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**“THE SECURITY THREATS NUCLEAR-CAPABLE MISSILES POSE AND
HOW TO BEST CONTROL THEM”**

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This paper concentrates at nuclear-capable ballistic missiles as the most dangerous weapons which are in possession of several states. It pretends to analyze the negative impact of these weapons on international security. In particular, the paper focuses at the threat which is created not only by the spread and proliferation of nuclear weapons alongside with the means of their delivery, but also by the very fact of the existence of such weapons. The general conclusion is that all the states must put a ban on long- and medium-range nuclear capable ballistic missiles. But the first step must be done by “The Big Five” nuclear states – United States, Russia, Britain, France and China.

The threats

There exist many historical examples when countries refused to obtain nuclear weapons. In different cases it was done whether under their personal political decision or under the pressure of international community, or under the combination of these two factors. The reasons not to develop and not to deploy ballistic missiles are less clear. Partially it is connected with the fact that there does not exist international regime which prohibits the states to obtain such weapons although Missile Technology Control Regime (MTCR) plays certain role in preventing proliferation of ballistic missiles. As the result many countries have in possession or make

certain efforts to possess ballistic missiles putting forward different explanations why they need these weapons and how they contribute to their security. It was true from the very beginning of the “nuclear age” in the middle of the last century; this is quite the same with the new international “players” for to-day.

But whatever explanations are given about possible contribution of nuclear-capable ballistic missiles to security of the state, which develops and deploys such weapons, its neighbors in the majority of cases have quite an opposite view. This classical situation of “action-reaction” have very serious consequences from the point of security, bearing in mind that nuclear-capable missiles have very specific characteristics in comparison with other weapons and delivery vehicles. They are as follows:

1. The decision to use these weapons is irreversible, i.e. once taken it cannot be abandoned since it is implemented very quickly. In contrast to this, the decision to use nuclear-capable bombers or ballistic missiles deployed at submarines gives the leadership much more time to “think it over”. In periods of crisis the factor of time becomes the most important one and, as the result, the possibility of misperception and fatal decision is growing dramatically. This situation is usually described as “use or lose” option. And it mostly concerns nuclear-capable ballistic missiles due to their vulnerability and high military “value”.

2. Nuclear-capable ballistic missiles can create a false illusion of security. At the same time these weapons create a real threat to the neighbors, which are forced to undertake corresponding measures in military preparations. As usual these preparations are concentrating at obtaining the same weapons as the “provocative” side does. In case with nuclear-capable ballistic missiles the threat looks much higher than with other nuclear-capable systems. The problem is that ballistic missiles due to their technical characteristics (first of all, the accuracy and short flight time) have very high counter-force potential. Another words, they can be used in

preemptive strike against nuclear forces and command and control system of the opponent. In periods of crisis it gives a very high impetus for each side of a conflict to use their weapons first, as it was mentioned above. These “trigger-happy” systems can also be used in case of warning of the attack, which also can be described as very dangerous and destabilizing strategy. In case of such a warning the leadership, responsible for corresponding decision, will have only minutes to “press the button”, i.e. the decision-making process becomes the hostage of a warning system and possible false alarms.

3. Nuclear capable ballistic missiles are one of the main sources of arms race. They can be produced by large series, their price is relatively low; the production rate is relatively high. As the result, nuclear arsenals grow very rapidly. All these are usually justified by the “necessity of defense”. But these weapons are designed and can be used more effectively in a first strike rather than in retaliation. That’s why the arms race in this segment of nuclear weapons can be called the most provocative and destabilizing. It does not concern only the opponent or a counter-part of the state obtaining ballistic missiles. All the neighbors within the range of these ballistic missiles will inevitably react on this development and will have to take this or that decision. Such decisions do not exclude a development and deployment similar systems, which accelerates proliferation and increases international tension.

4. Nuclear capable ballistic missiles (more correctly, the leadership of the states possessing these weapons) are very “sensitive” to wide spectrum of non-nuclear weapons, first of all to ballistic missile defense. In this sense BMD systems very are often presented as a part of offensive potential and as weapons, which are equal to nuclear offensive systems. This approach dramatically complicates the possibility to achieve agreements on arms control and creates suspicions about “real intentions”

of the side, which tries to protect itself from the third aggressive states by deployment BMD systems.

5. Deployment of ballistic missiles needs preliminary and sometimes very provocative phase of tests. Without an agreement with the neighbors on corresponding notifications such tests may have very provocative effect as we can see in case with North Korea.

Traditional arms control

The attempts to control nuclear capable ballistic missiles started in late 1960s, when the United States and the Soviet Union agreed to negotiate SALT-1 Treaty. In 1972 they achieved a success and signed a Treaty which limited uncontrolled growth of strategic ballistic missiles with nuclear warheads. Since then the Parties concluded several agreements in this field and managed to make the process of negotiations lasting practically during the period of more than 40 years (with some relatively short breaks). Within this way a number of very important documents was signed and implemented. As the result, the overall number of nuclear warheads and nuclear-capable delivery vehicles was dramatically reduced. Only in the category of strategic nuclear warheads each side reduced corresponding numbers of their nuclear arsenals in approximately 8 times.

Nuclear capable ballistic missiles have been always the central part of these agreements. Although Soviet Union (and now Russia) considered ICBMs as the “cornerstone” of its security, it had to agree to limit its offensive potential, the numbers and the efficiency of the deployed systems. Thus, in START-1 Treaty (1991) USSR agreed to eliminate 50% (154 units) of SS-18 (Satan) heavy missiles, and to cut by 50% the through weight of ballistic missiles. In START-2 (which did not enter into legal force) Russia agreed to the American proposal to establish a complete ban on MIRVed ICBMs.

Speaking generally, the United States and Russia moved gradually (from one treaty to another one) on the way of reductions of their nuclear arsenals. But after the achievements of the second half of 1980s – first half of 1990s this movement became quite slow and finally stagnated.

This among other things is evidenced by certain “craftiness” of a New START Treaty of 2010 whereby all payload of each heavy bomber with long-range nuclear air-launched cruise missiles is counted as one warhead. Only thus Russia and the U.S. managed to demonstrate that they continue the nuclear disarmament process. Nevertheless, several indicators can lead to a conclusion that Russia and the U.S. have actually reached that quantitative limit of their strategic nuclear arsenals, which they consider as a minimum required for reliable security.

The reason is that at least Russia found further reductions of ballistic missiles as threatening its national security interests. The problem is that from the point of traditional approach to security the state must preserve quite reasonable number of weapons to deliver a guaranteed retaliatory strike against possible aggressor and to cause him an unacceptable level of damage. Another words, cold war approach to security remained at place whether during the period of confrontation as well as after the cold war was over.

Each of the arms control Treaties signed between the two states has its own advantages and disadvantages. But only one of them is really unique – the INF Treaty of 1987. It provided complete elimination of a whole category of nuclear capable ballistic missiles, and provided the ban on development, tests and deployment of Russian and American missile systems within the range of 500-5500 km. Such an approach was never experienced again, but, to my view, it opens the way to radically new vision of future arms control based at qualitative rather than quantitative vision of security.

From bilateral to multilateral disarmament

Today many Russian and foreign experts recognize the existence of a serious crisis in the area of arms control. The need to have other nuclear powers engaged in that process was stated by President of Russia V. Putin in February 2012. He emphasized at the meeting in Sarov that “further steps in nuclear disarmament should be comprehensive in nature, and all nuclear powers should participate in the process”. Later this idea was reiterated in a number of other statements. It should be noted that no real steps have been proposed yet toward implementation of this idea. The main attention of the expert community has been focused as before on further lowering the level of nuclear standoff between Russia and the U.S.

In this connection the following conclusion can be made: the traditional approaches to nuclear arms control that contributed to success at bilateral negotiations can hardly be applied to multilateral solution of the problem. It is necessary to seek and justify the new solutions and new foundations upon which a system of strengthening international security could be built with participation of the main nuclear powers of the world. There are many reasons for such a conclusion. Thus, any nuclear forces reductions by the third countries would be unacceptable for them in a situation of the overwhelming numerical superiority in these weapons of the two leading states in this area. The existing incomparability between the nuclear arsenals of Britain, France and China with the arsenals of the U.S. and Russia is exactly one of the main reasons of their refusal to join in the nuclear disarmament process. This argument should “work” at least until an approximate parity is reached on that parameter among all members of the “Big Nuclear Five”, -- i.e. until the U.S. and Russia reduce their stockpiled nuclear weapons to the level of these countries.

The idea to establish greater predictability in strategic relations of main nuclear powers also looks not very productive. A number of serious problems may arise with its implementation. It should be noted first of all

that under this scenario confidence and predictability instead of nuclear weapons reductions can be the only issue for discussion. More specifically – it is the issue of providing exhaustive information on quantitative and qualitative composition of strategic nuclear forces and plans of their development for the near future. Along with this an issue will be probably raised on imposing an obligation for each party not to build up these forces above certain thresholds, i.e. establishing specific limits that would be different for each party. It seems unlikely that the five nuclear powers will reach an understanding on the above issues, let alone start consultations and negotiations based on such terms.

Any nuclear arms control negotiations can be called successful if as a result of relevant arrangements the security of participants is increased. From the viewpoint of international agreements in this field the military-technical rather than political aspect should be understood as increased security. In other words the threat reduction should be regarded as reduced capacity of each side to launch a surprise first strike, and, accordingly -- reduced incentives to launch such an attack. In this connection we should concentrate our attention at the most dangerous weapons, which can “successfully” implement the task of a first strike – at nuclear capable ballistic missiles.

Traditional approach based on the “strategic stability” concept pays the main attention to the preservation and strengthening of retaliation strike potential. It is an issue of making one’s own forces “survivable” and “less attractive” for a hypothetical first “disarming” strike. Meanwhile if a significant part of those forces does not meet the “survivability” criteria (for example, land-based ICBMs deployed in silo launchers) that represent “attractive” targets (if these ICBMs contain multiple warheads) then the way out of this situation is to maintain their high combat readiness. In other words presumably these systems can be launched before the nuclear warheads of the potential enemy would reach their targets, i.e. on missile

attack early warning. The concept of “launch on warning” is considered to be highly risky due to a limited time for making a relevant decision, and, as a consequence possible fatal miscalculation in giving an order to launch such a strike. This issue has been examined in many Russian and foreign research works and there is no need to dwell on it in more detail. It is enough just to mention that several experts suggest to abandon this concept by reducing ICBMs’ combat readiness on mutual basis with the U.S.

In our approach to security problem we suggest to focus our main attention on the first strike weapons systems which (for Russia and the U.S.) are the intercontinental ballistic missiles (ICBMs). Naturally it can be argued that these systems serve exactly as the means of the first “disabling” strike. However, there are no doubts that precisely the ICBMs are best suited for this purpose. Unlike the submarine launched ballistic missiles the attack with ICBMs is much easier to coordinate. Their accuracy is sufficiently high to destroy such hardened facilities as command centers and silo launchers. And without any doubt they themselves are the primary targets for the first strike of a potential enemy. The MIRVed systems (ICBMs with independently targeted re-entry vehicles) are as well “attractive” targets for an attack. Therefore, from the viewpoint of security these weapons systems, especially, silo-based ICBMs with multiple independently targeted re-entry vehicles cannot unequivocally be considered as “stabilizing” even by all standards of “strategic stability”.

As it has been already noted the Russian and US strategic weapons are mainly targeted against each other. And this mainly concerns the ICBMs. Thus in our view the following question is in order: will the security of the sides increase if these weapons systems are totally eliminated? It should be emphasized however that the author is not suggesting elimination of only Russian and American ICBMs. It is a matter of elaborating a multilateral agreement with participation of all nuclear powers

that establishes a total ban on land-based ballistic missiles with a range in excess of 500 km (some experts, who share this approach think that this range for the following agreements can be reduced – i.e. not 500 km, but 400, 300 km or even less). Such an idea as it seems is fully consistent with the Russian proposal to give an international and universal character to the INF Treaty. This idea at least does not contradict the security interests of all nuclear powers, including China, even if this security level is assessed by “strategic stability” criteria.

As a basis of a new approach to the issue of multilateral nuclear disarmament we propose the principle of “real security” which would not make the security of states dependent on their capacity to annihilate each other but literally ensure mutual security of the sides. This can be achieved by consistent elimination of strategic (and other) nuclear weapons targeted against each other. Unlike the existing nuclear arms control policy based on phased reduction of nuclear warheads the idea of “quality” disarmament is proposed – precisely, the primary elimination of the most dangerous delivery vehicles of this type of weapons. Undoubtedly, this should strengthen both the security and confidence among the parties. We believe that this approach can well be expanded globally. And, undoubtedly, this should strengthen both the security and confidence among all nuclear and non-nuclear states.