

NUCLEAR WEAPONS IN RUSSIAN NATIONAL SECURITY STRATEGY

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Speaking on November 11, 2009 during a visit to the oldest Russian nuclear weapons laboratory at Sarov, the head of Russian Orthodox Church Patriarch Kirill endorsed nuclear weapons and nuclear deterrence. “We must strive for world without nuclear weapons,” he emphasized, “but in a manner that does not hurt our country.” Calling the closure of the St. Seraphim monastery at the place of the nuclear lab by Soviet authorities a “sinful act,” he also congratulated the lab employees who, “at the home of St. Seraphim [developed] a weapon of deterrence that prevented World War III.”¹

This statement, which stands in stark contrast to the position advocated by the majority of church leaders in the West, is in tune with the dominant view among the Russian public. Nuclear weapons are widely regarded as a symbol and a guarantee of Russia’s influence, independence and security – the ultimate unbeatable card in global power politics. The world is regarded as a dangerous place, full of potential or actual enemies that would attack or subjugate Russia any moment if it is unable to crush the attacker; the United States and NATO as a whole (more rarely, also China) top the list of threats.

Self-reliance and especially reliance on own military power has deep roots in Russian psyche. Even a casual visitor to many Russian Internet forums will find participants fondly quoting Alexander III, a late 19th century Russian tsar known as “Peacemaker” (Russia did not wage major wars during his reign) that Russia had only two reliable allies – its Army and its Navy. Many now add the “third ally” – “...and Strategic Rocket Forces.”

¹ “Rossii Poka Neobkhodimo Yadernoe Oruzhie – Patriarkh Kirill” [Russia Still Needs Nuclear Weapons – Patriarch Kirill], RIA-Novosti, November 11, 2009.

The government readily supports this sentiment. Both President Medvedev and Prime Minister Putin make frequent statements about their attention to nuclear forces. The Duma readily approves budgets for Strategic Forces. Road-mobile ICBMs roll through the Red Square during holiday parades. Certainly, this means that Moscow is and will remain constrained when it comes to concessions in arms control negotiations – nuclear weapons are not a card that could be readily traded.

The Russian government publicly supports the goal of nuclear-free world, but that goal is regarded so long-term that becomes impractical. When Vladimir Putin recently signed a law on funding for upgrades to facilities and equipment for nuclear weapons complex (primarily to ensure reliability of weapons), he mentioned that the country would need them for the next “30-40-50 years.”²

The profile of nuclear weapons is further increased by the wide (and perhaps even unbridgeable) gap between Russia and the United States/NATO in modern technology. This gap prevents Moscow from shifting emphasis from nuclear to conventional assets and further strengthens long-term reliance on nuclear weapons in national security policy.

At the same time – and in apparent contrast to public posturing – funding for maintenance and modernization remains limited. Production of new delivery vehicles is apparently below the optimal level (the lowest cost per unit) and R&D programs remain underfunded or, at best, funded at bare minimum. Effectively, the government can be said to take a “minimalist” attitude toward nuclear capability. While this pattern began during the time of relative financial scarcity, it continued through the more financially favorable period almost without change and remains the same today. There is no indication that Moscow plans to radically increase funding for either production or modernization of its nuclear arsenal. The question remains open whether limited funding reflects a relatively skeptical view of the possible role of nuclear weapons in Russia’s security.

This paper will address the following issues relevant to the understanding of the future of the Russian nuclear capability:

- The role of nuclear weapons in security policy. While the public profile of nuclear weapons is enormous, of greater relevance are the missions assigned to nuclear weapons and their evolution in the last 20 years. Of special interest are the roles, if any, of tactical (nonstrategic) nuclear weapons, which are increasingly visible in international debates.

² “Podpisano Dopolnenie k Programme Razvitiya Yaderno-Oruzheinogo Kompleksa,” RIA-Novosti, June 9, 2010.

- Modernization programs. What are the reasons for the apparent gap between high public profile of nuclear weapons and relatively limited funding? How modernization programs are related to nuclear missions?
- What are the prospects for transition from nuclear to conventional capability? This has been a stated goal of the Russian government, but can Russia actually implement it? This section will also tackle debates about abrogation of the INF Treaty: while that agreement provided for reduction of nuclear weapons, it is has apparently become part of policy aimed at enhancing conventional capability.
- What is the impact of U.S. missile defense plans on the Russian nuclear posture and how has it changed in the last year or so? Is there any prospect for cooperation with the United States and NATO on missile defense and what are the limits of that cooperation?

Key conclusions can be summarized as follows:

- (1) During the last ten-fifteen years Russian nuclear policy has experienced approximately the same evolution as that of other nuclear weapons states (NWS) – gradual increase in the perceived role of these weapons, emergence of new missions, and then, toward the end of this decade, gradual reduction of their role. In Russia, the decrease of the role of nuclear weapons has been somewhat less pronounced than in other NWS.
- (2) Nuclear weapons have two missions. One is traditional strategic deterrence – prevention of a large-scale aggression against Russia. The other, which is considered more pertinent under present circumstances, is deterrence of a more limited conventional attack by a powerful country or an alliance (a clear reference to the United States and NATO), which cannot be repelled with Russian conventional forces alone. Recently, the perceived urgency of the latter mission has somewhat receded, but it remains on the books.
- (3) Russia seeks to gradually shift emphasis from nuclear to long-range high-precision conventional assets. It has been at least 15-20 years behind the United States and its allies, however, and the verdict is still out whether it will be able to cover that gap. It is clear that efforts will continue, in particular because nuclear weapons are increasingly seen as unusable and thus not very relevant for security policy.
- (4) Nuclear posture has seen rather radical changes in the first half of this decade following a fundamental revision of long-term plans in 2000 and then a series of partial revisions to new policy. Currently, Russia seems to be moving toward a posture that can be characterized as a balanced dyad – a relatively equal (60 to 40 percent) distribution of nuclear warheads between the land and the sea legs. The air leg remains part of the nuclear triad, but only formally – the main mission

of long-range aircraft is increasingly conventional and, furthermore, its nuclear assets are subject to the least modernization.

- (5) The Russian nuclear force remains old – the bulk of delivery systems are still those produced in the Soviet Union. The rate of production and deployment of new weapons is below what production capability can sustain. More importantly, production capability gradually decreases as well and the Russian government does not appear interested in sustaining ability to expand production. This strongly suggests that the overall size of the nuclear force will gradually decline and that delivery vehicles will carry the maximum load of warheads.
- (6) Contrary to common perception, short-range nuclear assets (non-strategic nuclear weapons, or NSNW) do not appear to play a significant role in Russia's security policy and there are no discernible missions assigned to them with the exception of naval assets. Continued Russian resistance to arms control measures with regard to NSNW is primarily explained by the alignment of domestic politics.
- (7) The current trends will make Russia interested in further reductions of nuclear weapons, perhaps to the level of around 1,000 strategic warheads. It seems that Russia will probably want to pause at about that point. Reaching new agreements will not be easy, however, due to the multiplicity of divisive issues that have emerged in the last 20 years and especially during this decade. Post-New START negotiations are likely to be difficult and time-consuming.
- (8) The urgency of the missile defense issue has receded rather considerably in the last year, although public statements do not reflect that. The greatest concern is not about the current or the short-term American capability, but rather about the capability that might emerge by the end of this decade. This leaves considerable margin of opportunity to further discuss this issue and perhaps develop a set of predictability and transparency measures that might help alleviate the controversy. Cooperation in missile defense remains possible and could be the "real" long-term answer.
- (9) On the surface, the trajectory of Russian strategy is similar to what the United States has been doing in the last two decades – emphasis is gradually shifting toward long-range high-precision conventional capability, Russia actively develops missile defense capability, etc. This similarity is misleading, however, and will hardly make arms control negotiations any easier because there exists important asymmetry between the two countries. Whereas the United States, for reasons of its geographical location, needs strategic capability in both conventional and defense assets, Russia emphasizes theater-range assets. Consequently it will remain highly suspicious about U.S. plans to the extent that

they could theoretically affect the credibility of strategic deterrence that is regarded as the foundation of the existing international system.

Russian Views on the Role of Nuclear Weapons

Nuclear weapons have three partially overlapping roles in Russian national security policy, which can be described as status symbol, existential deterrence, and plans for use of nuclear weapons under certain specific contingencies, first and foremost to deter large-scale use of conventional forces against Russia by the United States and NATO.

(1) The role of nuclear weapons as a symbol of status is quite straightforward, although rather difficult to define in clear-cut, unambiguous terms. Status as a recognized nuclear weapons state, along with a permanent seat on the UN Security Council (coupled with the right of veto), are the most visible and perhaps the only remaining vestiges of great-power ambitions. Partially, this self-image satisfies the nostalgia – particularly widely spread among the public – for the Soviet Union’s number two place in the Cold War international system.

More importantly, nuclear status fits very well with the forward-looking conceptualization of the emerging post-post-Cold War (to borrow Colin Powell’s term) international system as multipolar, in which Russia sees itself as one of the centers of power and influence. It should be noted, however, that the term (multipolarity) is seriously misused in Russia.³ In fact, Russian leaders, when they talk about multipolarity, appear to mean a “concert” – a system similar to the 1815 Vienna Congress arrangements. They see the future international system as based on a consensus of key players – countries with the greatest economic and military power. In that conceptualization Russia is accorded the place of one of the pillars of the emerging system – a state with special rights and responsibilities. Although Moscow recognizes – and welcomes – the rise of new centers of power beyond the five permanent members of the UN Security Council (such as India, Germany, Japan, Brazil, etc.), it is also keen on preserving certain special privileges. For example, when Foreign Minister Sergey Lavrov recently described India as a potential new permanent member of the UNSC, but cautioned that only “old” permanent UNSC members should have the right of veto.⁴

³ For an early critique of the Russian concept of “multipolarity” see Nikolai Sokov, “*Mnogopoluysnyi Mir v Zerkale Teorii Mezhdunarodnykh Otnoshenii*” [The Multipolar World Reflected in the Mirror of International Relations Theories], *SShA: Ekonomika, Politika, Ideologiya* (journal of the Institute of USA and Canada Studies, Russian Academy of Sciences), No. 7, 1998, 19-27; No. 8, 1998, 19-31. For the latest Russian critique of this concept see Vladislav Inozemtsev, “Mechty o Mnogopoluysnom Mire” [Dreams about a Multipolar World], *Nezavisimaya Gazeta*, September 18, 2008; Aleksandr Konovalov, “Mir Ne Dolzhen Byt Mnogopolyarnym” [The World Must Not Be Multipolar], *Nezavisimaya Gazeta*, September 16, 2008.

⁴ The transcript of press conference of Minister of Foreign Affairs of the Russian Federation with Russian media, New Deli, October 20, 2008, document 1650-22-10-2008,

The prospect of nuclear disarmament puts Russian leaders into a rather awkward situation. On the one hand, they cannot question the legal (under Article VI of the NPT) or the moral obligation to disarm. On the other hand, elimination of nuclear weapons would deprive Russia of one of its key status symbols. Speaking in February 2008 at the Conference on Disarmament in Geneva, Sergey Lavrov endorsed the nuclear disarmament initiatives of George Schultz, William Perry, Henry Kissinger, and Sam Nunn, but in a rather half-hearted manner and referred to it as a very long-term prospect.⁵ In December 2008, at a meeting with the Association of European Businesses in Russia, Lavrov characterized nuclear disarmament as an “uncertain” goal whose solution is hampered by multiple “unresolved issues.”⁶ The apparent contradiction is resolved, it seems, by postponing the final solution into a distant future.

(2) “Existential deterrence” refers to a general, vague notion that no rational country or alliance, including the United States and NATO, will attack Russia because Russia can respond with nuclear weapons. This is a guarantee against a threat that, for all intents and purposes, does not exist. As a result nuclear weapons are often portrayed as a “just-in-case” deterrence for the unlikely situation when, some time in the indefinite future, the United States or another powerful country or coalition becomes hostile to Russia.

At a deeper psychological level reliance on nuclear deterrence reflects uncertainty about the unpredictable international environment and the lack of confidence in Russia’s power and influence. Nuclear weapons played a similar role during the Cold War – a prop for a country that more or less acutely sensed that the enemy, the United States and the Western community in general, were too powerful. The trauma of the 1990s, when Russia suddenly found itself weak and vulnerable, reinforced the psychological need for the ultimate security guarantee. The need for that “prop” should disappear if the place of Russia in the emerging international system becomes clearer and, especially, if the country becomes more deeply integrated into the global economy.

The latter process has been developing quite well where relations between Russia and the European Union are concerned: even today not only are many EU states (in particular the “Old Europe”) reluctant to enter into a conflict with Russia, but Moscow is equally reluctant to enter into a conflict with them. The U.S.-Russian relationship, unfortunately, does not have a solid economic foundation yet, and consequently political and security relations lack stability. The need for stronger interdependence is further reinforced by the belief of Russian leaders (particularly strong among the Putin

http://www.mid.ru/brp_4.nsf/2fee282eb6df40e643256999005e6e8c/168f10e1ae44dd7dc32574ea0041988a?OpenDocument

⁵ Roman Dobrokhotov, “Obezoruzhivauyshchie Argumenty” [Disarming Arguments], *Novye Izvestia*, February 13, 2008.

⁶ Disarmament was tackled during the Q&A part of the meeting and was not addressed in the main speech. See Arkadi Dubnov, “Treugolnaya Diplomatiya” [Triangular Diplomacy], *Vremya Novostei*, December 11, 2008.

and Medvedev generation) that economic interdependence is central to cooperation and war prevention: this belief was borrowed from American political science literature during their formative years in the 1970s and 1980s.

Another complicating factor is the weakness of economic and political levers of influence in the international arena, which serves to enhance the perceived importance of military instruments. Although Russia could potentially use its position as an exporter of oil and gas, this is, in reality, a double-edged sword: an attempt to use it could harm the most important source of revenue for the government and private (semi-private) business and vastly strengthen the desire of its customers to diversify energy sources (thereby eliminating Russian influence as well as profit). Instead, Moscow is trying to build a reputation as a reliable supplier and has been reluctant to even hint at interruption of exports. The fact that dependence on Russian oil and gas exports does not affect the rather cold, sometimes even hostile attitude of Eastern European countries (such as Poland) toward Russia suggests that the utility of this dependence as a political lever is at best very limited. Seen through Russian eyes, Russian exports actually depend on other countries – on Ukraine, which provides the main transit route, and on Central Asia, which is an important source of natural gas that is re-exported to Europe. Instead of using oil and gas exports as a lever, Moscow has to fight to hold on to its market against alternative routes (across the Caspian Sea and South Caucasus). Several crises in relations with Ukraine, when transit to Europe was interrupted or nearly interrupted (all of these cases were blamed on Russia), created an acute sense of dependence in Russia and a desire to build alternative routes of its own through the Baltic Sea and the Balkans. Strong objections by Poland, the Baltic states, and Nordic countries to that alternative have only served to reinforce the feeling of vulnerability.

(3) As long as nuclear weapons and the research and industrial infrastructure supporting them continue to exist, political and military planning for their use must take place. Planning for nuclear use involves development of scenario-specific missions that pit nuclear assets against real or perceived threats. These missions provide formal rationale for continued maintenance of nuclear capabilities, for distribution of targets, for posture planning, as well as for research and development. The underlying assumption of this type of planning is the belief that certain threats are difficult or even impossible to counter with other, non-nuclear assets or that non-nuclear assets are less reliable or effective.

At the center of nuclear planning in today's Russia is concern about U.S. and NATO conventional superiority. Although a large-scale war with Russia is widely regarded as improbable, the threat of superior conventional force could, according to the prevalent logic, be used to extract political or economic concessions. A long series of limited wars (the Gulf War of 1991, the use of force in Bosnia, the war in Kosovo, the 2003 war in Iraq) have demonstrated, in the view of Russian policymakers and elite, that (1) American conventional power vastly surpasses anything that Russia has or might hope to have in the foreseeable future, both in technological level and in sheer numbers, and (2) that the United States is prone to use that force with few second thoughts. The

continuing weakness of Russian conventional forces vis-à-vis U.S. and combined NATO power as well as the close proximity of NATO forces to Russian territory (making limited use of force both more feasible and more effective) have led Russian military planners to rely on nuclear weapons for the purposes of de-escalation – the threat of a limited nuclear strike in response to a conventional attack that cannot be repelled by conventional forces is supposed to deter the attack in the first place.

A relatively recent new concern is deployment of U.S. missile defense, which eventually could, in theory, intercept a Russian nuclear second strike and thus undermine both the “existential deterrence” capability and the de-escalation mission. Deployment of missile defense leads Russian military planners to suspect that the United States intends to “make the world safe for conventional war” and only serves to enhance the perceived value of nuclear weapons for Russia.

Finally, there is the emerging issue of China, which Russians rarely discuss in the open. While the two countries are close partners or a broad range of issues, have solved outstanding problems (border issues in particular), and their economic relationship continues to develop, many in Russia are concerned that the partnership might not survive continued growth of China’s economic, political and military power. Nuclear weapons are regarded as “just-in-case” protection against the risk that China becomes a foe or at least attempts to transform Russia into a subordinate power.

Evolution of Russian views on the role of nuclear weapons can be traced through Military Doctrines adopted in the last 17 years. Military Doctrine is a primarily political document that defines the broad contours of defense policy and outlines of military postures as well as provides a link between overall national security policy and, more narrowly, defense policy. The term “doctrine” is somewhat misleading because its meaning in Russian and English are not the same. It should be more properly translated as “strategy” or “guidance.” This caveat should be kept in mind during any discussion of Russian defense policy.

1993-1999

The end of the Cold War and the diminished relevance of strategic nuclear deterrence were reflected in the first Military Doctrine approved by Boris Yeltsin in November 1993 (“Main Provisions of the Military Doctrine”⁷), which assigned nuclear weapons only to that “old” mission and thus codified their relatively low tangibility in Russia’s national security policy. The only innovation, of that document was a provision that allowed for first use of nuclear weapons (until then, the official Soviet policy, which was set in the 1970s and confirmed in 1982, allowed for the use of nuclear weapons only in response to a nuclear attack). While this new plank attracted close attention both in Russia and in the West, of greater relevance was the fact that nuclear use was only conceptualized in

⁷ "Osnovnyye polozheniya voyennoy doktriny Rossiyskoy Federatsii," Rossiyskaya gazeta, 18 November 1993, pp. 1, 4.

response to a large-scale attack that threatened the sovereignty and the very survival of the country, i.e., a mission whose probability was officially assessed as low.

The official view of nuclear weapons remained unchanged despite a flurry of proposals in 1996-97 to increase reliance on nuclear weapons in response to the first phase of NATO enlargement. The 1997 National Security Concept retained the plank about reserving "the right to use all forces and means at its disposal, including nuclear weapons, in case an armed aggression that creates a threat to the very existence of the Russian Federation as an independent sovereign state."⁸ This was effectively a "just-in-case" mission against a conflict that was virtually ruled out.

In a review of an unpublished early draft of a new Military Doctrine, which was produced in 1997, two officers of the General Staff noted that "some 'specialists' ... attempted to introduce into the documents language that would toughen nuclear policy," but said that these proposals were rejected by the interagency working group charged with drafting the document. It was decided, they said, to retain the 1993 language, "which passed the test of time and was supported by the Russian Ministry of Foreign Affairs."⁹

At that time the Russian government adopted a series of documents, which confirmed earlier policy and laid out development and deployment plans based on the assumption that the sole mission of nuclear weapons was deterrence of a large-scale attack. In line with this policy, several decrees signed by Boris Yeltsin in 1997 and 1998¹⁰ foresaw deep reductions of the Russian nuclear arsenal.

The Role of Strategic Deterrence in Russian Security Strategy

The mission of strategic deterrence has remained largely unchanged from Soviet times to the present day. It is based on the traditional notion of mutual vulnerability –

⁸ Kontsepsiya natsionalnoy bezopasnosti Rossiiskoi Federatsii. Utverzhdena Ukazom Prezidenta RF ot 17 dekabrya 1997 g. No. 1300, http://194.226.83.2/documents/decrees/1997/_1300-1.html.

⁹ Anatoliy Klimenko and Aleksandr Koltuykov, "Osnovnoy dokument voyennogo stroitelstva," *Nezavisimoye voyennoye obozreniye*, 13 February 1998, p. 4.

¹⁰ These included a decree of Boris Yeltsin "On urgent measures toward reforming the Armed Forces of the Russian Federation," (July 1997), and two Security Council documents: "The Concept of Development of Nuclear Forces until 2010" and "The Foundations (Concept) of State Policy in the Area of Defense Development until 2005" (July-August 1998). These documents are classified, but their general thrust could be gleaned from newspaper publications: "Sovet Bezopasnosti RF Reshil Sokhranit Trekhkomponentnyi Sostav Strategicheskikh Yadernykh Sil," *Interfax daily news bulletin*, No. 4, July 3, 1998; "Russia to be Major Nuclear Power in 3d Millennium—Official," *ITAR-TASS*, July 3, 1998; Ivan Safronov and Ilya Bulavinov, "Boris Yeltsin Podnyal Yadernyi Shchit," *Kommersant-Daily*, July 4, 1998; Yuri Golotuyk, "Yadernoe Razoruzhenie Neizbezhno," *Russkii Telegraph*, July 11, 1998; Yuri Golotuyk, "Moskva Skorrektirovala Svoi Yadernye Argumenty," *Russkii Telegraph*, July 4, 1998; Anatoli Yurkin, "Perspektivy Voennogo Stroitelstva," *Krasnaya Zvezda*, August 5, 1998, p. 1, 3; Oleg Falichev, *Vpervye So Vremeni Miluykovskikh Reform*, *Krasnaya Zvezda*, August 18, 1998, p. 1, 2.

deterrence through ability to inflict unacceptable damage in a response strike.

The main mode of operation has also remained the same – strike on warning. It should be noted that this mode has always been a forced choice, and since at least late 1960s the Soviet Union tried to develop assured second-strike capability by enhancing survivability of weapons systems. Nevertheless, efforts to develop relevant systems succeeded only in the 1980s – mobile ICBMs (SS-25 Topol and SS-24) as well as reduced-noise submarines. In post-Soviet Russia reliance on strike on warning even enhanced due to a number of reasons: (1) deep economic crisis, which forced drastic reduction of funding, (2) breakup of the Soviet Union, which left many relatively modern weapons outside Russia, reduced deployment options, and undermined the production capability limiting ability to develop and produce weapons systems, and (3) deterioration of early warning capability due to the loss of several key radars.

Traditional strategic deterrence is regarded as a “skeleton” of international security – the underlying structure that keeps the system stable. Speaking at the London Institute of International and Strategic Studies, Sergey Ivanov (at that time still Minister of Defense) called strategic deterrence the foundational of global stability.¹¹ Similar views have been expressed by almost every official and unofficial source in Russia.

Strategic deterrence is primarily aimed at the United States and, to a smaller extent, its allies. China is present in the background – Russian officials just do not speak about the need to deter China and relatively few non-governmental experts are prepared to discuss this mission. The reasons why United States remains the focus are the following:

- The United States has demonstrated the willingness to use force, including for humanitarian interventions.
- A U.S. decision to use force cannot be overruled by the United Nations or its allies.
- It is commonly believed that a large-scale attack (regional conflict) can only be successful if the United States leads it.
- It is assumed that if Russia can deter the United States, it can deter any other state or a coalition of states. The United States in effect serves as a benchmark.
- Finally, many among the Russian elite and especially among the military still view the United States with unease and suspicion. Only a few years ago one could hear talk about the intent of undisclosed countries (some directly mentioned the United States) to partition Russia.

¹¹ On Sergei Ivanov’s statement at the International Institute of Strategic Studies, see “Sergey Ivanov: Terrorizm Iskhodit ot Nesostoyavshikhsvy Gosudarstv” (Sergey Ivanov: Failed States are the Source of Terrorism), Strana.ru Information Service, July 13, 2004.

One element of strategic deterrence conceptualization that has experienced considerable change in the post-Soviet period is the criterion, “how much is enough” to deter the potential adversary. During the Soviet period (including late 1980s) the goal was assured delivery of 500 warheads to U.S. territory; in the 1990s the figure apparently decreased to 150-200; recently one can hear an even lower figure – assured delivery of about 50 warheads. The reduction of this all-important criterion is consistent with the acknowledgment in the 1993 and subsequent Military Doctrines of very low probability of a global war and reflects a fundamental change in the international system after the end of the Cold War. In addition, the lower criterion reduces pressure for creating an assured second-strike capability as well as requirements for nuclear posture and modernization programs. Basically, it means that Russia can be reasonably relaxed with regard to the future of its strategic arsenal and can afford limiting spending and resources necessary to maintain and modernize strategic force.

Adherence to traditional views on strategic deterrence dictates Russia’s negative or, at least, very cautious attitude toward missile defense. At its core, Russian strategy still rests on the theorems of the late 1960-early 1970s embodied in the ABM Treaty: (1) offensive and defensive weapons are inextricably linked, (2) robust defense can vastly complicate the calculation of strategic stability (i.e., it becomes difficult to predict how many warheads will reach the adversary in a response strike), and (3) uncontrolled missile defense developments can irreparably upset strategic stability and will result in an arms race. Russia’s preferred response has traditionally been in the area of offensive weapons, which are more cost-effective, although in the 1980s the Soviet Union actively explored strategic missile defense options, i.e., simultaneously pursued both symmetric and asymmetric response. For Russia, symmetric response (development of its own advanced strategic missile defense system) has been out of the reach for financial and technological reasons. As a result, it has pursued both political options (through arms control negotiations, mobilization of international community, close cooperation with China, etc.) and defense penetration capability of new strategic delivery systems.

2000-2010

The 2000 Military Doctrine rather radically changed the role of nuclear weapons in Russia’s national security strategy by introducing a new mission – that of limited nuclear use in response to a limited conventional attack, i.e., one that did not threaten the survival and sovereignty of Russia, but still was beyond the capability of Russian conventional forces. According to the new document, in addition to “the use of nuclear weapons or other weapons of mass destruction” against Russia or its allies, nuclear weapons could also be used “in response to large-scale aggression involving conventional weapons in situations that are critical for the national security of the Russian Federation and its allies.”¹²

¹² “Voennaya Doktrina Rossiiskoi Federatsii” (Military Doctrine of the Russian Federation), April 21, 2000.

The new document divided all possible armed conflicts into four categories:

- “armed conflict” – a predominantly domestic conflict, in which insurgents have outside support (effectively, the war in Chechnya, whose resumption was already obvious by the time of the adoption of the new Doctrine in the spring of 2000);
- “limited war” – a war with one foreign states with limited goals (a recent example is the war with Georgia in 2008);
- “regional war” – a war with a powerful state or a coalition, which Russian forces cannot win or terminate on favorable conditions. Russian military publications of the period believed that regional war could be a direct result of escalation of “armed conflict” (for example, as a result of outside interference into the war in Chechnya¹³);
- “global war” – a war against a coalition of powerful states in which sovereignty and very survival of Russia are at stake.

That is, compared to the 1993-97 documents, which assigned nuclear weapons only to the fourth type of conflicts, the 2000 document expanded nuclear missions to the third type. This was a direct result of the war in Kosovo, whose impact on Russian national security of the period is difficult to overestimate. Paradoxically, until 1999 Moscow seemed to believe that the right of veto in the UN Security Council made it immune to the use of force. Kosovo, as well as the 2003 war in Iraq a few years later, demonstrated that the United States and NATO could use force without UNSC authorization. At the same time, since U.S. and NATO stakes in a Kosovo-size conflict with Russia were expected to be relatively low (at least, not central to U.S. interests), threat of even limited nuclear use was expected to become a sufficiently strong deterrence.

Decision to enhance reliance on nuclear weapons in a departure from all documents adopted in the 1990s was apparently made while the war in Kosovo was still underway – at a meeting of the Russian Federation Security Council in April 1999, the first chaired by Vladimir Putin in the capacity of the council’s secretary.¹⁴ The key tenets of the new approach were tested in May 1999 during large-scale maneuvers called “West-99.” The new role of nuclear weapons was formalized in the January 2000 National Security Concept and the April 2000 Military Doctrine.¹⁵ The White Paper, a document adopted

¹³ V. Prozorov, *Yadernoye Sderzhivaniye v Teorii Primeniya RVSN* [Nuclear Deterrence in the Theory of Use of the SRF] (Moscow: Pyotr Veliki Military Academy, 1999), p. 19.

¹⁴ For details of this meeting see Nikolai Sokov, “The April 1999 Russian Federation Security Council Meeting On Nuclear Weapons,” NIS Nuclear Profiles Database, Center for Nonproliferation Studies, Monterey Institute of International Studies, June 1999, www.nti.org/db/nisprofs/over/rfsecmtg.htm.

¹⁵ National Security Concept of the Russian Federation, January 2000, and Military Doctrine of the Russian Federation, April 2000.

in the fall of 2003,¹⁶ put the final touches.

While the obvious and perhaps initially the only target of the new mission were the United States and NATO, subsequently Russian military leaders unveiled that the same provisions applied also to “developing countries, some of which have large, well-armed militaries.”¹⁷ This represented a thinly veiled reference to China; perhaps also to some other countries (for example, Iran).

The new mission, which came to be known as “de-escalation” of conventional conflicts, is similar to NATO’s “flexible deterrence” of the 1960s. Possible scenario was clearly reflected in the “West-99” exercises: a large-scale conventional attack (“West-99” actually simulated an attack by a NATO force exactly the same as the one used in the war in Kosovo), relatively brief resistance by Russian conventional forces, then a limited nuclear strike, after which the opponent was expected to back down because its stakes were not worthy of resulting destruction and losses.

Central to the concept of “de-escalation” was the notion of “calibrated” damage (*zadannyi ushcherb*), which, in the 2003 White Paper, was defined as “damage, which is subjectively unacceptable to the enemy and which exceeds the benefits the aggressor expects to gain as a result of the use of military force.”¹⁸ This notion is more flexible than the more common notion of “unacceptable damage” and, in addition to promising to deny benefits from aggression, also conveys a message that damage would be commensurate to the level of conflict rather than devastating. “Calibrated” damage gave the opponent a choice to back down without escalation to the strategic level.

Even limited strikes were supposed to reach far-away targets: according to the 2003 White Paper, in all wars in the 1990s and early 2000s (Balkans, Kosovo, Afghanistan, and Iraq) American victory was ensured by ability to involve out-of-theater assets. Consequently, counterstrategy, whether nuclear or conventional, had to emphasize the ability to defeat targets at large distances.

Accordingly, the White Paper postulated “the utmost necessity of having the capability to strike military assets of the enemy (long-range high-precision weapons, long-range Air Force) outside the immediate area of conflict. To achieve this, [we] need both our own long-range high-precision strike capability and other assets that enable [us] to

¹⁶ “Aktualnyye Zadachi Razvitiya Vooruzhennykh Sil RF” (Immediate Tasks of Development of the Armed Forces of the Russian Federation), October 2, 2003.

¹⁷ Yuri Baluevski, Speech at the Academy of Military Sciences, January 2007. The full text of Baluevski’s speech was published about two weeks after the conference and can be found at the official site of the Ministry of Defense (in Russian), www.mil.ru/847/852/1153/1342/20922/index.shtml. See also Vadim Solovyov, “Voennaya Reforma Obyavlena Bessrochnoi” (Military Reform Has Been Declared Unending), *Nezavisimoe Voennoe Obozrenie*, January 26, 2007.

¹⁸ “Aktualnyye Zadachi Razvitiya Vooruzhennykh Sil RF,” p. 43.

transfer hostilities directly to enemy territory."¹⁹

Targets for limited nuclear use with “calibrated damage” could be gleaned from a series of large-scale exercises since 1999. All of them were military targets involved in a potential attack against Russia and the number of warheads involved in simulated strikes was small (fewer than 10):

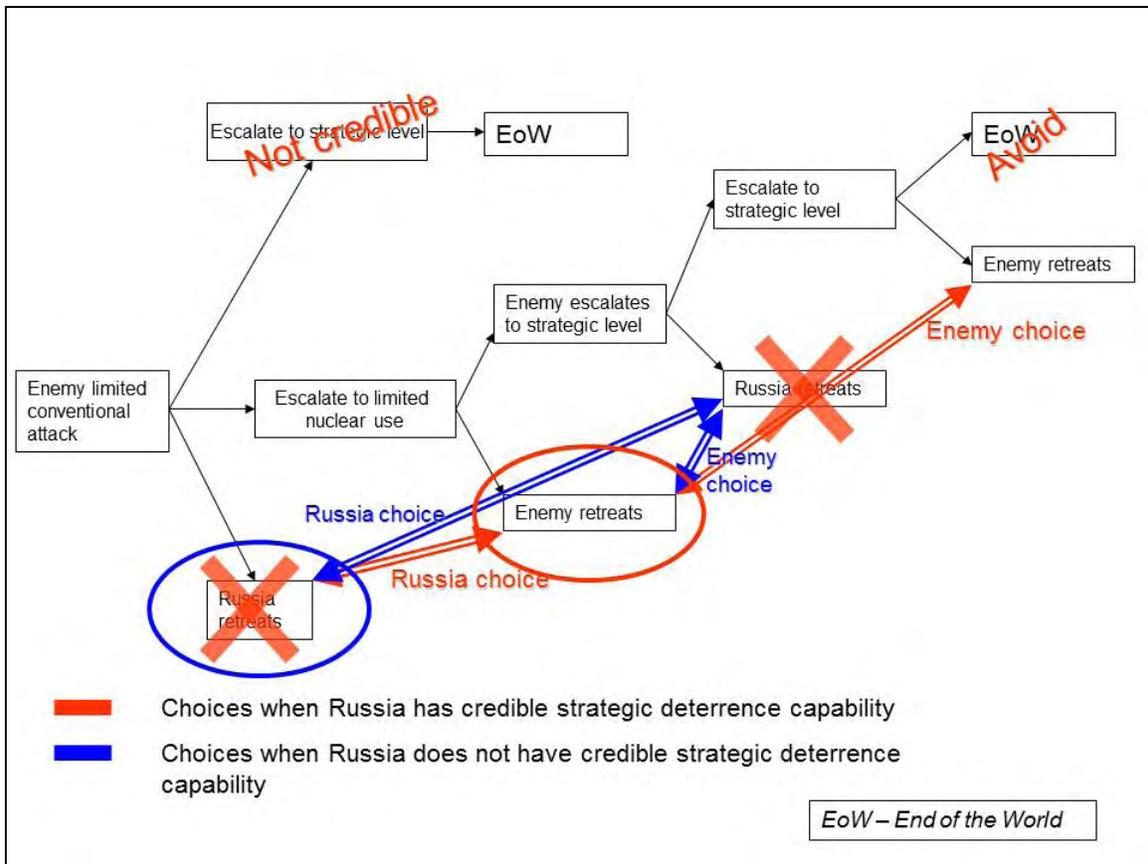
- Airbases as well as command, communications and support facilities in European NATO countries and in at least one case in Japan. New members of NATO are clearly considered first candidates for basing countries for launching an attack against Russia;
- Unknown targets in the continental United States (most likely bases from which B-52s and B-2s would fly missions against Russia);
- Aircraft carrier groups in the Pacific Ocean and the Baltic Sea. Similar operations were simulated at least one in the Indian Ocean and Mediterranean; and
- U.S. bases on Diego Garcia and Guam.

An integral part of making sure that threat of limited nuclear strike is credible is demonstrated ability to escalate to the strategic level (the level of large-scale nuclear exchange).²⁰ This condition necessitated the maintenance of credible strategic nuclear deterrence capability, giving additional prominence to the “traditional” mission and strategic weapons modernization programs.

The decision tree underlying the “de-escalation” scenario can be pictured in the following way:

¹⁹ "Aktualnyye Zadachi Razvitiya Vooruzhennykh Sil RF," p. 24.

²⁰ A. Khryapin, V. Afanasiev, “Kontseptualnye Osnovy Strategicheskogo Sderzhivaniya” (Conceptual Foundations of Strategic Deterrence), *Voyennaya Mysl*, January 2005.



The 2003 “White Paper” also cautioned that nuclear deterrence of “regional” conflicts requires capable modern conventional forces: “only in that case will the threat of nuclear use in response to an attack be credible.”²¹ This principle closely mirrors one of the seminal documents in U.S. nuclear policy from the 1950s, NSC-68. This is only logical: reliance on nuclear weapons alone is simply not sustainable because threat of nuclear use is not sufficiently credible except in a relatively narrow range of circumstances.

It should be noted, however, that Russia’s 2000 National Security Concept regarded reliance on limited nuclear use as a temporary fix until Russia builds up its conventional capability, especially its precision-guided weapons. A more modern conventional capability together with modern reconnaissance and targeting assets was supposed to enable Russia to successfully deter, or, if deterrence fails, fight regional conflicts. Thus, at least in theory, the limited-use missions should eventually fade away. That thinking remains valid today: in 2009, then-Commander of the SRF Nikolai Solovtsov said that reliance on nuclear weapons in the near future is intended to buy time while Russia

²¹ “Aktualnyye Zadachi Razvitiya Vooruzhennykh Sil RF,” p. 30.

conducts military reform and upgrades its conventional capability.²²

2010 and Into the Future

The new, third Russian Military Doctrine, which ushered in yet another turn in the role of nuclear weapons, was revealed in February 2010.²³ Work on that document was launched by a special conference convened at the Russian Academy of Military Sciences in January 2007. Speakers at that meeting, including then-Chief of General Staff Yuri Baluevski, agreed that nuclear weapons would still play a central role in Russia's security, but the overall tone suggested that the "nuclear component" of the 2000 Doctrine would remain unchanged; attention focused instead on the upcoming reforms and modernization of general-purpose forces.²⁴

Quite unexpectedly, however, the "nuclear" section of the draft became a contested issue in the months preceding its release and was perhaps one of the reasons for multiple delays (it was initially scheduled to be released in the fall of 2009). In an interview in October 2009 Secretary of the Security Council Nikolai Patrushev indicated that the future document might assign nuclear weapons to yet one more type of war – "local conflicts".²⁵ This would have represented a massive expansion of the role of nuclear weapons: whereas the 1993 Doctrine assigned them to "global wars," and the 2000 one added "regional wars," the further expansion described by Patrushev would have assigned them to conflicts similar to the 2008 war with Georgia.

In the end, however, the trend set by the new Doctrine was opposite to what Patrushev described. Instead of further expanding the role of nuclear weapons, it somewhat reduced it by tightening conditions under which these weapons could be used. Specifically, whereas the 2000 Doctrine foresaw the resorting to nuclear weapons "in situations critical for [the] national security" of Russia, the 2010 version allows for their use in situations when "the very existence of [Russia] is under threat." At least in this regard, the new Doctrine returned to the principles of the 1993 and 1997 strategies.

Otherwise the new document seemed to closely toe the line set in 2000. The role of nuclear weapons, according to the new Doctrine, is "prevention of nuclear military conflict or any other military conflict." They are regarded as "an important factor in the prevention of nuclear conflicts and military conflicts that use conventional assets (large-

²² "Yadernyi Shchit Dast RF Vremya na Formirovanie Novogo Oblika Armii – RVSN," RIA-Novosti, June 10, 2009.

²³ Voennaya Doktrina Rossiiskoi Federatsii, February 5, 2010, <http://www.scrf.gov.ru/documents/33.html>.

²⁴ For details see Nikolai Sokov, "Russian Academy of Military Sciences Debates Role of Nuclear Weapons in Conference on New Military Doctrine," WMD Insights, March 2007, http://www.wmdinsights.com/l13/l13_R2_RussianAcademy.htm.

²⁵ "Menyaetsya Rossiya, Menyaetsya i ee Voennaya Doktrina" [As Russia Changes, its Military Doctrine Changes Too], Izvestiya, October 14, 2009.

scale and regional wars)." The new document also clearly indicates that a conventional regional war could escalate to the nuclear level. In a slight change from 2000, the latter provision is formulated in broader terms — this is now not only seen as a means of deterring or dissuading states that might attack Russia with conventional armed forces, but also an expression of concern that similar escalation might take place elsewhere.

That is, that the mission of “de-escalation” remains on the books. The new Doctrine mandates the maintenance of nuclear capability “at the level of sufficiency,” which means ability to inflict “calibrated” damage, same as the previous guidance. An interesting feature of the 2010 Doctrine is the emphasis on *strategic* deterrence capability. The choice of terms seems to indicate that Russia does not assign a visible role to substrategic (or tactical) nuclear weapons.

Overall, the 2010 Doctrine devotes less attention to the nuclear component of Armed Forces than the previous one. At the most superficial level, there are fewer paragraphs about the use of nuclear weapons and nuclear posture than in the 2000 document. The doctrine places considerably more emphasis on conventional forces and in particular on high-precision assets, communications, command and control systems, and other elements in which Russia has been traditionally behind other major military powers.

Overall, the change in the role of nuclear weapons appears to be positive, but limited: the missions remained the same as before, albeit the criterion for nuclear use was somewhat tightened. The direction of the trend is similar to that in the United States under the new administration, but the degree of change is noticeably smaller. Notwithstanding the fact that the new strategy will remain in force for at least several years, one can hardly expect a significant downgrading of the status of nuclear weapons in the foreseeable future. They continue to enjoy elite and public support as a symbol of Russian power and independence and thus any government that might consider further downgrading of that component of Russian armed forces is likely to encounter stiff resistance. Furthermore, modernization of Russian conventional forces proceeds at a very slow pace. In the foreseeable future concern about conventional forces of the United States and NATO and, increasingly, of China will remain high necessitating continued reliance on nuclear capability.

The Tactical Nuclear Weapons paradox

Tactical (non-strategic) nuclear weapons enjoy a special and highly controversial place in Russia’s nuclear policy. They gained visibility in the mid-1990s during debates about possible response to NATO’s first round of enlargement. They are still often conceptualized as a counterweight to NATO conventional superiority, but this view primarily resides with conservative non-governmental experts while the government and (with one exception noted below) uniformed military remains silent about possible missions for these assets. Instead, all political-military guidance documents issues in the last 15 years have not mentioned them. Moreover, the 2003 White Paper referenced

above specifically insisted that in case of large-scale (regional or global) war Russia needed long-range capability to strike out-of-theater assets of the adversary. Thus TNW apparently do not have a mission to speak of.

The only exception to that general rule is the Russian Navy. Russian naval commanders admit that they simply cannot confront the U.S. Navy—in case of a direct clash between Russia and the United States — without reliance on nonstrategic nuclear assets. Accordingly, crews of surface ships and submarines have reportedly trained to mate warheads to SLCMs and launch them.²⁶ In fact, Vice-Admiral Oleg Burtsev, deputy chief of the Navy’s Main Staff declared recently that the role of tactical nuclear weapons on attack nuclear submarines would increase. “The range of tactical nuclear weapons is growing, as is their accuracy. They do not need to deliver high-yield warheads, instead it is possible to make a transition to low-yield nuclear warheads that could be installed on the existing types of cruise missiles,” he asserted.²⁷ Paradoxically, nuclear warheads for short-range naval systems are supposed to be in the status of non-deployed under the PNIs (see below) unlike those for the Air Force, whose leaders rarely if ever mention TNW.

Indicative of the attitude toward the possible role of TNW was the rejection by the Russian government and the military of proposals to deploy short-range nuclear-capable assets in response to the U.S.-planned missile defense assets in Poland in 2008 – at the time when George W. Bush plans were regarded as a serious and immediate threat to Russia. The General Staff was quick at dismissing rumors (apparently, originating in Lithuania) that Russia would equip surface ships and submarines of the Baltic Fleet with tactical nuclear weapons.²⁸ Similarly, a September 2008 high-level meeting in Kaliningrad oblast, involving representatives from the Ministries of Defense and Foreign Affairs at the level of deputy minister, General Staff, Administration of the President, as well as security services, rejected the proposal to deploy nuclear weapons in the exclave.²⁹ Chairman of the Duma Defense Committee retired general Viktor Zavarzin explained that preference was given instead to high-precision conventional assets.³⁰ Proposals about deployment of tactical nuclear weapons in Belarus were similarly not taken to heart. Russian ambassador to Minsk Aleksandr Surikov announced that Russia would not return nuclear weapons to Belarus but would consider deployment of tactical

²⁶ Interviews by one of the authors with Russian officials (who requested anonymity).

²⁷ “Rol Takticheskogo Yadernogo Oruzhiya na Mnogotselovykh APL Vozrastet – VMF” [The Role of Tactical Nuclear Weapons on Multipurpose Submarines Set to Grow – the Navy], RIA-Novosti, August 23, 2009, http://www.rian.ru/defense_safety/20090323/165742858.html.

²⁸ Mark Franchetti, “Russia’s New Nuclear Challenge to Europe,” London Sunday Times, August 17, 2008

²⁹ Vadim Smirnov, “Kalinigradskii Platsdarm September 8, 2008

³⁰ RIA-Novosti, September 4, 2008

conventional *Iskander* missiles and short-range aircraft with precision-guided weapons.³¹

Short-range weapons are also often said to have another role—that of deterring Chinese conventional forces.³² The logic is similar to the common beliefs about the role of TNW vis-à-vis NATO: if the opponent has superior conventional forces, Russian needs to rely on nuclear weapons. The Western and the Eastern theaters differ by the nature of challenge – technological in the West and numerical in the East.

This logic appears questionable, however. The Russian-Chinese border is primarily a land border, but, if public statements of Russian officials are to be believed, Russia no longer has land-based short-range nuclear weapons. Also, there are few valuable targets on the Chinese side of the border and, if TNW were used to repel a hypothetical Chinese offensive, nuclear weapons would be used on the Russian side of that border in densely populated and economically developed areas. Indeed, confidential interviews with high-level Russian military indicate that nuclear weapons assigned to deterrence of China are strategic and air-launched intermediate-range, i.e., weapons capable of reaching political, military, and economic targets deep inside China. That is, the logic here is similar to the one used in the Military Doctrine for deterrence of the United States and NATO: the emphasis is on long-range assets.

Thus, logically speaking, Russia could, without changing its present-day nuclear strategy, reduce the entire short-range category of nuclear weapons. Yet, it refuses to do that.

Instead, Moscow consistently, stubbornly, and very forcefully resists attempts of the United States and its NATO allies to launch almost any kind of arms control measures with regard to its TNW. Thus, up until now U.S. and Russian TNW are still subject to only one arms control regime – unilateral parallel statements of George H.W. Bush and Mikhail Gorbachev made in 1991 known as PNIs (in 1992 Boris Yeltsin confirmed Gorbachev's statement in the name of Russia). It only remains to regret that the Soviet proposal, made in the fall of 1991 shortly after PNIs, to launch negotiations on a legally binding and verifiable treaty on TNW was at that time rejected by Washington.

Moreover, since 2004 Russia no longer recognizes PNIs as even politically binding. The last time Moscow formally reported on the implementation of PNIs was at the NPT PrepCom in April 2004, when the Russian representative mentioned that his country had “almost completed implementation” of its “initiatives” except for warheads assigned to Ground Forces and that the pace of elimination was constrained by the technological capacity and available funding.³³ Six months later, an official

³¹ Olga Tomashevskaya, Viktor Volodin, “Do Czhekhiï I POlshi Letet Nedaleko” *Vremya Novostei*, August 7, 2008

³² See, for example, Alexei Arbatov, “Deep Cuts and de-Alerting: A Russian Perspective,” p. 321.

³³ *Vystuplenie Glavy Rossiiskoi Delegatsii A.I. Antonova na 3 Sessii Podgotovitel'nogo Komiteta Konferentsii po Rassmotreniyu Deistviya DNYaO* [A Statement of the Head of the Russian Delegation A.I. Antonov to

representative of the Russian Foreign Ministry declared Russia was not bound by the PNIs, which were characterized as a “goodwill” gesture rather than an obligation.³⁴

That said, PNIs have apparently been implemented, even though Russia does not publicly recognize that. In a report distributed at the 2005 NPT Review Conference, Russia declared that it had reduced its TNW arsenal to one-fourth of what it was in 1991.³⁵ The following year, the Chief of the 12th GUMO (the Main Directorate of the Ministry of Defense responsible for handling nuclear weapons), confirmed that information and even asserted that reductions exceeded the original promise (he asserted that the 1991 statements foresaw a 64 percent reduction while Russia had reduced its TNW arsenal by 75 percent).³⁶ Speaking in 2007, the new Chief of the 12th GUMO, General Vladimir Verkhovtsev, confirmed the 75 percent figure and added that the promised elimination of TNW warheads assigned to Ground Forces had been completed.³⁷

the 3rd Session of the Preparatory Committee of the NPT Review Conference], April 28, 2004, Document 927-28-04-2004 (<http://www.mid.ru/Ns-dvbr.nsf/10aa6ac6e80702fc432569ea003612f0/432569d800226387c3256e840046adc4?OpenDocument>)

³⁴ See footnote 2.

³⁵ *Prakticheskie Shagi Rossiiskoi Federatsii Oblasti Yadernogo Razoruzheniya* [Practical Actions of the Russian Federation in the Area of Nuclear Disarmament], Report presented at the 7th NPT Review Conference, slide 13 ([http://www.mid.ru/ns-dvbr.nsf/10aa6ac6e80702fc432569ea003612f0/526da088ef7526e3c325700d002f81c7/\\$FILE/Presentation-Russian.pdf](http://www.mid.ru/ns-dvbr.nsf/10aa6ac6e80702fc432569ea003612f0/526da088ef7526e3c325700d002f81c7/$FILE/Presentation-Russian.pdf))

³⁶ “Rossiya Perevypolnila Plany po Sokrashcheniyu Yadernogo Oruzhiya” [Russia Has Overfulfilled the Plan for Reduction of Nuclear Weapons], RIA-Novosti, June 22, 2005, <http://www.rian.ru/politics/20050622/40566772.html>.

³⁷ To be sure, some analysts have pointed to statements from a few Russian officials that appear to argue that the weapons assigned to Ground Forces have not been eliminated. One prominent example is Col.-Gen. Vladimir Zaritski, commander of the Rocket and Artillery Forces, which are part of the Ground Forces (sometimes referred to as General Purpose Forces). In 2003, Zaritski declared that “the main delivery assets for the use of tactical nuclear weapons are in the hands of Rocket and Artillery Forces.” (Oleg Falichev, “Bog Voyny v Zapas ne Ukhodit” [The God of War Does Not Retire], *Voenna-Promyshlennyi Kurier*, November 19-25, 2003). In subsequent publications, Zaritski did not mention TNW at all or alluded to some nuclear role for the Ground Forces in a general, non-specific way without identifying, missions or assets and referring to earlier, late 1990s military manuals or doctrines. See Vladimir Zaritski, “O Razrabotke Novoi Metodiki Planirovaniya Ognevogo Porazheniya Protivnika v Operatsii i Bouyu” [Toward Developing New Methods for Planning of Use of Firepower Against Adversary in an Operation and a Close Fighting], *Voyennaya Mysl*, No. 12, 2006; “Napravleniya Sovershenstvovaniya Form i Sposobov Boevogo Primeneniya RViA v Obshchevoiskovoi Operatsii (Bouyu)” [Ways to Enhance the Ways and Means of Combat Use of Rocket Forces and Artillery in an Operation (Close Combat) of General Purpose Forces] *Voyennaya Mysl* No. 11, 2006; V. Zaritski, L.Kharkevich, *Obshchaya, Taktika* [Foundations of Tactics], Tambov, 2007.

Information supplied by the Chief of the 12th GUMO, the Defense Ministry agency directly responsible for handling of all nuclear weapons, should probably be regarded as more authoritative. The statements by Zaritski could also signify that nuclear weapons are still regarded by a significant sector of the Russian military as desirable both in terms of mission support and status. His attitude seems to be in line with the

The exact number of Russian TNW is unknown because parties to the PNIs are not required to exchange it. It is commonly believed that Russia has about 2,000 warheads for delivery vehicles that are not subject to START treaties – about double what the United States is assumed to have.³⁸ Breaking down that uncertain number into categories is even more challenging. According to NRDC, the Air Force has 650 warheads, the Navy 700, and Air Defense and Missile Defense (nowadays united in the Aerospace Forces) 700.³⁹ Russian nongovernmental experts use the same figures, but the method of calculation used by NRDC leaves many uncertainties.⁴⁰

It is safe to assume that the overall size of the stockpile is going down. Russia continued to dismantle warheads with expired service life (warranty) and only part of those are refurbished. The rate of dismantlement and refurbishment is limited by the available industrial capacity. There is no saying at which point the decline will stop and the stockpile stabilizes. That time is probably near.

A solution to the paradox of TNW – assets that Russia apparently does not need, but continues to hold on to – can be found in domestic politics rather than in strategic planning. The Russian government attitude toward TNW appears to represent a complex mix of domestic and bureaucratic politics, (mis)perceptions, and idiosyncrasies. Its main elements could be summarized in the following way:

- *“No More Unreciprocated Concessions.”* Resistance to arms control measures with regard to TNW appears to reflect the deep-seated rejection of Gorbachev and early Yeltsin propensity to make wide-ranging concessions that Edward Shevardnadze used to call “concessions to common sense.” Russian numerical superiority is regarded as an advantage that could be traded for something

insistence of Russian Navy officials that they need nuclear weapons to support some of their missions. Although the value of Zaritski's assertion as direct evidence with regard to the status of sub-strategic weapons in Russia should probably be questioned, it certainly testifies to the "nuclear romanticism" of many Russian military leaders.

³⁸ There is no good way to calculate the numbers – the 2,000 figure is the number that is most often cited by Western and Russian non-governmental experts and is often privately confirmed by Russian officials. If, however, one takes as a baseline the number provided by Alexei Arbatov for 1991 – 21,700 (Alexei Arbatov, “Deep Cuts and de-Alerting: A Russian Perspective,” in: *The Nuclear Turning Point* (The Brookings Institution Press: Washington, DC, 1999), p. 320), then the 75 percent reduction officially announced by Russia would leave it with 5,400 warheads by 2004 – figure that should be lower nowadays as dismantlement continues.

³⁹ Robert Norris and Hans Kristensen, “Nuclear Notebook,” *Bulletin of the Atomic Scientists*, May/June 2009(<http://thebulletin.metapress.com/content/h304370t70137734/fulltext.pdf>)

⁴⁰ NRDC has traditionally calculated both the overall number (2,050) and categories of Russian TNW by counting nuclear-capable delivery vehicles. Unlike strategic weapons, however, the relationship between delivery vehicles and warheads is far from direct where TNW are concerned – it is far from obvious that Russia keeps nuclear warheads for all nuclear capable delivery vehicles (meaning that the stockpile number is lower than the number of delivery vehicles) or, alternatively, might have several warheads for each delivery vehicle.

tangible and should not be given away. Western attempts to persuade Russia to act on TNW (which by default means asymmetric reductions) tend to be regarded with suspicion without serious thought about the reasons for these proposals. Instead, such attempts are seen as proof that these weapons are truly valuable.

- *Inertia.* The longer the same position is maintained, the more entrenched it becomes. A position that has been in place for over a decade can be changed either when the leaderships changes (as happened when Gorbachev assumed the highest office in the Soviet Union) or when the external environment changes. Neither condition is present today.
- *“Capabilities-Based Planning.”* The Russian elite, including the military leadership, acutely feels the uncertainty of the international environment. The main threat is still associated with the United States and its allies, but other potential threats are emerging, and the Russian military is reluctant to part with any assets. In 2005-2007, similar arguments were made in favor of the withdrawal from the INF Treaty (see below). The logic is similar to Donald Rumsfeld’s notion of “capabilities-based planning” that favors maintenance of all available assets as insurance against unforeseen (and unforeseeable) threats.
- *Parochial Group Politics.* As noted above, the Navy is interested in keeping TNW as a “just-in-case” option.⁴¹ In contrast, the Air Force appears much less interested in TNW except for weapons assigned to Tu-22M3 medium bombers. Other groups probably have even less interest in TNW, but are unlikely to invest political resources to get rid of these weapons. Similarly, the Foreign Ministry, another important player, has many other more pressing items on its agenda. Since no parochial group is seriously interested in changing the existing position, the Navy’s interest wins by default.
- *Arms Control Challenges.* Russian ambivalence with regard to TNW might also reflect the challenges of crafting a verifiable treaty. The traditional approach, according to which nuclear weapons are accounted for and reduced indirectly through accounting and reduction of nuclear-capable delivery vehicles, is inapplicable to TNW. New accounting rules require much more intrusive verification at several categories of nuclear-related facilities that have never been subject to inspections — storage sites for nuclear weapons, dismantlement facilities, etc. While such procedures are, in principle, not unthinkable, it would take serious investment of political resources to overcome entrenched resistance and political opposition.

⁴¹ It is ironic that confidential interviews collected in 1991-92 among U.S. officials attributed the rejection by George H.W. Bush of the Russian proposal to start negotiations on a legally binding and verifiable treaty on TNW to the U.S. Navy, which was reluctant to allow on-site inspections of ships and submarines to confirm the absence of nuclear warheads.

Russian response to all Western proposals has remained the same for years – any discussion is only possible after the United States withdraws its TNW from Europe. An interesting aspect of that condition is that Moscow apparently does not have a plan as to what it might do if the United States, indeed, complies with it. One can find a range of rather contradictory opinions on how Russian NSNW could be leveraged, but these come from any quarter except from high-level officials. By all indications, the sole purpose of the current Russian position is to deflect U.S. and European pressure.

While American TNW in Europe are few, they provide a convenient justification for rejection of any initiatives aimed at reducing the Russian TNW arsenal. Effectively, Russia has calculated that NATO would be unable to part with U.S. TNW. So far this calculation has proven solid and, given the outcome of internal NATO debates in the spring of 2010, will continue to succeed at least in the near future.

Modernization of Russian Strategic Nuclear Arsenal

Russian modernization programs are reasonably well known and for the purposes of this study require only an overview of key trends. These can be summarized in the following way.

All three legs of the triad undergo modernization. These programs are driven by the expiration of warranty periods of systems inherited from the Soviet Union – even though warranty is regularly extended, this cannot continue indefinitely. The rate of replacement is low and new ballistic missiles, both land- and sea-based, carry fewer warheads than Soviet ones. This means that arsenal undergoes gradual reduction. The strategic arsenal will probably stabilize by the end of this decade at about 800-1,200 warheads.

It is hardly surprising that Russia chose to deploy a new generation of delivery vehicles instead of restarting production of existing types. Behind this decision is the Soviet tradition of uninterrupted modernization, which, in turn was determined by the structure of the Soviet design and production complex.⁴² It should be noted, however, that the majority of new types of strategic weapons were developed still in the Soviet Union.

Technologically and conceptually, current strategic modernization programs represent linear continuation of Soviet programs. In this sense, the emerging Russian strategic nuclear posture is very traditional. SRF will probably account for the bulk of all deployed warheads (around 50-60 percent). The earlier plans to radically change the structure of the triad and shift the emphasis to the Navy, which were developed in 2000 and approved by then-President Vladimir Putin, have been abandoned. Russia has continued

⁴² For details see Nikolai Sokov, Russian Strategic Modernization: Past and Future (Rowman and Littlefield, 2000), chapter 1.

the Soviet line toward reduction of vulnerability and maintenance of high degree of readiness for launch – according to the SRF, almost all ICBMs could be launched within one minute.⁴³

The air-based leg of the triad is gradually shifting to a new tangent, however – to conventional strike capability. Eventually its role in the triad will probably be primarily symbolic and for all intents and purposes the Russian strategic arsenal will become a dyad.

The pace and the success rate for each leg of the triad are different. Modernization of the land-based, ICBM force began in the 1990s and progresses slowly, but surely. Introduction of new types of weapons systems into the sea-based leg has encountered major delays and its future remains uncertain. Modernization of the air leg has been postponed – Russia plans to rely on existing aircraft in the foreseeable future and only weapons for use by strategic bombers are being gradually modernized with an emphasis on conventional assets.

ICBM Force

The ICBM force modernization has been both conservative and most successful. Its center is Topol-M, a new ICBM designed in the last years of the Soviet Union. The project was partially revised in the 1990s to adapt to the new industrial base (a large part of relevant enterprises remained outside Russia). In the 2000s the same ICBM was further redesigned to carry several warheads and was designated RS-24, or Yars. Beginning of deployment was postponed until after the expiration of START I.

The rate of ICBM production is low – less than 10 missiles each year; increase of production is unlikely. After 10 years, only six regiments (60 missiles) of silo-based ICBMs have been deployed and only two regiments (18 missiles) of road-mobile ICBMs. In the meantime, the SRF has been extending service lives of existing types of delivery vehicles – to 31 years for SS-18 and to 23 years for Topol (SS-25) and SS-19.⁴⁴

The low rate of missile production might be surprising given the impressive Soviet capability to turn out large numbers of new weapons – in the 1980s production of Topol (SS-25) was reportedly at 50 per year. Speaking in late 2007, at the time of relative financial plenty, First Vice-Premier and former Minister of Defense Sergey Ivanov sought to make it clear that the government consciously chose “butter” versus “guns:” “We believe,” he stated, “that we do not need 30 *Topol-Ms* a year.⁴⁵ Of course, we would not

⁴³ “Pochti Vse Puskovyye Ustanovki RVSN Nakhodyatsya v Miutnoi Gotovnosti,” RIA-Novosti, February 11, 2009.

⁴⁴ “Vtoroi Polk Mobilnykh ‘Topol-M’ Zastupit na Dezhurstvo do Kontsa Goda,” RIA-Novosti, November 18, 2009.

⁴⁵ 30 Topol-Ms a year is widely assumed to be the cost-effective level of production – the lowest cost per unit – and has been regularly mentioned by leading figures of the Russian military-industrial complex.

mind having them, but this would mean that we would need to cut social programs, housing programs, and other things.” He added that the annual deployment of six to seven new missiles is sufficient for the SRF.⁴⁶ At the same time, Ivanov emphasized that “military capability, especially nuclear capability, should be sufficient if we want to be at a [safe] level or even merely independent. No one likes the weak, no one listens to them, everyone abuses them, and when we have parity, others talk to us differently.”⁴⁷

There are other explanations for the low rate of production. One is the breakup of the traditional Soviet networks: many Soviet-era enterprises that contributed to production of components remained outside Russia. It is known that the number of only first-order suppliers for Topol-M is around 200; recreating these networks from the scratch is difficult, expensive, time-consuming, and probably outright impossible. Another possible explanation is that Russia sought to reserve some unused production capacity for the new SLBM Bulava.

Nonetheless, the SRF confidently promises that by 2016 about 80 percent of all ICBMs will be new, i.e., deployed in the post-Soviet period.⁴⁸ Reduction under New START and perhaps under the next agreement could certainly contribute to that goal, but it nevertheless appears wishful thinking without a significant increase of funding.

Even more remote is the plan to develop a new liquid-fuel MIRVed ICBM to replace the Soviet SS-18 (the new ICBM will hardly classify as “heavy” under START I definitions, but its throw-weight will likely be significantly greater than that of Topol-M, probably at the level of SS-19).⁴⁹ Development of the new ICBM is supposed to be completed by 2016, but the goal does not appear realistic. More likely, same as talk about the revival of the rail-mobile ICBM, it reflects the wishes of the military rather than definitive plans.

That said, liquid-fuel missiles have, in the eyes of the military, certain advantages that explain why this line of missiles is still alive in Russia unlike in the United States. Traditionally, Soviet liquid fuel has been more efficient than Soviet solid fuel allowing for greater throw-weight for the same weight of missile. Liquid-fuel missiles have helped Russia retain an impressive strategic arsenals after two decades of financial, economic, and political turmoil: a large number of these systems that had been produced in the

⁴⁶ “Rossiya ne Budet Narashchivat Proizvodstvo Raket v Ushshcherb Sotsialnym Programmam” [Russia Will Not Increase Production of Missiles at the Expense of Social Programs], RIA-Novosti, December 7, 2007.

⁴⁷ “Pervyi Vitse-Premier Sergey Ivanov Zayavil o Neobkhodimosti Pariteta Yadernyih Sil Rossii i SShA” [First Vice-Premier Sergey Ivanov Declared that Parity of Russian and U.S. Nuclear Forces is Needed], RIA-Novosti, December 7, 2007.

⁴⁸ For a recent statement to that effect see, for example, a statement of the new SRF Commander Andrey Shvaichenko: “Udarnaya Gruppirovka RVSN Budet na 80 Protsentov Sostoyat iz Novykh Raket,” RIA-Novosti, October 12, 2009.

⁴⁹ “RF Sozdast Novuyu Tyazheluyu Ballisticheskuyu Raketu na Smeny Kompleksu ‘Voyevoda’,” RIA-Novosti December 16, 2009.

Soviet Union remained in “dry storage,” i.e., were kept without fuel. During the post-Soviet period, the military could simply take them from storage, fuel, and deploy. This cannot be done with solid-fuel missiles whose warranty period begins at the moment of production.

Recently the SRF was criticized by the government for being insufficiently ambitious. Reportedly, chief of the Government’s Department for the Support of the Military-Industrial Commission Sergey Khutortsov declared that the SRF was bogged down in small-scale programs and does not have an ambitious long-term goal around which its future should be built, unlike the Navy or the Air Force. The new liquid-fuel MIRVed ICBM and even rail-mobile ICBM did not classify as sufficiently ambitious, he said.⁵⁰

The SRF proudly advertizes defense-penetration properties of its new ICBMs,⁵¹ but conveniently fails to mention that this capability was part of Soviet-era design. In particular, Topol-M features reduced boost phase (about one-third of that of SS-18), which was intended to reduce the effectiveness of space-based interceptors; today this capability is probably less relevant. Topol-M can also carry a maneuverable warhead known as Igla. There is no public authoritative confirmation that Igla is actually being deployed following a very small number successful tests. Overall, the anti-missile defense capability of new Russian ICBMs should not be overestimated.

SLBM Force

Modernization of the sea leg of the triad has encountered major technological and political failures. The initial plan was apparently fairly logical: retain the more modern Delta III and IV SSBNs (eventually only the latter) with replacement missiles, develop a replacement missiles for Typhoon SSBNs, and build new SSBNs to carry the same missiles as Typhoons. This plan quickly fell apart. The replacement for SS-N-20, known as Bark, was canceled after three failed test flights. Although the failures had been attributed to production shortcomings and one Typhon-class SSBN had been converted for further tests of Bark,⁵² the contract for the new solid-fuel SLBM was nevertheless given to the Moscow Institute of Thermal Technology (MITT), the same that developed Topol and Topol-M ICBMs. Design of the new SSBN had to be radically altered: construction of the first submarine in the new class was put on hold until new designs could be drawn to accommodate a radically different missile. The Typhoon-class SSBN converted for Bark was converted once again to serve as a testing pad for the new missile. This decision, made in the late 1990s, was widely attributed to parochial fights, and in particular to the close relationship between the Director of MITT Yuri Solomonov and the then-Defense Minister Igor Sergeev, previously the Commander of the SRF.

⁵⁰ “Sredstva na RVSN Sostavlyayut Okolo Treti Finansirovaniya Yadernoi Triady,” RIA-Novosti, December 8, 2009.

⁵¹ “Raketnye Kompleksy RVSN Sposobny Preodolevat Noveishuyu PRO SShA,” RIA-Novosti, September 10, 2009.

⁵² Yuri Zaitsev, “Ot RSM-40 do ‘Sinevy’,” RIA-Novosti, March 11, 2009.

MITT planned to make the new SLBM, code-named Bulava, an example of a new approach to development of missiles – relatively fast, relatively cheap, with fewer test flights, and large-scale use of computer simulation. The new missile was supposed to become a major departure from Soviet traditions of SLBM design and be much lighter and smaller than Soviet solid-fuel SLBMs. The plan failed utterly – to date, seven out of 12 test flights have failed, and that by rather relaxed official criteria; the majority of non-governmental experts classify only one or two tests as successful.

By the end of 2009 the government and the Ministry of Defense lost patience. Solomonov had to resign from the position of the head of MITT and a special commission was established to investigate the cause of failures concluded that the missile's design was faulty.⁵³ Resumption of tests was initially scheduled for early summer 2010, but then was postponed until late fall.⁵⁴ Solomonov, however, continues to insist that failures were caused by substandard components supplied by the industry, which no longer can maintain high quality.⁵⁵

In the meantime, the new SSBN program continued in spite of delays with the missile. The first submarine in the new class, Yuri Dolgoruki, has been commissioned, two more are being built and the keel of the fourth was laid in January 2010. It was also decided to retain one more Typhoon SSBN and convert it for Bulava. Eventually this might mean that, given the low production capability, Russia will have serious problems producing the necessary number of SLBMs to equip all submarines (16 per each new Borey-class SSBN and 20 per each Typhoon; future Borey SSBNs are expected to carry 20 missiles each).

The sorry state of modernization of the Navy increasingly causes displeasure of the top echelons of the government – last year First Deputy Prime Minister Sergey Ivanov revealed that the Navy consumes 40 percent of the total defense budget, more than the SRF, Air Force, and Space Forces combined, and that the bulk of that spending goes to the nuclear submarine force.⁵⁶ Implicit in the tone of his remarks was recognition that the yield from that investment remains unsatisfactory.

In the meantime, the sea leg of the Russian triad consists Delta III and IV SSBNs. These submarines were given an overhaul to extend their service lives. The Makeev design bureau, which had lost contract for a new SLBM, produced a modernized version of SS-N-23. In the coming decade Delta IIIs will be probably phased out and only slightly newer Delta IVs will remain in service. Thus, early completion of the Bulava program

⁵³ "Prichinoi Neudachnogo Puska 'Bulavy' Yavlyaetsya Konstruktorskaya Oshibka," RIA-Novosti, January 12, 2010.

⁵⁴ Dmitri Litovkin, "'Bulavu' Ispytayut Osenyu," Izvestia, May 24, 2010.

⁵⁵ 'Solomonov Obyasnil Neudachi 'Bulavy',' Voeno-Promyshlennyi Kurier, No. 9, 2010.

⁵⁶ "Lvinaya Dolya Buydgeta MO Idet VMF, v Osnovnom Yadernym Silam – Ivanov," RIA-Novosti, June 3, 2009.

remains a must – without it, Russia risks losing the sea leg completely by the end of this or the beginning of the next decade.

It might be interesting to contemplate Russian strategic triad without the naval component. Proposals to phase out SSBNs were quite popular in the late 1990s-early 2000s, when investment into modernization of that leg was still minimal. In that case, Russia might seek much deeper cuts in nuclear arsenals than otherwise likely and the mission of strategic deterrence would be supported by the SRF while “de-escalation” would still be entrusted to the Air Force. In the end, transition from a triad to a dyad might be a good choice, but it appears unlikely for political reasons and also because too much money has already been spent on Bulava – it is difficult to imagine a political or military leader who would be willing to accept responsibility for the failure.

Air Force

Air Force never played a major role in Soviet nuclear posture; its share in the strategic arsenal was limited to about 5 percent of deployed warheads. This choice is easy to explain by traditional drawbacks of Soviet aircraft-building (especially in engines and navigational equipment) as well as long distances heavy bombers had to cover to reach the United States meaning a very long gap between decision to launch and delivery as well as very limited payload. The situation began to change somewhat in the 1980s after the Soviet Union succeeded in development of long-range air-launched cruise missiles, ALCMs. Posture plans drawn in the late 1980s foresaw some (albeit still limited) increase in the share of warheads carried on heavy bombers.

In the post-Soviet time the Air Force remained at the back burner during the larger part of the 1990s until Ukraine agreed to sell some heavy bombers to Russia instead of eliminating them under START I. This allowed increasing the number of heavy bombers to a level that had at least some military sense. In the 2000s the Air Force became the leading asset to support the new mission, that of “de-escalation.”⁵⁷

Nuclear-capable aircraft (heavy bombers Tu-160 and Tu-95MS as well as medium Tu-22M3) have remained at the back burner of modernization efforts: existing heavy bombers are expected to last until at least the end of this decade, so there is no rush, in contrast to the ICBM and SLBM forces, which must be replaced as a matter of urgency. Instead, Russia has concentrated on upgrading electronics and avionics of these aircraft; some heavy bombers designed to carry ALCMs are being converted to carry gravity bombs.

Modernization of nuclear weapons has been very limited. Russia is working on a new-generation (reportedly supersonic) ALCM, Kh-101 and its conventional version Kh-102.

⁵⁷ For an overview of the aspects of major military exercises relevant to the analysis of nuclear doctrine, see Nikolai Sokov, “Significant Military Maneuvers,” Part V of “Issue Brief: Russia’s Nuclear Doctrine,” August 2004, [Bwww.nti.org/e_research/e3_55a.html](http://www.nti.org/e_research/e3_55a.html).

Work on that program has been exceedingly slow – it began in the 1990s and the last mention belongs to 2000. After that, mentions of that program ceased until recently, when it surfaced only once and almost by accident. Obviously, the program is highly classified, but work continues, which is hardly surprising because at the moment the only long-range nuclear asset is a hopelessly outdated Kh-55. There is also a plan to give high precision capability to gravity bombs using the emerging navigational system, GLONASS.

Eventually aircraft has to be replaced, of course. Among existing types Tu-22Ms will probably be phased out completely. Some suggest that Su-34 could take up its roles, but it is unclear whether a decision has been made yet, which probably indicates that Russian military does not foresee many nuclear missions at Su-34 ranges.

Long-range plans of the Air Force are built around a brand new bomber, which will reportedly fall somewhere between Tu-22M3 and heavy bombers in range and load and is expected to be cheaper than the heavy bombers.⁵⁸ Its main missions are reported to be in Eurasia and perhaps also northern part of Africa. One wonders whether the new aircraft will actually fall under the traditional, START I definition of heavy bomber. Beginning of test flights is scheduled for 2015-16 and production could begin around 2020. These dates are certainly subject to revision, which is hardly surprising given the tradition of delays of all modernization programs: in fact, first reports about the new bomber appeared more than ten years ago, but the Ministry of Defense concluded a formal contract with Tupolev design bureau for a new aircraft only in August 2009.

Information about modernization of the air leg of the strategic triad is scarce, but whatever is available leads to three conclusions:

First, the Air Force is likely to lose a role in strategic deterrence, even though formally and for arms control purposes it will remain part of strategic arsenal.

Second, the Air Force will maintain and perhaps even enhanced a nuclear role at the theater level. This role will not require large capability and the number of long-range aircraft will remain relatively small.

Third, long-range aircraft will increasingly support conventional long-range missions. In this, Russia follows the trends of U.S. Air Force with about 15-20 years lag. More about this aspect of Air Force modernization will be discussed in the relevant section of this paper.

Missile Defense in U.S.-Russian Relationship

⁵⁸ “Dalnaya Aviatsiya: Perspektivy Strategicheskikh Mashin,” RIA-Novosti, December 23, 2009.

American missile defense plans is an old issue in U.S.-Russian relations. It dates back to Reagan's Strategic Defense Initiative; tensions declined in the early 1990s, but began to build up again toward the end of that decade and reached the peak during last decade as a result of U.S. withdrawal from the ABM Treaty and subsequent announcement of the intention to deploy ten interceptors in Poland and a radar in Czech Republic. The announcement in September 2009 of a change in missile defense plans for Europe helped to significantly alleviate the acrimony, but did not remove it completely.

That is, conflict has continued for almost three decades. A truly curious element of the picture is that strategic missile defense still does not exist. So far it has all been about intentions and the projected capability of the future system.

Another curious element is that there is actually very little to be said about the nature and the dynamic of that conflict. The fault lines are simple and straightforward; they have not changed in many years.

Russian view of missile defense is informed by the traditional view of strategic deterrence built around mutual vulnerability. Underlying Russian opposition is fear that the United States could acquire ability to deny Russia ability to respond to an attack; this concern was shaped in the 1980s by SDI plans. Even though the likelihood of a large-scale nuclear war is practically non-existent, there is fear that such capability could be used as a leverage to extract concessions, exert political pressure, etc. In other words, it goes straight to the heart of the view that nuclear weapons guarantee Russia's security and sovereignty. Hence, opposition to missile defense amounts to more than just a straightforward military calculation. The issue has become emotionally charged and suspicions now matter more than cool-headed assessment.

Virulent, often hysterical Russian opposition to the George W. Bush plans to build a limited strategic defense capability in Europe has demonstrated two underlying and intertwining trends that make conflict almost inevitable.

First, multiple capabilities of a system designed to protect the United States against Iranian or North Korean missiles. The same assets could theoretically intercept Russian missiles as well and that residual capability conveniently feeds into the concern about the credibility of strategic deterrence.

Almost no one in Russia believed the official justification provided by the Bush administration because, according to Russian military's estimates, Iran will not acquire missiles with strategic range for many years. Hence, Russians tried to imagine the "real" purpose of the planned missile defense and, not surprisingly, concluded it was intended against Russia – worst-case planning and suspicions still to a large extent rule the day in Moscow. Washington's assurances that the system would be limited were not taken seriously – the planned deployment was regarded as a "foot in the door" with the first ten interceptors supplemented by dozens more at a later stage.

A further complication was the manner and style of Russian rhetoric, which almost always failed to clearly convey the true nature of concern – it was not about the system the Bush administration planned, but rather about its possible expansion in the future. Russian statements were usually devoted to short-range plans. Concern about future capability was further enhanced by the insistence of the White House that the plan was open-ended and refusal to set any limits, whether formally or informally. The open-ended nature of the proposed system further strengthened Russian belief that the “true” plans were much more ominous than those announced publicly.

Only relatively rarely did Russians clearly distinguish between immediate American plans and possible future expansion. Speaking in February 2007, Chief of the Air Force Vladimir Mikhailov said that he regarded “very calmly” the planned missile defenses in Eastern Europe.⁵⁹ Former Chief of Staff of Strategic Rocket Forces Viktor Yesin opined that the main threat of missile defense came from “undefined architecture.” “Will there be ten interceptors or a thousand? It’s ten now, but no one can guarantee there will not be more.” He anticipated that eventually the United States would also deploy missile defense assets in Japan, Great Britain or Norway.⁶⁰ Deputy chief of the Main Directorate of International Cooperation at the Ministry of Defense Yevgeni Buzhinski said that current small-scale deployment plans were but elements of a broader vision – a global network of missile defense around Russia’s borders.⁶¹

This leads to the second and perhaps the most important feature of the conflict over missile defense – it has been about the lack of predictability. In the absence of reasonably clear-cut, definitive long-term plans, Russian thinking has been unavoidably informed by worst-case scenarios. **The most important lesson that could be drawn from the conflicts of the last decade over missile defense is simple, but perhaps difficult to implement – the need for predictability. U.S. efforts to maintain transparency through provision of information about plans turned out to be insufficient.**

It is no wonder that the lowest point in U.S.-Russian interaction on missile defense was the end of 2007 and 2008. In October 2007, a two-by-two meeting (between foreign and defense ministers of the two countries) seemed to have achieved a preliminary agreement on a set of confidence building measures intended to alleviate Russian concerns. Neither side was fully satisfied with it, but about a week after that meeting Vladimir Putin, at that time still president of Russia, indicated that Moscow regarded that tentative deal as a foundation for possible future agreement.⁶² When the United

⁵⁹ “Rossiya Perenapravit Rakety” [Russia Will Retarget Missiles], Vzglyad, February 19, 2007.

⁶⁰ RIA-Novosti, July 24, 2008

⁶¹ RIA-Novost, May 27, 2008; Vadim Udmantsev, “Pautina Vokrug Granits,” VPK, June 4-10, 2008

⁶² Interview Iranskomu Gosteleradio i Informatsionnomu Agentstvu _IRNA_ [An Interview with the Iranian TV, an Information Agency IRNA], October 16, 2007, Official Website of the President of the Russian Federation [<http://president.kremlin.ru/text/appear/2007/10/148471.shtml>].

States transmitted its proposals on missile defense in writing a month later (delay was ascribed to protracted bureaucratic infighting in Washington), however, Russian officials promptly rejected them accusing the United States of retracting the compromises discussed during the Gates-Rice visit and returning the negotiations to square one.⁶³ After that, Moscow came to regard dialogue with the United States on missile defense as impossible.

Against that background, the September 2009 announcement about a revision of plans for defense of Europe was seen as positive news. While “principled” opposition to missile defense did not disappear, the new architecture was at least logically explainable. It was clearly intended to defend Europe from *existing* Iranian missiles and at the same time in the near future will not have capability to intercept Russian ICBMs.

Acknowledgment by the United States in New START of a relationship between offensive and defensive weapons also contributed to a calmer tone of interaction on missile defense. New START did not resolve the issue, from the Russian perspective, but was a positive first step toward a “final solution.” Effectively, it bought time for a more constructive engagement and this is probably the maximum that could be done at the current stage.

Nevertheless, the issue did not fade away completely. While current plans are not a source of serious concern, possible future capabilities still are. Chief of General Staff Nikolai Makarov declared that U.S. missile defense in its current shape and capability is not a concern for Russia, but long-term plans to develop strategic missile defense could become a threat.⁶⁴ According to Vladimir Dvorkin, “the crisis between Russia and the United States over missile defense has been postponed [by the signing of New START], but it could return in an even more acute shape after the sea-based missile defense system built around SM-3 interceptors and their ground-launched analogues acquire strategic capability by 2020.”⁶⁵ That is, while the first irritant – multiple capabilities – has been removed, the other and more important one, predictability, still needs to be addressed.

A complicating feature that has emerged during the last decade was the emergence of close cooperation between Russia and China in opposition to U.S. missile defense plans. Both countries share many of the same concerns and have jointly acted in almost every conceivable international forum to oppose and derail American plans. A turning point in that cooperation was 2005, when Foreign Minister Sergey Lavrov declared that Russia and China *both* face the *same* threat from U.S. missile defense plans. As a result, now

⁶³ For details see Nikolai Sokov, “Moscow Rejects U.S. Written Proposals on Missile Defense, Downplays New Iranian Missile Test,” WMD Insights, February 2008.

⁶⁴ “PRO SShA v Nyneshnem Sostoyanii ‘Ne Volnuet’ Rossiiskikh Voennykh – Genstab,” RIA-Novosti, April 12, 2010.

⁶⁵ Vladimir Dvorkin, “Otlozhennyi Protivoraketnyi Krizis,” Nezavisimaya Gazeta, April 20, 2010.

Russia's ability to find accommodation with the United States, launch cooperative programs, etc. is limited because it could be seen by China as "betrayal."

Quite paradoxically, another, equally persistent theme in Russian approach to U.S. missile defense programs have been proposals for cooperation. In the early 1990s these proposals were built around a notion that Russia could contribute technologies developed during decades of R&D in missile defense. These included programs launched in the 1980s – although the Soviet Union vehemently opposed SDI and advertized "asymmetric" response to it (i.e., through enhancement of offensive weapons capability), it simultaneously pursued a wide range of its own defense programs, a "symmetric" response. These were not particularly advanced and mostly remained at the stage of research, but their scale was quite impressive – they consumed more than half (about 52 percent) of all spending on strategic weapons.

Since late 1990s, Russia sought to showcase defense system against tactical missiles, S-300, as well as another system, S-400, at that time still in the pipeline, which was intended against intermediate-range missiles. Indeed, the 1997 New York Protocols, which drew a line between strategic and non-strategic defenses (i.e., those that were banned or allowed under the 1972 ABM Treaty), were carefully crafted by Russia to protect S-400. The highest point of these initiatives was a proposal made in early 2001, which foresaw a relatively well-developed plan for defense of Europe consisting of a combination of S-300 and S-400; this proposal was overlooked by the United States, which, under the new administration, was moving toward abrogation of the ABM Treaty.

It is important to understand Russian definition of cooperation. It assumed that Moscow would supply weapons systems (and get paid for them), be an integral part of decision-making on the architecture of the defense system (and have the right to veto elements of the system that could be used to track and/or intercept Russian missiles), and be part of operating the system (including the right to prevent launches of interceptors against Russian missiles). The definition of cooperation used by George W. Bush administration was different. The most important practical contribution that was expected from Russia was data from the radar it operated – from Gabala in Azerbaijan and later from the new radar in Armavir. That is, Russian participation would have to be passive. This mode did not satisfy Moscow and it was not prepared to supply data to an American-operated system, only to a joint one.

Proposals about a joint missile defense resumed under Obama administration and have recently become a central point in Russian official and unofficial statements on missile defense. President Dmitri Medvedev declared recently, in response to NATO overtures on cooperation in missile defense, that Russia would be interested in a joint system with NATO if the proposal was serious.⁶⁶ Former Chief of Staff of the SRF Viktor Yesin opined

⁶⁶ "Rossiya Skazhet 'Da' Predlozheniyu NATO po PRO, Esli Predlozhenie Seryoznie," RIA- Novosti, April 26, 2010.

that the United States and Russia could create a joint defense system to protect Europe against Iranian missiles and mentioned that such a system could be configured to intercept Iranian missiles with speeds up to 7 km/second (that is, it would be classified as non-strategic under the 1997 New York Protocols) and use data not only from American radars, but also from radars at Gabala and Armavir. According to Yesin, such a system could be created after 2015.⁶⁷ Similarly, Vladimir Dvorkin wrote that a joint system building on simulations conducted between the United States and NATO during the last decade is the only way to resolve the continuing controversy over missile defense. In his view, however, the system does not need to be fully integrated and instead could be built on dividing responsibility for different sectors.⁶⁸

Proposed Russian contribution is still S-300 and S-400 systems, which are now in a more advanced stage than they used to be ten years ago. In fact, S-400 entered test deployment in 2007 and is expected to go into mass production later this year or in 2011 following long delays with development of a new interceptor. Moreover, Russia is conducting R&D on a still more advanced system, S-500 Triumphator, which is supposed to be ready for production in 2015 (given multiple-year delays with S-400, this official timeline does not sound very realistic, though). With S-500 Russia could reach the parameters proposed by Yesin (7 km/second for incoming missiles; S-400 can only intercept missiles with less than 5 km/second speed).

All in all, solution to the issue of missile defense remains elusive. Perhaps the biggest challenge is lack of any clarity with regard to a “final” solution; thus, it is difficult to decide which way dialogue should steer. Russian preference seems to be for a new ABM treaty of some sort that would regulate missile defense to guarantee mutual vulnerability of the United States and Russia. Such a solution is hardly feasible in the near future. Furthermore, Russian position on missile defense is limited by its close cooperation with China, whose criteria for a new international regime in missile defense are likely to be even more restrictive than those of Russia. While a new politically or legally binding regime on missile defense seems improbable, it is still advisable to nevertheless discuss it, perhaps unofficially, to enhance predictability and promote better understanding of positions of all parties.

In the absence of a “final” solution, a series of small-scale partial agreements on various elements of relationship in missile defense area seems more feasible. These could address confidence building measures, enhance transparency and predictability. That is, conflicts seem unavoidable, but they can be regulated and kept in check. There appears to be two ways of tackling differences, neither fully acceptable to the United States or Russia for reasons of domestic politics.

⁶⁷ “Rossiya i SShA Mogut Sozdat Sovmestnuyu PRO v Evrope Protiv Irana,” RIA-Novosti, September 21, 2009.

⁶⁸ Vladimir Dvorkin, “Otlozhennyi Protivoraketnyi Krizis,” Nezavisimaya Gazeta, April 20, 2010.

The first option is **enhanced predictability**. All the loud, sometimes shrilly, statements notwithstanding, Russia has never been concerned about short-term American plans; even the George W. Bush administration's system was not regarded as an immediate threat. Concern has been primarily about future capability, which has so far remained undefined. Interaction in the last decade has demonstrated that simple information about plans is not sufficient because plans can change; other ways to enhance predictability should be considered together with enhanced consultations. An ultimate predictability mechanism is a new full-scale treaty on missile defense, but other, more limited options should be considered.

The second option favored by Russia is a **fully integrated missile defense system**. A strong cooperative program in that area could change the lineup of domestic parochial groups in Russia in favor of a more moderate attitude toward American plans, but such a joint system would give Russia a role in decision-making on all aspects of building and operating it. That degree of involvement and especially the right of veto over the use of the system, whether formal or de facto, is likely to be unacceptable to Washington, too.

A positive element in all conflicts and debates over a possible missile defense system, which has not attracted sufficient attention, is that Russia is actually prepared to contribute to defense of Europe and potentially of the United States from Iran as long as it is accepted as a full partner. This could finally and unequivocally put Moscow into the "Western camp" with regard to Iran and end the Russian attempts to straddle the fence when it comes to Russian-Iranian relations. Interestingly, the military and the defense industry seem to favor that solution and, for a change, the Foreign Ministry takes a more conservative approach.

In the end, there is probably no prospect of a "final" solution to the issue of missile defense. In all likelihood, controversy and conflict will continue in the foreseeable future. The parties will continue to "muddle through", one year after another with ups and downs and perhaps with some partial, small-scale agreements on various aspects of the issue.

Long-Range Conventional Capability

Russian opposition to the emerging U.S. Global Strike is well known. Multiple concerns voiced by Russian officials and uniformed military fall into three categories:

First, high-precision conventional weapons could be used in a disarming first strike against Russian nuclear arsenal. This was a major concern in the 1990s, but its urgency has been gradually declining. Among the military, there is still concern about ability of high-precision conventional weapons to destroy "soft" targets, particularly road-mobile ICBMs, but even that is not considered a high-priority threat, at least not at the moment. By and large, this concern is now limited to conservative quarters.

It should be noted, however, that decline of this concern rests, to a large extent, by continued reliance on nuclear weapons. Even a well-known liberal expert Aleksei Arbatov emphasized recently that “as long as Russia as a reliable nuclear deterrence capability, the scenario of a massive and extended conventional air and missile U.S. strikes using high-precision conventional weapons remains an artificial threat.”⁶⁹ Without it, Russia could have been much more concerned about U.S. conventional strike capability.

Second, in a large-scale conflict conventional assets can do many of the same things as nuclear weapons, but are more usable. To some extent, this is not so much a concern as envy – where the United States could utilize conventional assets Russia is still limited to nuclear options. The recent Nuclear Posture Review was assessed by Russian experts from precisely that angle – the United States no longer needs nuclear weapons for its security and can (or will in the near future) support almost all missions with conventional assets.⁷⁰

Third, and final, it is difficult to distinguish a long-range delivery vehicle with a conventional warhead from the same vehicle equipped with a nuclear warhead. Since trajectories toward the majority of likely targets cross Russian territory or closely skirt it, they could be interpreted by the early warning system as an attack.⁷¹ This concern appears real and needs to be addressed – the Russian military are clearly not going to be satisfied with U.S. notifications in case of a launch and will want ability to independently verify it. Very limited (non-existent for all practical purposes) Russian capability to detect single launches from submarines is likely to complicate the matter even further. Paradoxically, ICBMs armed with conventional warheads might be a better option for Global Strike because Russian inspectors could verify the type of warheads on designated ICBMs during RV inspections under New START (on the other hand, to reach the majority of targets in Eurasia ICBM must fly Russian territory, which can be cause of concerns as well).

Even as Russian politicians, military, and non-governmental experts continue to criticize American plans for Global Strike, they simultaneously advocate acquisition of similar capability by Russia. As a well-known Russia expert, Aleksandr Khramchikhin, noted,

⁶⁹ Aleksei Arbatov, “Strategicheskii Surrealizm Somnitelnykh Kontseptsii,” *Nezavisimoe Voennoe Obozrenie*, March 5, 2010.

⁷⁰ Vladimir Ivanov, “Vashington Shagnul v Bezyadernyi Mir,” *Nezavisimoe Voennoe Obozrenie*, April 16, 2010; Dmitri Ruyrikov, “...Plus Bystryi Globalnyi Udar,” *Voennoe-Promyshlennyi Kurier*, No. 10, 2010.

⁷¹ The 1995 “Black Brunt” incident, when a single Norwegian research rocket triggered a false alarm in the Russian strategic command and control system, serves as a reminder that this concern is not pure imagination: as it turned out later, the rocket closely fit one of first strike scenarios built into the early warning system. For details see Nikolai Sokov, “Can Norway Trigger a Nuclear War? Notes on the Russian Command and Control System.” PONARS Policy Memo No. 24, 1997.

“strategic weapons are not a panacea for defense against attack against Russia.”⁷² It is worth recalling that the 2000 National Security Concept and subsequent documents called reliance on nuclear weapons a temporary “fix” until Russia acquires modern conventional capability.

Efforts toward that goal have started in the 1980s, but progress is slow. Nonetheless it enjoys greater attention than modernization of nuclear capability. Programs include long- and short-range precision guided air- and ground-launched missiles as well as new communication, command and control assets, a Russian analogue to GPS, GLONASS, which should enable precision strikes, etc.

In early 2000s Russia began production of Kh-555 conventional ALCM (a version of the nuclear Kh-55); in the 1990s it also started to work on a brand-new Kh-101/102 ALCM: the 101 variant for nuclear warhead and 102 for conventional. This R&D program has apparently been exceedingly slow and secretive – it was fairly often reported in the media in the 1990s, but then all information about it disappeared from open sources until 2009, when it was mentioned only once and apparently inadvertently. The Air Force has also begun conversion of some Tu-160 heavy bombers from cruise missiles to conventional gravity bombs.

In the 1990s Russia also developed a new tactical missile, Iskander; its production began in mid-2000s. Initially Iskander-E was reported to have the range of 280 kilometers,⁷³ but subsequently its range was reportedly increased to more than 400 kilometers – about the same as the SS-23 Oka, which was eliminated under the 1987 INF Treaty. Later, a cruise missile was also developed for Iskander launcher. The decision, announced in 2008, to deploy five brigades (probably 60 launchers with two missiles each) of Iskanders in Kaliningrad oblast – officially in response to American plan to deploy missile defense assets in Poland and the Czech Republic,⁷⁴ – perhaps signaled a move in the shifting emphasis from nuclear to conventional capability vis-à-vis NATO. Moscow had to cancel these plans in 2009 after the revision of U.S. missile defense program, but this probably only shows that the pretext was wrong – a change of U.S. plans was apparently not expected. If deployment of Iskanders, indeed, was part of a

⁷² Aleksandr Khrushchikhin, “Strategicheskie Vooruzheniya ne Panatseya ot Ugrozy Voennogo Napadeniya dlya Rossii,” *Voенно-Promyshlennyi Kurier*, No. 11, 2010.

⁷³ The Iskander-E was developed with a range of 280 kilometers to avoid the restrictions of the Missile Technology Control Regime (MTCR) – the multilateral arrangement that seeks to restrict exports of missiles able to carry a 500 kilogram payload to a distance of 300 kilometers or more. The letter “E” in the missile’s name denotes the “export” variant. See Nikita Petrov, “Asimmetrichnyi Otvet” [An Asymmetric Response], *Strana.Ru*, February 16, 2007; Nikolai Poroskov, “Evropa pod Pritselom” [Europe in Sights], *Vremya Novostei*, February 16, 2007.

⁷⁴ See the Address to the Federal Assembly by President of Russia Dmitri Medvedev on November 5, 2008, <http://president.kremlin.ru/text/appears/2008/11/208749.shtml>.

move toward greater reliance on conventional assets, the idea will be revived in a new context.

An important element of the emerging conventional capability is multipurpose (attack) submarines. Russia is building new types of SSNs and diesel-powered submarines – Project 885 Yasen (the first SSN, Severodvinsk, should be commissioned this or next year), Project 677 Lada (construction of the first submarine was completed in 2005, two more are close to completion). These and other submarines are equipped with dual-capable cruise missiles, both those intended against other ships and against land targets. As mentioned above, the Navy seeks to maintain nuclear capability, especially vis-à-vis U.S. Navy, but conventional assets play an increasingly visible role in the long-term plans.

The pace of conventional rearmament is set to increase following the “five-day war,” the conflict between Russia and Georgia in August 2008. Russia won this conflict largely due to the sheer size of the army it sent to battle. Speaking in September 2008, Dmitri Medvedev declared: “We must achieve superiority in the air, in high-precision strikes against land and sea targets, in quick relocation of troops ... By 2020 we must solve the problem of ... comprehensive equipment of forces with new models of arms and reconnaissance assets.”⁷⁵

More than two decades of work on a global positioning system, GLONASS, which should allow precision guidance for conventional weapons are gradually coming to completion as well. It currently features 21 satellites allowing coverage of Russia’s own territory with two or three satellites for each location; launch of six additional satellites is planned for 2010. The system is still inferior to GPS – the accuracy of its coordinates in Russian territory is reported to be 6 meters, several times worse than for GPS, but on the other hand its characteristics are gradually improving – in 2009 it was 10 meters.⁷⁶ One of the main drawbacks of Soviet satellites, which necessitates frequent replacement of satellites in orbit, – short life span – is also slowly improving. A new satellite was introduced several years ago and in 2010 Russia plans to launch the first satellites that will last seven or more years. Given multiple delays and Russian propensity to overestimate the ability to deliver new products, GLONASS will probably reach full functionality only in the second half of the coming decade.

While Russian efforts to acquire long-range conventional capability seem to mirror what the United States has been doing for over 20 years, there is an important asymmetry that could complicate finding a common language. In contrast to Global Strike, which emphasizes strategic ranges because potential targets are located in southern Eurasia (Middle East, South Asia, etc.), Russia is developing theater-level conventional

⁷⁵ Vera Sitnina, “Voina Mozhet Vspykhnut Vnezapno,” *Vremya Novostei*, September 29, 2008)

⁷⁶ Viktor Myasnikov, “GLONASS Dlya Vsekh,” *Nezavisimoe Voennoe Obozrenie*, June 4, 2010.

capability. Ironically, American and Russian targets, if not the same, at least overlap, but Russia is simply closer to these targets. Furthermore, assets the United States needs to strike targets in the areas of ongoing and potential conflicts could also be used against Russia, which will remain a source of unending concern for Moscow whereas Russian theater-range assets will not be able to strike the United States. Thus, Russian military and civilian experts will continue to voice concern about Global Strike. This concern could be alleviated somewhat through a set of confidence building measures, but hardly removed completely, at least not in the foreseeable future.

Withdrawal from the INF

The 1987 INF Treaty has never been particularly liked by the Russian military. It is closely associated with major concessions on part of the Soviet Union, which had to eliminate many more missiles in that class than the United States. Characteristically, the security benefits the Soviet Union obtained from that deal (removal of American missiles with very short flight-time) is practically never mentioned – the emphasis is almost always on the numbers of weapons subject to elimination. Particularly painful for the military is the agreement by Mikhail Gorbachev to include SS-23 Oka missiles into the treaty: the range of that missile is widely believed (not without reason) to be below 500 km and thus it should not have been subject to the INF Treaty, or so many still believe. In other words, the INF Treaty is often regarded as a symbol of “betrayal” and unwarranted concessions. This perception has strongly affected many other arms control issues, including Russian resistance to Western proposals with regard to reduction of non-strategic nuclear weapons.

Nevertheless, the INF Treaty was not only implemented, but Russia continues to uphold it; until relatively recently there was no reason to believe that constant grumbling would translate into proposals to abrogate it. Such proposals did emerge, however, in the middle of 2000s.

When the United States withdrew from the ABM Treaty in 2002, many in Russia regarded this as an example that could be emulated – namely, that it is acceptable to withdraw from treaties once they are no longer regarded as serving national interest. U.S. withdrawal from the ABM Treaty certainly undermined the argument about sanctity of international agreements, especially among Russian military. Central to the argument about abrogation of the INF was its bilateral nature: “others have ‘em.” Official statements did not point at specific countries, but public debates mentioned China, North Korea, India, Pakistan, Iran, and Israel.

An important point to bear in mind is that proposals for withdrawal from the INF Treaty were not part of a desire to enhance nuclear capability. Instead, they were part of Russian desire to develop long-range conventional assets. Indeed, for the first time regret about the ban on intermediate-range missiles was voiced during the second war in Chechnya, when then-Secretary of the Security Council Sergey Ivanov complained

that without such assets Russia could not take out Chechen training camps in Afghanistan.

The desire to add intermediate-range missiles to the planned conventional capability was officially spelled out during Ivanov's meeting of U.S. Secretary of Defense Donald Rumsfeld in August 2006 in Alaska. Responding to Rumsfeld's attempt to explain the benefits of the United States equipping some strategic missiles with conventional warheads to make them usable for strikes against terrorists, Ivanov said that conventionally-armed strategic missiles were not the only option for strikes against terrorists and far from the safest: "Theoretically, one could use long-range cruise missiles with conventional warheads...One could even consider a theoretical possibility of using intermediate range missiles, although the United States and Russia cannot have them, unlike many other countries, which already have such missiles."⁷⁷

Uniformed military were clearly delighted to see their old favorite proposal pitched to the U.S. Secretary of Defense and quickly sought to elaborate it and calm possible American anxieties. An unnamed representative of the Ministry of Defense said that while the abrogation of the ABM Treaty opened door to a similar step with regard to the INF Treaty, the United States should not be concerned because Russian intermediate-range systems cannot reach U.S. territory except from Chukotka, across the Bering Strait from Alaska, "but they will not be deployed there." Referring specifically to North Korea, he stated that for Russia, intermediate-range missiles would be far more useful as conventionally armed systems than intercontinental missiles, as proposed by the United States.⁷⁸ □

Ultimately, however, the rationale for withdrawal from the INF Treaty changed and came to be linked to George W. Bush administration's plans for missile defense in Europe. Early in 2007 Chief of the General Staff Yuri Baluevski declared that Russia was considering whether to withdraw from the Intermediate-range Nuclear Forces (INF) Treaty and the final decision was contingent upon U.S. actions with regard to deployment of a missile defense system in proximity to Russia.⁷⁹

⁷⁷ Artur Blinov, "Raketnyi Torg na Alyaske" [A Missile Trade-off], *Oborona i Bezopasnost*, August 30, 2006.

⁷⁸ "Minoborony: Pri Neobkhodimosti Rossiya Mozhet Vyiti iz Dogovora po RSMD" [Ministry of Defense: If Necessary, Russia Could Withdraw from the INF Treaty], *RIA Novosti*, August 25, 2006; "Ekspert: Rossiya Mozhet Vyiti Iz Dogovora po RSMD v Odnostoronnem Poryadke" [Expert: Russia Could Unilaterally Withdraw from the INF Treaty], *Interfax*, August 25, 2006. □

⁷⁹ "Rossiya Mozhet Vyiti iz Dogovora po Raketam Srednei Dalnosti" [Russia Could Withdraw from the Intermediate-Range Missiles Treaty], *Strana.Ru*, February 15, 2007. □ Nikita Petrov, "Asimmetrichnyi Otvet" [An Asymmetric Response], *Strana.Ru*, February 16, 2007; Nikolai Poroskov, "Evropa pod Pritselom" [Europe in Sights], *Vremya Novostei*, February 16, 2007; Viktor Myasnikov, "Asimmetrichnyi Otvet naiden" [An Asymmetric Response Has Been Found], *Nezavisimaya Gazeta*, February 16, 2007; Ilya Azar and Dmitri Vinogradov, "Otvét Srednimi Raketami" [A Response with Medium Missiles], *Gazeta.Ru*, February 15, 2007. □

The leading role in the push for withdrawal was often attributed to the SRF, which sought to expand its force and give it more relevance within the military establishment. It is noteworthy that Director of the 4th Central Research Institute of the Ministry of Defense (the institute conducts research to support the SRF) Maj.-Gen. Vladimir Vasilenko said, in a departure from the standard Russian perspective, that intercontinental, strategic missiles were preferable to intermediate-range systems as conventional assets because the longer range of the former made them a more versatile asset.⁸⁰ The Air Force was a more vocal voice of opposition – its representatives declared that they could support any conventional or nuclear mission at the theater level implying that there was no reason to spend all the political and financial resources to deploy intermediate-range land-based missiles. The Foreign Ministry was another force opposing the abrogation of an important treaty. There was also quite serious – and surprising – opposition in the ranks of retired generals who claimed that the United States could use the abrogation of the INF Treaty to deploy once again Pershing II and GLCMs in Europe; clearly, uniformed military, who are less wedded to Cold War concepts, did not regard that as a likely scenario.

The outcome of the debates that raged in 2005-2007 reminded NATO's 1979 "dual-track" decision (it is noteworthy how much contemporary Russian policies are influenced by examples set by past policies of NATO) – Russia would not withdraw from the INF Treaty, but would propose to make it a multilateral agreement. It was tacitly assumed that abrogation was not off the agenda, however, and the issue could be revisited if countries with intermediate-range missile programs do not join. The United States joined the initiative and in 2008 Moscow even tabled a draft multilateral INF Treaty at the Conference on Disarmament in Geneva. Thus the issue has remained on the agenda and from time to time Moscow reminds other countries about the proposal. The specter of withdrawal from the INF Treaty has not disappeared completely, but is mentioned very rarely. It is possible that it could eventually die out quietly, but a new international crisis (for example, between Russia and Iran) could reignite it once again.

An important variable in any future decisions with regard to the withdrawal from the INF Treaty is funding. While technologically resumption of production of SS-20s or extending the range of Iskander tactical missiles are feasible, the Russian government has consistently limited funding for production of even existing classes of weapons – ICBMs and short-range missiles. It does not appear likely that it will be supporting of an even more expensive programs for intermediate-range missiles. It seems likely that reluctance to allocate funds played an important role in the decision to pursue a diplomatic option and postpone the abrogation decision to an indefinite future.

⁸⁰ "SYaS Rossii: Narashchivanie Vozmozhnostei po Preodoleiyu Protivoraketnoi Oborony" [Russia's Strategic Rocket Forces: Enhancing the Capability to Penetrate Missile Defenses], *Voенno-Promyshlennyi Krier*, March 8-14, 2006. [a]

Conclusion

Nuclear weapons retain high profile in Russian national security strategy and will keep it in the foreseeable future. Contrary to official statements, there is no reason to believe that Russia could agree to a very significant reduction, much less elimination, of its nuclear arsenal. Instead, ten years ago nuclear weapons were given additional roles – those of deterring and “de-escalating” limited (“regional”) conventional wars. They are likely to keep that role as well, at least during the coming decade.

At the same time, Russian leadership clearly understands limited utility of nuclear weapons and seeks to enhance conventional capability. In this sense, Russia is moving in some of the same directions as the United States – it seeks to develop missile defense and precision-guided long-range conventional assets. According to long-term plans, eventually these efforts should allow Russia to reduce reliance on nuclear weapons. These programs encounter multiple delays, however, and progress much slower than anticipated. Russia will hardly succeed before the end of the coming decade and might never completely close the gap with the United States and NATO. In that case, reliance on nuclear weapons will continue indefinitely.

Certain similarities notwithstanding, differences between the United States and Russia will continue – Moscow is likely to continue seeing U.S. Global Strike and missile defense plans as a potential threat. There exists an important asymmetry: while the United States emphasizes strategic capability (intercontinental-range conventional assets and ability to intercept strategic missiles), Russia seeks intermediate-range capability and will continue to view American programs from the perspective of strategic balance.

Overall, the relationship will remain uneasy, but manageable. The key condition for a stable relationship is predictability – first and foremost careful management of American capabilities that can affect Russian strategic deterrence. This is not impossible, but might be difficult to achieve due to the dynamic of domestic politics in the two countries.