FURTHER REDUCTION OF NUCLEAR WEAPONS

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There is no doubt that negotiations over the new US-Russian agreement on reductions of strategic nuclear arms, currently in their final stage, will be concluded successfully. However, it is unrealistic to expect that a new treaty could provide significant reductions of delivery vehicles and warheads since one of its main tasks is to preserve continuity in the US-Russian nuclear arms reductions process after expiration of START-I. The new treaty will likely have to demonstrate the adherence by the two nuclear superpowers to their obligations according to Article VI of the NPT since the next NPT Review Conference is scheduled to May 2010.

Referring to initiatives of Presidents Obama and Medvedev on complete elimination of nuclear weapons, which laid the basis of the UN Security Council Resolution 1887 adopted on September 24, 2009, many experts believe that negotiations over further irreversible reductions of nuclear arms will be continued even after signing of the new treaty. And that the list of questions to be considered will not be limited to strategic offensive weapons only. According to American experts, the scope of negotiations should include non-strategic nuclear weapons (NSNW), which were never covered directly by arms control agreements. In our opinion Russia, based on its own understanding of strategic stability, will not likely agree to discuss NSNW without taking into account long-range SLCMs, missile defenses, and precision-guided munitions — all spheres of US superiority.

This publication is devoted to a preliminary analysis of these problems without solution of which the progress towards deeper, coordinated reductions of nuclear weapons is hardly possible.

Non-Strategic Nuclear Weapons

This class of nuclear weapons is not covered by any international agreement/regime that would require its control and reduction. Events of the end of 1980-s and 1990-s and 1991unilateral commitments made by Presidents Bush and Gorbachev (known as Presidential Nuclear Initiatives on tactical nuclear weapons) lead to significant reductions of non-strategic nuclear weapons in the US and Russia. However, PNIs are not legally binding, and reductions were carried out on a free-will basis, without any bilateral control measures.

There is no official data on the numbers of non-strategic nuclear warheads. Non-governmental experts estimate that currently the US possesses about 1300 nuclear warheads of this class, while Russia has about 3000. On one hand, the presence of non-strategic nuclear arsenals comparable or even exceeding numerically strategic ones, while nuclear warheads are not covered by transparency and control meas-

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ures, will constantly "poison" Russian-American relations and impede cardinal changes of their character. On the other hand, if the US and Russia keep their NSNW arsenals, this fact will not be missed by international community. It will hamper involvement of other nuclear states into the process of verifiable reductions of nuclear weapons. For non-nuclear states the lack of control over NSNW will be a permanent source of doubts over US and Russia's commitment to their NPT obligations.

However, control over NSNW can not be established without solving a number of military and political problems, as well as without some non-trivial solutions and complicated decisions.

Russian approach to NSNW takes into account the general military and strategic situation on its borders as well as lack of balance in conventional weapons and forces in favor of NATO (in the West) and China (in the East). American NSNW in Europe are considered by Russian military as strategic since they are deployed close enough to Russian territory. Acceptance of East European countries and some former Soviet Republics into NATO, as well as NATO's superiority in conventional weapons, increase Moscow's concerns over US NSNW in Europe and quite objectively raise importance of Russian NSNW as an equalizer. Thus Moscow believes that negotiations on control and reduction of this class of nuclear weapons can be started only after American NSNW will be withdrawn from Europe. At the same time, Moscow quite possibly can link its readiness to discuss NSNW issues with NATO's and EU's consent to consider Russian proposal to develop a legally binding treaty on European security.

For the US, the main role of NSNW in Europe is to demonstrate reliability of the so called extended deterrence concept, which guarantees US nuclear "umbrella" to NATO countries. Presence of these weapons in Western Europe serves as a "glue", that provides for Trans-Atlantic unity and solidarity. Some experts believe that currently, considering Alliance's conventional superiority, there is no need in American NSNW in Europe and they should be withdrawn.

Technical problems of establishing control over NSNW and over the process of reduction of NSNW are caused first of all by that control has to be established over warheads themselves rather than their delivery means, which are controlled under strategic nuclear weapons treaties. In practice, control procedures over nuclear warheads has never been applied, although in mid-1990s Russian and American specialists made certain efforts within joint programs on development of general control procedures over disposition of nuclear warheads. The main problems were related to necessity to protect sensitive design information while to confirm warheads dismantlement and exchanging sufficiently reliable data on the number of available and eliminated nuclear warheads. Progress in development of the necessary transparency measures will obviously depend on the ability of Russian and American nuclear experts to identify and develop the most suitable technical solutions and control schemes, as well as on the general level of confidence between the two countries.

Development of Precision-Guided Weapons and Reductions of Nuclear Weapons

Further steps on reduction of the US and Russian nuclear weapons can not be made without taking into account the existing in the US programs on development of precision-guided weapons (PGW), supporting information technologies and missile defenses. These programs generate increasing concerns in Russia over their effects on survivability of Russian strategic nuclear forces. Some Russian ex-

perts believe that technical characteristics of currently existing in the US precision-guided weapons already permit their use to destroy objects of strategic nuclear forces. Their concerns are also increased by the fact that the US plan to use precision-guided weapons for some of those missions, which previously were assigned to nuclear weapons. Although Russian industry has a task to develop precision-guided munitions, relevant budget allocations are not comparable to those assigned to PGW development programs in USA. Therefore the existing gap between USA and Russia will only widen in the future. For this reason PGW will likely be one of the major obstacles on the way to deep reductions of nuclear weapons.

According to Russian analysts the biggest threat to survivability of Russian strategic nuclear forces can be posed by conventionally-armed strategic weapons with low detectability and relatively short delivery time, such as: conventionally armed ICBMs, SLBMs, and long-range SLCMs and ALCMs, as well as high-yield bombs and guided missiles that can be delivered by heavy bombers and tactical aircraft of Air Force and Navy if deployed close to Russian borders.

To some extent, the problem of growing counter-force potential of PGW can be solved by developing already existing arms control approaches and solutions.

In particular, START-I Treaty contained limitations on non-nuclear strategic forces too. According to this Treaty, allowed levels of strategic delivery means — ICBM, SLBM and bombers — were counted regardless of which type of weapons they were armed with — nuclear or conventional. The same referred to the counting rules for ICBM and SLBM warheads. Both nuclear and non-nuclear strategic delivery vehicles were covered by control and transparency measures, and by limitations of START-I. It would be advisable to keep these regulations in the new treaty and to supplement them with more intrusive transparency measures.

Also desirable would be to introduce limitations on deployment of precision-guided weapons, which were not previously covered by control measures. For example, a ban could be introduced on basing of attack aircraft on the territory of new NATO members. Similar obligations could be accepted by Russia with respect to its allies within Collective Security Treaty Organization (CSTO) and CIS. Also, it seems important to limit patrol areas for submarines that carry cruise missiles in order to prevent deployment of significant number of US submarines within Russian territory and vice versa. Such a step would permit to solve other problems that were raised by Russia during negotiations over strategic nuclear arms — ban on clandestine anti-submarine activity in SSBN deployment and patrol areas, prevention of collisions of nuclear submarines.

PGW limitation and control measures can significantly decrease Russian concerns in the near future. However as long as mutual nuclear deterrence remains the basis of the US and Russian nuclear doctrines, PGW factor will keep growing along with deeper cuts of nuclear weapons.

Missile defenses

The fact that missile defenses affect strategic stability is accepted by virtually all Russian experts. Moscow insists that the principle of interrelation between strategic offensive and strategic defensive forces is included in the text of the new treaty that will replace START-I.

Russian military is concerned over the US plans to deploy global missile defenses. These concerns are based on the existing capabilities of already deployed and planned for deployment US elements of missile defenses, as well as on the perspectives of their further development and extension.

Unilateral steps of the US on development of PGW and deployment of missile defenses as an open-ended system, suitable for further improvement and enlargement, and integrated with land-, sea-, air- and space-based information systems and with combat-control systems, naturally do not promote reduction of Russian nuclear weapons. On the contrary, they can only provoke the opposite development.

It should be noted that the US's change of previous Administration's plans on deployment of missile defenses elements in Poland and Czech Republic, put out Moscow's acute reaction on these projects and softened temporarily crisis in US-Russia relations over this issue. Deployment of THAAD and Aegis systems in direct vicinity of Iran's borders (among other places) provided for during the first phase of the new plan, much better answers the declared purpose of neutralization of threat from Iranian ballistic missiles. At the same time this new four-stage "adaptive" plan of development of US missile defenses in Europe provides for deployment by 2020 of a system capable to intercept, among other targets, intercontinental ballistic missiles. As acknowledged by the US officials, the new system is a more advances, more cost-effective and efficient in countering long-range ballistic missiles. In this connection this US plans on further development of missile defenses in Europe should be discussed during the next stage of reduction of nuclear weapons.

To prevent a subject for discussions from becoming an obstacle, it would make sense to take advantage of current positive situation in order to re-new those confidence-building efforts and steps on developing cooperation in missile defenses that were not once declared during the last decade.

An important step in this direction would be work on joint assessment of other countries' capabilities in development of ballistic missiles in order to work out a common view on emerging threats. In particular, opening of the Joint Center for the Exchange of Data from early warning systems and notification of missile launches (JDEC), agreed upon since 2000, would be a significant contribution. Using this Center the parties would be able to exchange data on missile launches by other countries.

Joint use of Gabala and Armavir radars for detection and tracking launches from South would also contribute to this task. Taking into account ballistic missile capabilities of countries in this region (Iran, India, and Pakistan), such a step by Moscow would be not unfounded both for Russia's security and for improvement of cooperation in this area with USA and Europe. At the same time, for USA and Europe this would mean a significant improvement of their capabilities in detection and tracking of launches from a direction of concern. In future this cooperation could be raised to a new level by developing joint missile defenses for Europe under joint command.

Another important step towards development of cooperation between two countries would be renewal of Russian-American Observation Satellite Project (RAMOS) that was terminated in 2005 by the US initiative. Technical basis of the project lied on the principle of stereoscopic imaging of an object in the atmosphere (or on the ground) by two satellites — Russian and American — at the same time. Participants of the project conducted observation and tracking of launches of ballistic missiles in order to create a databank that could be used to detect launches of ballistic missiles by their unmasking traces. The US ceased their involvement in

the project citing concerns over possible leakage of sensitive technologies. It seems though that that was just a pretext and that currently, if an agreement on joint work on land-based missile defenses is reached, cooperation on RAMOS project (or a similar one) could become the beginning of development of a joint space-based early warning system.

Along with cooperation in military areas, the countries should also make joint diplomatic efforts to limit and prevent ballistic missile threats both within international regimes (MTCR and other initiatives), and working directly with those countries that can pose such threats.

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In conclusion: cooperation between USA and Russia in the search of complex solutions to the problems discussed in this article will allow not only to create conditions for the next phase of reductions towards numerically lower levels of their nuclear arsenals, but also to transform relations between the two countries from confrontational to confident and partner-like, which, in turn, will facilitate departure from nuclear deterrence in their bilateral relations.

February 3, 2010

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