

## ***U.S.-Russian Bilateral Arms Control Regime: What Measures Can Be Utilized in a Future Verification System of Multilateral Nuclear Reductions?***

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*Which conclusions can be drawn from previous US-Russian nuclear arms control for future efforts to control nuclear weapons and delivery systems? Can the experience with bilateral control of nuclear delivery systems in the START and INF process be extended to a multilateral context? Which verification systems and monitoring technologies exist and can be applied in a multilateral environment?*

Most Russian arms control experts are convinced that achieving a multilateral agreement on nuclear reductions is important and expedient. Russian official attitude is similar. In particular, two years ago Russia proposed that five nuclear states, which are permanent members of the UN Security Council (the Russian Federation, the U.S.A., Britain, China, and France), should institute and commence a permanently operating consultation process on the problems of strategic stability within the Five.<sup>1</sup> There is no doubt that other recognized nuclear states and de-facto nuclear states need to join the bilateral process of nuclear disarmament in order to keep this process progressive and ensure that it is directed toward elimination of nuclear weapons in the world. It is quite apparent that the main problem will be to reach a political consensus between key states in accomplishing this goal. Unfortunately, current political environment in the world does not give the ground for optimism. However, assuming that, under certain circumstances, the political decision on multilateral verified nuclear reductions is made, the next phase will be to work out a system for verification of the reached agreement. Existing U.S.-Russian experience seems to be a good basis for creating such a system.

Bilateral nuclear arms control between the U.S.A. and Russia (Soviet Union) has lasted for more than forty years. Culmination of this historical process was achieving INF and START Treaties, signed in 1987 and 1991 respectively. Both became eventually multilateral agreements as a result of collapse of the Soviet Union, and as Ukraine, Byelorussia and Kazakhstan inherited the Soviet

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<sup>1</sup> Interview Granted by Alexander Yakovenko, the Official Spokesman of Russia's Ministry of Foreign Affairs, to Interfax News Agency in Connection with the New Russian Strategic Stability Initiative, July 7, 2001.

nuclear potential along with the Russian Federation. However, one should note, that verification procedures of START and INF Treaties were adopted on bilateral basis.

Of course, tremendous experience was accumulated over this period, and it is impossible to cover all its practical lessons for international community in a brief presentation. Following are the main observations made from the author's prospective.

Starting point for creation of multilateral verification system is getting a consensus on common goals and verification principles. Practice of bilateral U.S.-Russian relations showed actuality of the following principles:<sup>2</sup>

- Verification should be implemented in accordance with universally recognized norms of international law, first of all, with noninterference in domestic affairs of states.
- Verification measures should be adequate to the scope and nature of obligations accepted by parties.
- Observance of the treaty obligations must be reliably verifiable.
- Verification measures need to be economically rational and simple in implementation.

It is important to note that previous bilateral treaties between the United States and the Soviet Union on limitation and reduction of nuclear arms covered mainly delivery platforms. Some measures adopted within the frames of the INF and START Treaties with respect to warheads were very limited. There were attempts to broaden transparency of U.S. and Russian nuclear arsenals in mid-1990s, but, unfortunately, they failed.<sup>3</sup> To all appearances further progress in disarmament seems impossible without solution of this problem,<sup>4</sup> and it is crucial to focus efforts of politicians in this direction.

National technical means (NTM) played a crucial role in verification of the reached arms control agreements. They were in fact the only means for verification of strategic arms limitation agreements prior to conclusion of the INF Treaty. NTM proved to be efficient in monitoring the number of deployed silo based ICBMs and the number of missile submarines. From the prospective of possible application of the U.S.-Russian experience to a multilateral agreement among nuclear states one may conclude that capabilities of NTM have grown since. In addition to military reconnaissance satellites, modern commercial satellites are capable to take pictures of any place on the globe with a resolution, sufficient for solution many of verification tasks. Another example - Open Skies Treaty represents a substantial tool of a kind that was not available during the Cold War.

Previous U.S.-Soviet bilateral agreements included provisions that the parties were obligated not to create obstacles for NTM of the other side. This principle seems to be topical in future as well.

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<sup>2</sup> Major-General Viktor Koltunov, Ret., Consultant to the Department of International Agreements of the Russian Ministry of Defense, "Strategic Arms Reductions Verification Mechanism", Lecture presented at Moscow Institute of Physics and Technology on March 21, 2002. The transcript in Russian is available at <http://www.armscontrol.ru/course/lectures/koltunov1.htm>

<sup>3</sup> History of U.S.-Russian negotiations on transparency of nuclear arsenals can be found, in particular, at STAR Site special section "Verifiable Elimination of Nuclear Warheads: What Lies Behind Russian Proposals?" (last updated on May 15, 2002) at <http://www.armscontrol.ru/start/w-control.htm>

<sup>4</sup> Anatoli Diakov and Eugene Miasnikov, Breaking the Deadlock: Confidence Building Measures Could Accelerate the Nuclear Weapons Reduction Process, *Nezavisimoye Voennoye Obozreniye*, September 11, 1998. English translation can be found at <http://www.armscontrol.ru/start/publications/nvo0911.htm>

However, “gray zones” still exist, which allow legally evade agreements. An example of such a loophole was mentioned by Major-General Viktor Koltunov, Ret., Consultant to the Department of International Agreements of the Russian Ministry of Defense.<sup>5</sup> One of provisions of the SALT II Treaty forbids use of measures that aimed at concealment of the association between ICBMs or SLBMs and their launchers during testing.<sup>6</sup> In early 1980-s the Soviet Union began testing its mobile “Topol” (SS-25) ICBM at Plesetsk test range. Missile launches occurred from positions close to silo launchers, and the U.S. blamed the Soviet Union in violation of the provision mentioned. The claims were based on the fact that U.S. NTM never detected the Soviet test launches. Therefore, the U.S. side concluded that the Soviet Union deliberately conceals the association between ICBMs and their launchers. The Soviet side responded that USSR has no intention to attach test launches (1) to the time when the test sites are exposed to U.S. reconnaissance satellites and (2) to the time and weather conditions, that ensure the best conditions for U.S. means to monitor the tests.

The parties of INF and START Treaties adopted unprecedented verification measures – on-site inspections. It was impossible even to imagine adoption of intrusive measures during the Cold War. INF Treaty included five types of on-site inspections,<sup>7</sup> and START Treaty included fourteen ones.<sup>8</sup> Certainly, types and quantity of inspections depend on the goals of the agreement. If parties aim at elimination of certain types of arms, verification measures become simpler in comparison with the ones, when the goal is not elimination, but limitation. This is most probably the reason for complexity of START verification system compared to the verification system of the INF Treaty. At the same time one should not forget that both systems have been developed when mutual confidence between the parties was much lower than these days. Due to an existing experience of cooperation between the two sides, Russian experts come to the conclusion that the START verification system became excessive. In particular, there is a suggestion, that only two types of inspections are required – baseline data inspections and data update inspections during the Treaty implementation.<sup>9</sup>

Telemetry data exchange is known to have been one of the most serious problems during START negotiations.<sup>10</sup> From verification prospective, telemetry data provides a basis to determine quantity of warheads deployed on ballistic missiles. If a multilateral agreement is reached, one may only welcome telemetry information exchange between the parties. There is no doubt, that such a measure will increase transparency of nuclear reduction process. Moreover, it will enable to resolve some existing problems of START implementation. In particular, the U.S. is well known to deploy Trident II SLBM. At the same time there is a joint U.S.-U.K. program on development of Trident II SLBMs for deployment on British strategic submarines. Unfortunately, tests of Trident II missiles conducted within the frames of joint U.S.-U.K. program are exempt of

<sup>5</sup> Viktor Koltunov, 2002

<sup>6</sup> Treaty between the United States of America and the Union of the Soviet Socialist Republics on the Limitation of Strategic Offensive Arms, June 18, 1979, Article XV, First Common Understanding. The text can be found at <http://fas.org/nuke/control/salt2/text/salt2-2.htm>

<sup>7</sup> Joseph P. Harahan, On-Site Inspections Under the INF Treaty, the History of the On-Site Inspection Agency and Treaty Implementation, 1988-1991

<sup>8</sup> Viktor Koltunov, 2002

<sup>9</sup> Viktor Koltunov, 2002

<sup>10</sup> Yuri Nazarkin, Strategic Offensive Arms Reductions Treaty, *Yadernyy Kontrol*, N6, November-December 2001

sharing telemetry data with the Russian side. Russia is still not satisfied with this state of affairs. In particular, there are concerns, that Trident II SLBMs may be tested with more than 8 warheads allowed by START.

There is also a problem of ambiguity of telemetry information. As experience of U.S.-Russian cooperation shows, the problem of number of warhead maneuvers during some of Trident II SLBM tests remained unresolved.<sup>11</sup> Therefore one should not overestimate significance of telemetry data, and it is necessary to develop alternative methods for reliable detection of the number of deployed warheads on missiles. In particular, a technique using radiation detection brings some promises. However, the U.S. attitude was not always consistent with respect to this approach.<sup>12</sup>

Characterizing the whole verification system of the START Treaty one may conclude with a confidence that it became a reliable means to achieve the declared goals. Nevertheless, one should not forget the fact, that this system is diffusing and there is a danger that it will totally collapse as START ends to be in force in 2009. It is true – the U.S. and Russia have signed the so-called Moscow Treaty, and there are good chances that the new agreement will get approval in both countries. However, the Moscow Treaty does not envisage **any** verification procedure of its implementation.<sup>13</sup>

The main reason for existing situation is U.S. intention to take their dual-capable strategic delivery means out of arms control regime. Today these platforms include submarines carrying long-range cruise missiles and strategic bombers. This list may also include land and submarine based ICBMs in future. In author's opinion, the principle danger to multilateral reduction of nuclear arms consists in reorientation of nuclear delivery means to conventional platforms.<sup>14</sup> It is becoming increasingly apparent that building an efficient verification system will require covering conventional delivery platforms as well.

Finally, one should mention, that entirely new challenges are going to emerge on the way of creation of multilateral verification system of nuclear disarmament. In particular, what could be the mechanism for information exchange between the parties? To what extent can the shared information be transparent to the world community? How can national technical means be efficiently implemented, taking into account that the parties have entirely differing capabilities? What is the best strategy to implement inspections? Should one of the parties inspect one of the other, or there is a need to create an international organization, responsible for inspections?

Importance of questions mentioned can be illustrated by an example of on-going UN inspections in Iraq. On one hand, the U.S. claim that they have a proof that Iraq violated UN resolutions and threaten to use force against Iraq, on the other – the U.S. are hesitant about providing international community with the alleged proof.

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<sup>11</sup> Ivan Sidorov, How Responsible Are the Parties in START Implementation? *Yadernoye Raprostraneniye*, August-October 1999, The text in Russian can be found at <http://www.armscontrol.ru/start/rus/publications/yr0400.htm>

<sup>12</sup> Anatoli Diakov and Eugene Miasnikov, 1998

<sup>13</sup> Anatoli Diakov, Timur Kadyshev, Eugene Miasnikov and Pavel Podvig, What to Do with the Treaty on Strategic Offensive Reductions? *Nezavisimoye Voyennoye Obozreniye*, September 20, 2002. The text in Russian can be found at <http://www.armscontrol.ru/start/publications/nvo092002.htm>

<sup>14</sup> Eugene Miasnikov, Precision Guided Weapons and Strategic Balance, Center for Arms Control, Energy and Environmental Studies at MIPT, November 2000, 43 pages. The summary in English and links to the full report can be found at <http://www.armscontrol.ru/start/publications/vto1100.htm>