvedev and Obama, and ratified by the Russian State Duma and U.S. Senate. The parameters and conditions of the new Treaty have been discussed quite broadly throughout the expert community, and discussions will continue at least for the duration of the Treaty. What is really important is the fact that signing of the new START Treaty has ended a protracted pause in the strategic dialogue between the two nuclear superpowers, has demonstrated growing trust between them, and has shown that the two countries are able to compromise on solutions to complicated problems. Moreover, the U.S. President for the first
time in the history of the Soviet (Russian) strategic dialogue agreed to a truly balanced and just strategic offensive weapons’ treaty.

The main limits under the new Treaty establish the number of warheads permitted on deployed launchers (1,550), the number of deployed launchers allowed (700), and the total number of deployed and non-deployed launchers for ICBMs, SLBMs, and heavy bombers (800). The treaty has set no restrictions on the structures or sub-levels of the nuclear triads of the two sides, but has simplified the rules for counting strategic weapons and for the system of inspections and notifications.

At the same time, the new Treaty has demonstrated a most important area where the nuclear policies of both Moscow and Washington coincide: neither of them in the foreseeable future intends to make real reductions in the numbers of strategic arms below the levels set by the 2002 SORT. The reduced number of warheads under the new START is actually only a demonstration of the fact that the rules for counting armaments on strategic carriers have changed. As compared to those rules of the START I Treaty, warheads under the new START are now counted by the number of warheads actually placed on the ICBMs and SLBMs, regardless of the number of places for warheads on their platforms, and any number of air-launched cruise missiles on heavy bombers is to count as a single warhead. It is absolutely clear that, for the United States, the Russian non-strategic nuclear weapons (NSNW) issue is much more important than continued strategic offensive reductions.

Since the issue of Russian NSNWs was specifically addressed in the Resolution of Advice and Consent to the ratification of the U.S.—Russian New START Treaty (adopted by the U.S. Senate in December 2010), it deserves some clarification. The document says that the United States and Russia will agree “to address the disparity between the non-strategic (tactical) nuclear weapons stockpiles of the Russian Federation and of the United States and to secure and reduce tactical nuclear weapons in a verifiable manner…”

Western concerns as regards Russian NSNWs are based on the following arguments:

- Reductions by the United States and Russia of their strategic nuclear arsenals will increase the Russian advantage in nuclear weapons as a whole;
- In case of a serious military conflict, tactical nuclear weapons belonging to the general forces may be employed at an early stage of conflict with a high risk of nuclear escalation;
- NSNWs are believed not to be equipped with the same highly reliable systems preventing non-authorized use that strategic nuclear weapons have, which makes the possibility of non-authorized nuclear strike much higher;
- NSNWs, especially of older types, are believed to be less protected by security, have smaller weight and size characteristics, and are thus more tempting objects for terrorists.

Russia does not agree to any of these four arguments, except perhaps the higher risk of tactical nuclear weapons being employed. Taking into account the relative weakness of the Russian general-purpose forces, the Russian command in case of a major conflict may be tempted to use tactical nuclear weapons to compensate for the numerical or technological superiority of the attacking enemy. As to the third and fourth arguments, they may not be considered as well-founded since now all Russian tactical nuclear weapons are kept in safely guarded central storage sites and are equipped with highly reliable security devices that prevent their non-authorized use. The fact that there is not a single proven instance of loss or theft testifies to their security.

The place of NSNWs in Russian military strategy is critical. Under the present circumstances, they are practically the only means of securing Russia’s independence and territorial integrity. On the contrary, the United States, due to its geographical and geopolitical situation, does not need NSNWs to defend its national territory at all.

Therefore, Russian and U.S. rationales for maintaining NSNWs differ. The United States sees their value largely in political terms: that is, providing a security link between the United States and Europe while serving as an element of NATO’s nuclear capability. Russia attaches more military significance to its NSNWs. It sees those weapons as offsetting a conventional force disadvantage vis-à-vis its neighbors, serving as a force enhancer (should conventional defense fail), and offering possibilities to escalate or to control escalation. Moreover, Russia considers its tactical nuclear weapons as a counterbalance to the nuclear forces of third countries, the nuclear capabilities of which practically all are able to reach the territory of Russia. Reducing Russian strategic nuclear potential, in accordance with the bilateral treaties with the United States, relatively increases the role of Russian tactical nuclear weapons to contain the nuclear countries of Eurasia.

For all these reasons, Russia’s attitude toward NSNW reduction remains rather cool. So, if Russia’s Western partners want Moscow to make some concessions on NSNW issues, they should consider linking progress on other

Non-strategic nuclear weapons are practically the only means of securing Russia’s independence.
questions important to Moscow on the U.S.–Russian agenda, including missile
defense, the weaponization of space, and non-nuclear strategic offensive
weapons.

But the main obstacle to any U.S.–Russian discussion on further reductions of
their nuclear arsenals, strategic or non-strategic, is definitely the U.S. missile
defense system in Europe. Russia does not believe that the European segment of
the system is not targeted at Russian deterrence potential. Moreover, the fact that the U.S.
administration stopped speaking about the possibility of revising missile defense plans if the
Iranian threat disappears (what President Obama mentioned in his speech in Prague) only
strengthens Russian suspicions. So, the crisis between Russia and the United States over
missile defense in Europe—temporarily defused by President Obama’s decision on September 17,
2009, to adopt a new architecture for the U.S. missile defense system—might very well flare up
again in an even more acute form, especially when the U.S. Standard-3 sea-
launched anti-ballistic missiles and their land-based equivalents reach their
strategic potential by 2020. These will be capable of intercepting ICBMs and
SLBMs.

This is why Russia refuses to start practical cooperation on missile defense
(which would include creation of joint data-exchange centers, joint missile
threat assessments, technological cooperation, etc.) in the absence of clear,
legally-binding guarantees that the future U.S.-NATO European missile defense
system is not targeted at Russian deterrence potential. Moreover, Russia insists
on specific limitations on the number of interceptors, their speed and range,
areas of sensors, and interceptors’ deployment. This leads to a deadlock in
consultations since a document containing guarantees and limitations as
requested by Russia, even if signed by President Obama, has practically no
chance of seeing ratification in the U.S. Senate.

Nevertheless, I believe that compromise over missile defense is possible.
Provided U.S.–Russian relations do not deteriorate for any political reasons, the
two sides could negotiate the following deal: Russia would agree to a “Rome-
type” declaration7 (referring to the May 2002 Rome Declaration signed between
NATO countries and Russia, designed to begin a new quality of relations after
resolution of the Kosovo crisis) on missile defense cooperation between NATO
and Russia. It would contain a political commitment that European BMD is not
directed against Russian deterrence potential, be signed at the highest political
level by heads of states and governments of Russia and all NATO countries, and
the United States would give up (or at least indefinitely postpone) its plans to deploy missile defense elements near Russian borders (notably in Poland and the Baltic and Northern Seas). The prospects of possible further reductions of nuclear weapons depend mainly on the U.S. readiness to solve this complex issue.

**The CTBT**

The Comprehensive Nuclear Test Ban Treaty opened for signature in September 1996. As of April 2012, 183 states have signed the Treaty, while 157 have also ratified it. Still, the Treaty is eight ratifications away from entry into force since two of them (China and the United States) are *de jure* nuclear states, four (India, Israel, Pakistan, and North Korea) are *de facto* nuclear states, and two (Egypt and Iran) are the so-called “threshold countries,” technically able to produce a nuclear weapon but have not yet done so.

China has halted ratification even though it has made all the appropriate preparations. Any further progress depends upon a number of factors, including both Treaty ratification by the United States and the overall climate surrounding nonproliferation and nuclear disarmament, which China believes has been significantly degraded by U.S. efforts to create regional and global missile defense systems. However, it can be expected that China will ratify the Treaty once it has been ratified by the United States.

Engaging India and Pakistan in the process remains a serious problem for the CTBT. After conducting a series of nuclear tests in May 1998, the two countries declared a moratorium on further testing, and at the 53rd Session of the UN General Assembly in 1998 announced their intention to move forward with the CTBT. Treaty ratification by the United States would exert significant influence on the decisions of Delhi and Islamabad.

The positions of Egypt, Iran, and Israel are largely interrelated and in many respects subject to the overall situation in the Middle East, which continues to be quite uncertain. Nevertheless, the United States may contribute significantly to their readiness to ratify the Treaty by placing more international pressure on the holdouts remaining.

The position of North Korea on CTBT ratification is unpredictable because of the political unpredictability of the Pyongyang regime itself. It seems reasonable to include CTBT into the agenda of any future Six-Party Talks. Maybe any success of the talks would help change Pyongyang’s position on CTBT.

Thus, CTBT ratification by the United States is widely perceived to be a game-changer for the entry-into-force process. The fact that CTBT ratification was declared by President Obama as a policy goal is a good sign for the nonproliferation
process as a whole, since a comprehensive ban on nuclear tests is always mentioned as the most urgent measure aimed at ending the nuclear arms race.

Nevertheless, the biggest impediment to the Prague Agenda, especially for the CTBT, is the U.S. Senate. Stubborn Republican positions that the United States should reserve the right to resume nuclear testing—if there is a need to check the aging nuclear weapons or develop new types—prevents President Obama from submitting the Treaty for ratification for the second time, since a second Senate defeat of the Treaty (the Senate first rejected the CTBT in 1999) would be bad for U.S. world standing and the future prospects of the Treaty itself. So, the chances that President Obama might fulfill the CTBT part of his Prague agenda are as unlikely as they were ten or fifteen years ago.

The FMCT

For many decades, the international community has viewed a ban on production of nuclear weapons usable fissile materials as a truly significant step that would bring the world closer to the dual goal of strengthening the nonproliferation regime and eliminating nuclear weapons. As nuclear disarmament has once again become a subject of lively debate and presidential initiatives, the search for a solution to the problem of weapons-grade fissile materials is back on the agenda. Russian President Medvedev and U.S. President Obama said in their joint statement following their April 1, 2009, meeting that they “support international negotiations for a verifiable treaty to end the production of fissile materials for nuclear weapons.” Unfortunately, that is practically all they can say and do under present circumstances.

The course of the international debate on the Fissile Material Cut-off Treaty (FMCT), which goes back more than 50 years, has been concentrated on two main problems. First, there is no doubt that the international community will not accept a ban on future production of fissile material for weapons purposes without some steps toward reducing the existing stockpiles—or at least some moves toward greater regulation and transparency of those stockpiles. Without such steps, any talk of fissile material cut-off will be seen as an attempt by one group of nations to preserve existing inequality and discrimination, and negotiations will remain deadlocked.

Second, the continuing efforts are being also hampered by the difficulties of developing appropriate verification and transparency mechanisms. It is obvious that any push for the FMCT without verification mechanisms would be pointless, and the present U.S. administration seems to have realized that. But verification remains a very tough nut to crack. The most realistic solution would be a gradual, step-by-step introduction of an FMCT verification system which would incorporate not only a system of NPT safeguards and the Additional
Protocol (adopted by the IAEA in 1997 to strengthen and expand existing safeguards for verifying adherence to the NPT), but also agreed verification mechanisms for stockpiles and HEU for naval propulsion.

Of course there are other problems, some of them bilateral. For example, Russia and the United States have not reached consensus on the terms of the proposed FMCT for weapons and explosive devices. Russia wants to define fissile material as weapons-grade uranium and plutonium (with the degree of enrichment more than 90 percent), while the United States wants fissile material to include HEU and plutonium (with a much lesser degree of enrichment). The U.S. definition is much more expansive, and would make more material illegal under the FMCT.

Any legally binding treaty will make sense only if all nuclear weapon states sign it, regardless of their NPT status, and if other countries that have nuclear technology and facilities sign as well. The initial draft of the treaty should probably be agreed first by a rather narrow circle of key nations and then submitted for broader discussion to the Conference on Disarmament (CD). Russia and the United States, which hold the world’s largest stockpiles of nuclear weapons usable fissile material, could play the leading role in this process, but of course it will be a long one.

Is the NPT Dying?

The deterioration of the Nuclear Non-proliferation Treaty (NPT) has been quite obvious of late. Some even say that the treaty in its present form does not meet the geopolitical, military, and economic realities of today’s world. As a result, the international nonproliferation regime is going through what may be the most difficult period in its history—but that is the price for the policies of those who advocated an unconditional and indefinite NPT extension (completed at the NPT Review and Extension Conference in May 1995). Perhaps extension was a mistake, made for the best and most rational reasons, since the international community was not, and is still not, ready for a serious discussion of ways to update a treaty signed more than four decades ago. Perhaps that will change in another decade or so, but now the countries that are not happy with the NPT have only one alternative: to violate it instead of waiting for it to be revised.

In his Prague speech, President Obama outlined the basic bargain to strengthen the NPT. It sounded good, but is it realistic and can it be
Indefinite extension of the NPT may have been a mistake... for the treaty itself.

implemented in the foreseeable future? Yes, the NPT remains the most universal international document ever (outside of the UN Charter), with 188 UN nations currently members and only four outsiders (India, Israel, North Korea, and Pakistan). But these four are exactly the ones that possess nuclear weapons (although I still doubt that North Korea has a nuclear warhead, aviation bomb, or artillery shell—it has only definitively tested a nuclear device).

So, in reality, there are two groups of countries which possess nuclear weapons: the so-called “nuclear five” inside the NPT (China, France, Russia, the United Kingdom, and the United States) and the abovementioned four outside of it. The nuclear five have committed to gradual nuclear disarmament under the provisions of Article VI of the NPT, but are not ready yet (for various reasons) to completely get rid of nuclear weapons. And the other four do not even mention nuclear disarmament as their political goal (also for various reasons).

On the other hand, a group exists of so-called “threshold” countries (more than twenty according to the IAEA) that possess nuclear fuel cycle technology, acquired through peaceful atom programs that under certain political circumstances may be used for military purposes (for example Japan, South Korea, or Taiwan). Alongside the technological capabilities of these countries to produce nuclear weapons, of particular concern are the world’s vast accumulated stockpiles of HEU and plutonium used for energy, military, and scientific purposes (an estimated 1700 tons of uranium and 460 tons of plutonium). These stockpiles are located both in nuclear and “threshold” countries, and are not always reliably protected by the NPT in its current form from theft or sale to potentially malicious buyers.

There is one more geopolitical reality that hinders strengthening the NPT. The past bloc-to-bloc confrontations have been replaced by numerous crises in regional and local conflicts. As a result, globally there is a clear tendency to weaken state sovereignty guarantees, and to interfere (including using military means) into the internal affairs of other countries, sometimes under the pretext of solving nonproliferation problems. In such conditions, some countries that have nuclear potential start to think of nuclear alternatives as a means to deter possible aggression, raise their international status, and secure superiority over their neighbors. If a real threat to their national security and state sovereignty arises, they will not hesitate to start production of nuclear weapons.
Keys to Strengthening Nonproliferation

But it is not enough to enumerate the reasons that have generally weakened the nonproliferation regime. What concrete steps can be taken to more effectively enforce nonproliferation and to deter serious violations of NPT obligations? The international community undoubtedly faces the need to continue the process of realistic nuclear disarmament and urgently strengthen the nonproliferation regime. The question of what is more important—nuclear disarmament or nonproliferation—is still open. But if we want to create favorable conditions for further reductions of strategic nuclear weapons, we should work hard to solve concrete problems in the context of strengthening the nuclear nonproliferation regime, such as:

- An offer by nuclear powers to non-nuclear NPT members in a legally binding instrument to not use or threaten to use nuclear weapons against them;
- Securing of unconditional rights for all NPT members to research, produce, and peacefully use nuclear energy without discrimination, but under strict observation of all agreements and arrangements in the framework of nuclear nonproliferation;
- Further reinforcement of the IAEA safeguards system—all states engaged in significant or minor nuclear activity must become party to the 1997 Additional Protocol (now only slightly more than 100 nations out of 180 NPT members have agreed to observe it);
- Placing nuclear fissile materials (diverted from military to peaceful purposes) under IAEA safeguards in the framework of voluntary safeguards agreements;
- Speedy implementation of the CTBT and a start and speedy implementation of the FMCT;
- Coming into force of all concluded Nuclear-Free Zone Agreements, and encouraging new nuclear-free zones—especially in unstable regions like the Middle East.

Of course, this list is not comprehensive, but it represents the main problems that require the attention of the international community.

Most importantly, any improvement of UN Security Council enforcement operations, which is the only international body with the right to legitimately punish a state violator, will largely depend on more closely aligning interests among the three great powers: China, Russia, and the United States.

The main lesson that the Security Council can draw from the Iranian and North Korean nuclear crises is that in situations of material non-compliance with the NPT regime, the United Nations must be better prepared to intervene effectively at an early stage of a nuclear dispute, in order to hold accountable those responsible for proliferation acts. A potential violator must receive a clear
warning well in advance about the seriousness of the UN Security Council’s intention to use its full authority and ability to undertake resolute collective actions to thwart proliferation. The UNSC should set measures in advance and have appropriate counterproliferation procedures in place to remove any illusions that proliferators harboring military nuclear plans and engaging in adventurism would go unpunished. The arrangement should serve as an effective deterrent.

It is especially important to agree in advance on what actions to take against a regime that violates the NPT while still a member and then expects to be able to withdraw from the Treaty obligations with impunity. Since the country would remain responsible for any NPT violation it committed prior to withdrawal, it would seem appropriate to spell out the consequences of such violation in advance. The International Commission on Nuclear Nonproliferation and Disarmament (ICNND) has recommended that the UN Security Council should severely discourage withdrawal from the NPT by making it clear that such an act would be regarded by UNSC as a *prima facie* threat to international peace and security and would lead to punitive consequences foreseen under Chapter VII of the UN Charter. Consequences would include, as said in Article 41 of Chapter VII, “complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.” Moreover Article 42 of the same chapter says that “should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.”

It would also be important to enhance the capabilities of the IAEA to investigate activities which might lead to the development of nuclear weapons. The ICNND has advanced practical recommendations in this field, including a proposal to update the Additional Protocol with specific references to dual-use items, reporting on export denials, a shorter notice period, and the right to interview specific individuals.

**Net Assessment of the Prague Agenda**

President Obama’s Prague speech made a pledge to secure all vulnerable nuclear material around the world in four years, break up black markets, detect and intercept nuclear materials in transit, and turn efforts such as the Proliferation Security Initiative and the Global Initiative to Combat Nuclear Terrorism into durable international institutions. Of course, the first part of his pledge proved impossible; it will definitely take more time to solve the problem of securing all vulnerable nuclear material. All other mentioned threats, as President Obama
rightly described them, are lasting ones. Nevertheless, if there is enough political will and cooperation among leading nations, they may be effectively met.

As for turning the two nonproliferation initiatives into durable international institutions, I have reasonable doubts. First of all, it is not clear what the term “international institutions” in a nonproliferation context means. If it means to lay concrete practical steps for the foundation of global counter-terrorist infrastructure, they have already been, and continue to be, made in the framework of the Global Initiative to Combat Nuclear Terrorism. If it means creating two additional international organizations (in this case it is not clear under which auspices), then it is hardly realistic.

The next NPT Review conference is to be held in 2015. If no progress is made on the list of issues confronting nonproliferation, then the fate of the NPT itself and the nonproliferation regime in general does not seem optimistic in today’s world.

Notes

2. Ibid.