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# Prospects of Lowering the Risk of Nuclear War\*

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# Prospects of Lowering the Risk of Nuclear War

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The opposition to the issue of de-alerting SNP<sup>1</sup> fighting readiness, stated by participants, can be explained by a number of reasons. They include:

- the absence of sufficient information on battle application and exploiting of SNP;
- the question is discussed fragmentarily, beyond the context of the problem of strengthening strategic stability as a whole;
- underestimating a system approach as a methodological basis for studying complex problems.

As a consequence, the assumption, that SNP de-alerting will strengthen international safety, seems to be ambiguous.

SNP de-alerting can be efficient, if it is considered as an integral part of a set of measures directed at ensuring strategic stability. Investigations in this direction should be continued, and one may hope they will be productive.

At the same time, there is concern that while discussing the nuclear threat problems, one could miss the issues related to information provision of its solution.

From the system approach perspective, the counter-action to nuclear war threats, as the world practice testifies, is implemented in a complex manner by a super system including Strategic Nuclear weapons and ABMD<sup>2</sup>. Recently, the latter has been supplemented by high-precision weapon.

The basic technological factors, determining system's ability, include:

- quantitative composition of nuclear arsenals;
- quality of missile weapon control;
- information provision of application and counter-action to applying rocket-nuclear means

Specific weight and influence of each of the above-mentioned factors on the problem of neutralizing the nuclear war threat, as a whole, requires system analysis and developing criteria for their estimation.

The primary conditions of super system functioning are transparency and tolerance in the USA-Russia interrelations.

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<sup>1</sup> SNP – Strategic Nuclear Powers.

<sup>2</sup> AMBD – Anti Ballistic Missile Defence.

So, it is obvious that implementation of measures for providing strategic stability is stipulated by organizing the information provision of joint actions of Russia and USA in this direction.

Here it is expedient to make use of such basic attributes of a system approach, as purposefulness, acceptability, continuity.

Nine years ago, on July 4, 2000, the U.S. and the Russian Federation signed a Memorandum on establishing the Joint Data Exchange Center (JDEC), which was a testimony to the first real joint actions of Russia and USA in supporting their statements and declarations.

The Memorandum envisaged the establishment, in Moscow, of the JDEC for exchanging data from MAEWS<sup>3</sup> and notifications on rocket launches with the purpose of organizing continuous exchange of information on launches of ballistic missiles and space launch vehicles, obtained from Russia's and USA's MAEWS, as well as for possible implementation of a multilateral mode for exchanging notifications on launches of ballistic missiles and space launch vehicles.

JDEC was intended for:

- providing the exchange of information on launches of ballistic missiles and space launch vehicles detected by MAEWS;
- resolving of possible unclear situations related to information from Parties' MAEWS;
- providing the conditions for preparing and servicing a common database on a multilateral mode of notification on launches of ballistic missiles and space launch vehicles.

Data exchange should be accomplished for the following types of objects detected by Parties' MAEWS:

- on all launches of IBM<sup>4</sup> from BMS<sup>5</sup> of the Russian Federation and the U.S.;
- on launches of Russian Federation and the U.S. ballistic missiles, which are not ICBM or BMS;
- on launches of ballistic missiles of third-world countries, which could represent a direct threat to Parties, or could cause uncertainty on account of a misinterpretation;
- on launches of space launch vehicles.

Owing to some subjective reasons, the work on the Center has not progressed. Since the signing the Memorandum the nuclear threat has not weakened. The world has witnessed the emergence of new states possessing nuclear weapon. Now the U.S. has intensified its AMBD activity in a unilateral manner and Russia has made attempts to take adequate counter-measures.

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<sup>3</sup> MAEWS – Missile Attack Early Warning System

<sup>4</sup> IBM – Intercontinental Ballistic Missiles

<sup>5</sup> Ballistic Missile Submarines

Under these conditions, the urgency of the problem, related to informatization aspect, drastically grows. A qualitative jump in the field of information technologies allows one to organize a global monitoring super system, that ensures strategic stability, and could provide transparency of the strategic situation.

Here, the other information sources can be used along with the MAEWS data. At present, there exist satellite navigation systems, which make it possible to determine the position of objects under observation down to centimeters. The reconnaissance satellites are capable of identifying in detail, round-the-clock and in any meteorological conditions, the operational situation both on the earth and in the world's oceans.

Proceeding from the principle of continuity, it seems rational to construct the strategic stability monitoring system on the JDEC basis.

Objectives, tasks and functions of the system, at the present stage of monitoring strategic stability, seem to be a topical subject for investigations and discussions by disarmament experts.