

**RUSSIAN ACADEMY OF SCIENCES
INSTITUTE OF WORLD ECONOMY AND
INTERNATIONAL RELATIONS**

**RUSSIA:
ARMS CONTROL,
DISARMAMENT AND
INTERNATIONAL
SECURITY**

**MEMO SUPPLEMENT
TO THE RUSSIAN EDITION
OF THE SIPRI YEARBOOK 2009**

MOSCOW 2010

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(IMEMO)

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Compiled and edited by
ALEXANDRE KALIADINE AND ALEXEI ARBATOV

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IMEMO

23, Profsoyuznaya str., Moscow GSP-7, 117997

Russian Federation

Telephone: (+7 095) 128 05 13

Telefax: (+7 095) 128 65 75

E-mail: imemoran@imemo.ru

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PREFACE

The Institute of World Economy and International Relations presents in this volume the 10th edition of *RUSSIA: ARMS CONTROL, DISARMAMENT AND INTERNATIONAL SECURITY*. This serial publication is associated with the Russian edition of the SIPRI Yearbook: Armaments, Disarmament and International Security, which contains supplementary materials written by IMEMO researchers.

Our intention in translating and publishing them in separate volumes has been to inform the international expert community about the research work being done at the IMEMO. Our specific target – readers of the original, English version of the SIPRI Yearbooks who may wish to acquaint themselves with similar studies originating from Russia.

2009 has witnessed the beginnings of new substantial international discussion of nuclear disarmament and non-proliferation issues. Critical arms control and disarmament problems are back on the international security agenda after a long period of marginalization and there is real hope that possible ways forward will be identified and pursued.

Russia and the USA have started serious negotiations for a START follow-on treaty to expand major bilateral reductions of their strategic weapons arsenals and prepare the ground for a multilateral nuclear disarmament process.

Efforts have also been made to boost the non-proliferation cause. The preparatory process for the 2010 NPT Conference succeeded in agreeing the agenda for the Conference. In September 2009 the UN Security Council passed a wide-ranging consensus Resolution 1887 on compliance and enforcement matters.

The themes discussed in this volume include a number of priority issues. Among them: lessons from the 1991 START and the prospects for further deep reductions of strategic nuclear weapons, parallel security issues that are likely to affect nuclear disarmament negotiations; the potential deployment of weapons in outer space, particularities of arms control in this environment and prospects for limiting and prohibiting space weapons; compliance and enforcement processes in the context of the NPT regime and the ways to strengthen them.

Several chapters deal with regional security problems. They include: the long-needed reform of European security and Russia's ini-

tiative to move toward a new Euro-Atlantic security architecture; the conflict in Afghanistan and the ways to resolve it; the risks posed by nuclear Pakistan.

The brief summary of key Russian documents on security and arms control contains reference to legislative and normative acts passed in 2009. This information is useful to specialists looking for source material. They could get more details from official documents.

The book represents a collective effort. I would like to express my thanks to Corresponding Member of the Russian Academy of Sciences, Dr Alexei Arbatov and Dr Alexandre Kaliadine for compiling and editing this volume and providing important contributions of their own. Appreciation is also due to the authors of this volume – Vladimir Dvorkin, Nadia Alexandrova-Arbatova, Gennady Chufrin, Vladimir Moskalenko, Petr Topichkanov and Tamara Farnasova. I would like to thank George Bechter, Boris Klimenko and Vladimir Svarichovsky for helping to prepare the manuscript for publication.

I gratefully acknowledge the support of this project by the Swiss Federal Department of Defence, Civil Protection and Sports.

Academician Alexander Dynkin
Director
Institute of World Economy and International Relations
Russian Academy of Sciences
February 2010

ACRONYMS

AAD	– anti-air defense
ABM	– anti-ballistic missile
ABM Treaty	– Antiballistic Missile Treaty
AFPAK	– ‘Afghanistan plus Pakistan strategy’ (the USA)
ASP	– additional safeguards protocol (IAEA)
ALCM	– air-launched cruise missile
ASEAN	– Association of Southeast Asian Nations
ASAT	– anti-satellite weapon
ASW	– anti-submarine warfare
ATT	– arms trade treaty
BM	– ballistic missile
BMD	– ballistic missile defense
CBM	– confidence-building measure
CD	– Conference on Disarmament (in Geneva)
CFE Treaty	– Treaty on Conventional Armed Forces in Europe
CIS	– Commonwealth of Independent States
CSBM	– confidence- and security-building measure
CST	– Collective Security Treaty (Tashkent Treaty)
CSTO	– Collective Security Treaty Organization
CTBT	– Comprehensive Nuclear Test Ban Treaty
DIC	– defense-industrial complex
DP	– defense products
DPRK	– Democratic People’s Republic of Korea
FOM	– fractional orbiting missile
ESDP	– European Security and Defense Policy
EU	– European Union
FA	– Federal Assembly (Russia)
FC	– Federation Council (Russia)
FBR	– fast-breeder reactor
FBS	– forward-based system
FEP	– fuel enrichment plant
FMCT	– Fissile Material Cut-off Treaty
FOM	– fractional orbital missile
FSP	– federal special program (Russia)
FZ	– Federal Law
GICNT	– Global Initiative to Combat Nuclear Terrorism
GBI	– ground-based interceptor

G8	– Group of Eight
GDP	– gross domestic product
GLONASS	– Global Navigation Sputnik System (Russia)
GMD	– global missile defense (the USA)
GPS	– Global Positioning System
HEU	– highly-enriched uranium
IAEA	– International Atomic Energy Agency
ICBM	– intercontinental ballistic missile
INF Treaty	– the Treaty between the Union of Soviet Socialist Republics and the United States of America on the Elimination of their Intermediate-Range and Shorter-Range Missiles
INP	– Iranian nuclear program
IRBM	– intermediate-range ballistic missile
IMEMO	– Institute of World Economy and International Relations
ISAF	– International Security Assistance Force
LEU	– low enriched uranium
LWR	– light-water reactor
MW	– megawatt
MIRV	– multiple independently targeted re-entry vehicle
MSC	– Military Staff Committee (the UNO)
MTCR	– Missile Technology Control Regime
MWS	– missile warning system
NAM	– Non-Aligned Movement
NATO	– North Atlantic Treaty Organization
NFC	– nuclear fuel cycle
NMD	– national missile defense (USA)
NNWS	– non-nuclear-weapon state
NPT	– Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty)
NSG	– Nuclear Suppliers Group
NTMV	– national technical means (of verification)
NW	– nuclear weapon (warhead)
NWFP	– North-West Frontier Province (Pakistan)
NWFZ	– nuclear-weapon-free zone
NWS	– nuclear-weapon state (as defined by the NPT)
OSCE	– Organization for Security and Co-operation in Europe
PAROS	– Prevention of an Arms Race in Outer Space

PPWOS	– Prevention of the Placement of Weapons in Outer Space
PPWOST	– Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects
PSI	– Proliferation Security Initiative
PTBT	– Partial Test Ban Treaty
R&D	– research and development
RAF	– Russian Armed Forces
RF	– Russian Federation
RNC	– Russia-NATO Council
SC	– spacecraft, space apparatus
SCO	– Shanghai Cooperation Organization
SD	– State Duma (Russia)
SDI	– Strategic Defense Initiative (the USA)
SIPRI	– Stockholm International Peace Research Institute
SLBM	– submarine/sea-launched ballistic missile
SLCM	– sea-launched cruise missile
SNDS	– strategic nuclear delivery system
SNF	– Strategic nuclear forces
SRAM	– short-range air missile
SOA	– strategic offensive arms
SORT	– the 2002 Moscow Treaty on the Reduction of Strategic Offensive Potentials
SRF	– Strategic Rocket Forces (Russia)
SSBN	– ship submersible ballistic nuclear (strategic nuclear submarine)
SSN	– nuclear-powered submarine
START	– Treaty on the Reduction and Limitation of Strategic Offensive Arms
TCBM	– transparency and confidence-building measure
THAAD	– theater high-altitude area defense
TNW	– tactical nuclear weapons
TMD	– theatre missile defense
TTBT	– Threshold Test Ban Treaty
UCF	– uranium conversion facility
UEF	– uranium enrichment facility
UF6	– uranium hexafluoride
UN	– United Nations
UNDC	– United Nations Disarmament Commission

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- UNGA – UN General Assembly
- UNSC – UN Security Council
- UNSCR – UN Security Council Resolution
- WNA – World Nuclear Association
- WMD – weapon of mass destruction

PART I. ANALYSES, FORECASTS, DISCUSSIONS

1. The lessons from the 1991 START and the prospects for further reduction of nuclear weapons
2. Preventing an arms race in outer space
3. The non-proliferation requirements: practices and prospects of enforcement
4. Framework of a new European security architecture

1. THE LESSONS FROM THE 1991 START AND THE PROSPECTS FOR FURTHER REDUCTION OF NUCLEAR WEAPONS

Vladimir DVORKIN

The strategic dialogue between Russia and the United States just as 30 years ago remains focused on the reduction of strategic nuclear weapons.

During the 8-years of the Bush Administration this dialogue has been put on the backburner of America's policy. After the expiry of the 2002 Moscow Treaty on the Reduction of Strategic Offensive Potentials (SORT) the Bush Administration did not consider it worthwhile in the foreseeable future to discuss further steps to reduce strategic offensive arms (SOA) based on new treaties with Russia.

In 2002 the United States denounced the 1972 Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty), undermining in fact the whole regime of limitation and reduction of nuclear weapons. Insignificant changes in US policy occurred in 2008 under the influence of growing criticism within the Democratic, but also the Republican Party. The critics considered it important to restart negotiations with Russia on the reduction of SOA in view of the approaching expiry of the Treaty on the Reduction and Limitation of Strategic Offensive Arms (START)¹, as well as on the need to cooperate with Russia on the problems of settling the nuclear crises in Iran and North Korea and the extremely complex situation in Afghanistan.

¹ The 1991 START expired on 5 December 2009.

In 2008 the State Department sent the Russian Ministry for Foreign Affairs a document entitled 'A Treaty between the Russian Federation and the United States of America on measures to strengthen transparency and confidence-building measures in respect of strategic offensive nuclear potentials'.

This document did not envisage explicit reduction of SOA on the part of the two sides as compared to the 2002 Moscow Treaty. This follows from the first two points of Art. 1. Instead, it was proposed to extend it for another 10 years. These points stipulated:

1. The total quantity of operationally deployed strategic nuclear warheads (NW) should not exceed 1700–2200 on each side by 31 December 2012 for the duration of 10 years after the entry into force of the present Treaty.

2. In accordance with the requirements of the State and the commitment to their allies the Sides intend to bring about further reductions in their strategic nuclear warheads to a minimal number.

The remaining eight articles mainly contained proposals for the control systems and confidence-building measures a limited part of what was stipulated in the 1991 START with a detailed description of the presence of the inspection groups of both sides when carrying out inspections.

As an integral part of the draft of the Treaty a 65-page Protocol on strengthening transparency and confidence-building measures was submitted. The Protocol contained the order of exchange of data, inspections and display of weapons, almost 25 different types of reports on the state of the facilities of the nuclear triad and procedure for the exchange of telemetric data with a detailed description of their contents, terms and definitions as well as of other control requirements. All these propositions in fact repeat many points of the corresponding parts of the 1991 START.

The greater volume of the Protocol was connected with the procedures of the exchange of telemetric data on the launching of missiles, the expediency of which is in considerable doubt.

In this way, the package of the documents submitted by the Bush Administration can be looked upon as a belated and fairly clumsy attempt to demonstrate positive views on the problems of nuclear disarmament and proliferation during the final period of its term of office.

During this period the Russian and American experts studied forecasts for the signing before the end of 2009 of a new Treaty on

the mutual reduction of SOA and the possibility of prolongation of the 1991 START. This project was regarded in official and expert circles of the RF and the USA with strong misgivings in as much as it restricted in a considerable measure further programs for SOA of the Sides. While the 1991 START was in force it was not permitted to carry out flight tests of the ICBM 'Topol-M' with MIRV without modification to give this missile parameters of a new type as well as increasing the number of warheads on SLBM 'Sineva'. Under the conditions of the 1991 START the counting rules for warheads and missiles in force and the destruction of armaments, the fulfillment of the conditions of the 2002 SORT requires the USA to dismantle the launching installations of SLBM 'Trident-2' at least on four SSBN of the 'Ohio' class, which are reconstructed as Cruise missiles. Apart from this, the continuation of inspection activities is extremely burdensome for both sides and does not correspond to the new situation. Nevertheless, a final refusal to consider this option in case of the failure to sign a new treaty would seem premature.

At the same time, quite independently of the further development of the situation in respect of the prospect for the signing of a new treaty, analysis of the application of such a unique document as the 1991 START appears not to be sufficiently thought through, though quite actual. After all, many of its propositions in one way or another will either be retained or modified in the course of the negotiations.

The 1991 START: the analysis of experience

The 1991 START is the first treaty not only about limitation, but also about a twofold reduction of strategic nuclear armaments by the two powers if one does not take into account the not less important Treaty between the USSR and the USA on the Elimination of their Intermediate-Range and Shorter-Range Missiles (INF Treaty). These weapons, however, are not considered, under the existing qualifications, part of the strategic forces.

In recent years a number of provisions of the 1991 START have been from time to time subject to criticism both in Russia and the United States. Highly placed Russian officials consider them almost scandalous because of the control system which supplies the American side with detailed information on the state, the technical

characteristics and technical particularities of the national strategic armaments. A number of military experts are of the opinion that the limitation of areas of permanent deployment and patrolling by mobile missile installations of the Strategic Rocket Forces (SRF) radically reduces their concealment and survivability².

Without for the moment evaluating these grievances, the time and the political-military situation in the period when those negotiations took place, should be borne in mind.

The negotiations lasted about seven years till the middle of 1991 while they had started during a serious worsening of relations between the USSR and the USA as a result of the announcement of the 'Strategic Defense Initiative' (SDI) Program by President Reagan on 23 March 1983.

The threat of an unprecedented military confrontation between the two nuclear superpowers became real. This might have resulted in militarization of outer space by the putting in orbit of various armaments including those constructed on new physical principles.

The USSR initiated numerous expensive R&D projects of a symmetrical and asymmetrical nature to counteract the SDI. The symmetrical measures included the development of multi-force military space system and layered anti-missile defense system. As to the asymmetrical measures the main effort was focused on the ground-based groupings of mobile ballistic missiles (BM) which disposed of enhanced energetic reserves as compared to the SLBM enabling them to overcome all the obstacles of the American BMD. The development of a number of new types of ICBM was initiated and the increase of ground-based groupings of ICBM from 1398 to 1700 was envisaged, including the deployment of more than 1000 of mobile launchers of 'Topol' ICBM and small-caliber 'Courier' ICBM in order to considerably enhance the survivability and maintenance of the Soviet nuclear deterrence potential.

In such circumstances the negotiations on SOA were started. Although later the tension in relations between the USSR and the USA gradually diminished (an important step in this process was the meeting between the presidents of the two countries in Reykjavik in 1986) the degree of mutual mistrust remained considerable which was fully reflected in the final text of the START.

² Lata, V., Vidanov, M., 'The USA overdid the USSR during the START-1 negotiations', *Nezavisimoye voennoye obozrenie*, 7 August 2009.

It should be borne in mind that the totality of documents which includes the Treaty itself consisting of 19 articles and also (forming integral part of the arrangement) seven protocols, terms, memoranda, 38 agreed statements, two separate agreements, a framework agreement, declarations and letters amounts to more than 500 pages.

One protocol connected with the disintegration of the Soviet Union and the emergence of new Parties to the 1991 START (Belarus, Ukraine and Kazakhstan) was signed in May 1992.

The framework agreement laying down the continuation of negotiations of the further reduction of strategic nuclear armaments fixing the level of SOA at 3000–3500 warheads was signed in June 1992. It also became an integral part of the 1991 START.

Let us note only a certain part of the principal provisions of the 1991 START which are from time to time discussed by officials and experts.

The main conditions for the reduction and limitation of SOA are set out in the second article of the Treaty. Apart from the reduction of strategic nuclear delivery vehicles (SNDV) to a level of 1600 units and warheads - to a level of 6000 units, by the end of the third stage the sides should not possess more than 154 heavy ICBM, 4900 warheads on ICBM and SLBM, 1100 warheads on mobile ICBM.

The next very important article defines detailed counting rules for deployed, serviced and stored, transported warheads, missiles, launchers and heavy bombers (HB) which comprised the strategic nuclear force (SNF) of the two sides. The number of warheads adapted to ICBM and SLBM of each of the existing types was mentioned in the Memoranda on the agreement, and for the new type of ICBM and SLBM the number of warheads was fixed at the number of those which have been flight tested. In order to exclude the possibility of a retribution potential the so-called 40 percent rule is introduced. Accordingly the number of warheads which will be adapted to the new type of ICBM and SLBM with separating warheads of the existing construction or of the new type of ICBM and SLBM with one warhead should be not less than the result of the division of 40 percent of the throw weight of the ICBM or SLBM by the weight of the lightest flight tested warhead on missiles of that type.

For this purpose the rules for the reduction of the number of warheads were defined in accordance with which each side had the

right to reduce the number of warheads adapted to the existing type of ICBM and SLBM to a summary number not exceeding 1250 units at any given time. At the same time the number of warheads adapted to ICBM and SLBM was reduced to no more than four units of the number of warheads adapted to them on the date of the signing of the Treaty. If the number of warheads adapted to ICBM or SLBM of a particular type was reduced by more than two units, the platform of the warheads of each of the ICBM or SLBM was to be destroyed and replaced by a new one. An exception was made for 'Minuteman-III', the platform of which when any reduction of the number of warheads takes place is destroyed and replaced by a new one. This is done in the USA when those missiles are armed with one warhead from an ICBM 'MX' instead of the three previous ones.

It was prohibited to carry out flight testing and the deployment of ICBM and SLBM with a number of warheads exceeding ten units which corresponded to the number of warheads of Soviet heavy missiles and American ICBM 'MX'. It was also prohibited to increase the number of warheads as compared to the number adapted to any ICBM and SLBM of each type.

The counting of nuclear warheads carried by heavy bombers was defined conditionally and did not take into account the real number.

For the USSR each heavy bomber with ALCM within a limit of a total number of 180 units, is armed with 8 warheads. Each heavy bomber which carried more than 180 units was equipped with the number of warheads for which it was designed ('Tu-95' is equipped with 6 and 16 ALCM, 'Tu-160' – with 12 ALCM). In this way, the increase of the summary number of warheads by more than 1300 units was allowed for the Russian triad.

Each American HB with ALCM, within a limit of a total number of 150 units, is armed with 10 warheads. Each heavy bomber which carried above 150 units was equipped with the number of warheads for which it was designed. Each American 'B-52H' HB is capable of carrying up to 20 ALCM. This made it possible to increase the 6000 warheads, allowed by the 1991 START, by 1500 units.

On an American initiative an important place in the text of the Treaty is taken up by the limitation of Soviet heavy ICBM (considered by the USA as a destabilizing element). Accordingly, the Soviet Union had to reduce their number twofold. It was prohibited to

produce, test and deploy such missiles of a new type and increase the throw weight of heavy ICBM of existing types. No less important place in the Treaty was accorded to various kinds of limitations on mobile ICBM and their launchers. In the end the Americans decided to cease to deploy such missiles.

There are limited areas of 5 km² where ground-based mobile launchers for ICBM are located. In each of these areas there should not be more than 10 launchers with ICBM and stationary concealed shelters for them. All this applies equally of course to the 'Topol' missile complexes and subsequently to the 'Topol-M' missile complexes. Each missile regiment with these complexes comprises 9 launchers with missiles.

The patrol area of these launchers should not exceed 125 000 km². This is considerably more than the area required for 9 launchers to provide the necessary concealment and survivability.

At seven railway stations there should not be more than 35 points for the permanent location of mobile railway missile complexes (MRMC). In actual fact the USSR and Russia disposed of 12 echelons (regiments) of 3 ICBM 'RT-23 UTTX' each.

The limits were established for the non-deployed mobile missiles, although these limits were within fairly wide bounds. Thus, the non-deployed ICBMs were limited to 250 units and for mobile railway-based missiles to not more than 125 units. This, as experience has shown, considerably exceeded the actually deployed number of Soviet ICBM on railway launchers (36 ICBM). At the same time, the number of launchers for ICBM of all types was limited to 110 units. For mobile railway launchers this amounts to 18 units.

For maneuvers with the use of ground-based and mobile railway missile complexes and their deployment location the notification of the beginning and the end of the exercises was required.

The same conditions were stipulated for large scale strategic maneuvers in which heavy bombers participated. These are carried out once a year for the duration of 30 days.

Most important feature of the 1991 START was the unprecedented transparency in respect of the state and characteristics of the SNF of the USSR and the USA.

The corresponding articles of the Treaty included provisions on the control system of limitations, on the conduct of inspections and confidence-building measures including the exchange of informa-

tion, the display of SOA and of dismantled SOA and the exhibition of SOA on demand.

The control system laid down 16 types of inspections in relation to the original data, new facilities, on suspicion, in respect of warheads of deployed ICBM and SLBM, in connection with re-equipment of facilities, in connection with displays and others.

The confidence-building measures comprised 10 groups, which consisted of 152 notifications. The exchange of information system between the USSR and the USA in accordance with the 1991 START Treaty included:

- the exchange of data once every 6 months on SOA and facilities related to them on all the categories of data contained in the Memorandum on the definition of original data in respect of the 1991 START;

- the transfer of all telemetric data obtained in the course of the launching of missiles and the presentation of the magnetic tapes with the record of such telemetric data as well as data connected with their analysis in accordance with the Protocol on telemetric data attached to the 1991 START;

- notifications should be given in accordance with the 1991 START containing current information on SOA and related facilities.

Each country was to display for confirmation the technical characteristics of ICBM and SLBM of each type, of all types of ICBM launchers, of each type and variety of heavy bombers and decommissioned heavy bombers, of each type of ALCM.

The information transmitted in accordance with the Memorandum should contain: quantitative data on SOA with mention of their location; technical data on SOA; plans of the areas of deployment of SOA and the facilities servicing them; photographs of the missiles, the launchers, means of transport and installation, heavy bombers and submarines.

The country carrying out flight tests should provide the other side after each missile launch with magnetic tape recordings of all telemetric information obtained in the course of flight testing; magnetic tape recordings of all telemetric information in capsule; a short description of each magnetic tape.

Apart from this, the country carrying out flight tests should provide the other side after each missile launch data for analysis

(description of the format of the telemetric frame and the method of encoding in respect of all telemetric information transmitted by air).

The part of the Treaty entitled 'Agreed statements' contained in its 39 points various propositions different in their importance and themes. These not only defined and explained a number of articles of the main text, but also introduce additional requirements and limitations. Below we shall look at the most important of these statements.

The seventh agreed statement concerned the permission to carry out permitted dislocation of ICBM. It sets out the agreement of the sides to such dislocation when carried out only for the purpose of national security during a crisis when one side considered it essential to take measures providing the survivability of its strategic forces. The sides also agreed that, although the number and frequency of such dislocations are not limited, in practice they will not be carried out often.

The nineteenth agreed statement set out that in case either of the sides decided to create mobile launchers of missile vehicles for space facilities and the missile vehicles connected with these launchers, this to be considered by a Joint commission for observation and inspection. This was permitted on condition that:

- mobile launchers of missile vehicles for space facilities and the missile vehicles for space facilities connected with these launchers differed from launchers for ICBM and SLBM in that they were observable by national control means;

- mobile launchers of missile vehicles for space facilities did not carry any ICBM and SLBM;

- the number of produced and stored mobile launchers of missile vehicles for space facilities and the missile vehicles for space facilities connected with these launches should not exceed the number necessary for space launches;

- mobile launchers of missile vehicles for space facilities and the missile vehicles for space facilities connected with these launches should not be located on ICBM bases for railway and ground-based launchers.

This provision was successfully used by Russia when launching space vehicles.

In accordance with the twenty second agreed statement the interdependence between the INF Treaty and the 1991 START was established in respect of the continuing monitoring of the production facilities of ICBM. In particular, the two sides agreed that dur-

ing a period of permanent control of the Votkinsk machine-building plant was carried out simultaneously in accordance with the INF Treaty, they applied the procedure of permanent monitoring in accordance with the 1991 START and the procedure for permanent control in accordance with the INF Treaty.

As variants of existing type of ICBM and SLBM may be considered missiles of the calibers which differ from the calibers of the same type by more than three percent but less than the corresponding criteria of a new type.

ICBM and SLBM were also acceptable as variants if their calibers differed from the calibers of the missiles of the same type by less than three percent. The particularity of this agreement consisted of the fact that all the limitations on the number of warheads and their throw weight apply to the variant of the missile.

In order to implement the conditions under which the ICBM and SLBM may be considered to be of a new type, their throw weight should exceed the throw weight of the existing or of the earlier declared new type of ICBM and SLBM by 21 percent or more. Changes in the length of the first stage of a type declared to be a new type of ICBM and SLBM represent changes in the ICBM and SLBM of an existing type or earlier declared new type by five percent or more.

The throw weight of an ICBM or SLBM of a new type represents the maximum throw weight achieved in flight tests over a distance of not less than 11000 km for ICBM or over a distance of not less than 9500 km for SLBM.

In case the ICBM declared to be a missile of a new type as compared to a 'Topol' missile when the throw weight is exceeded by 21 percent or more in addition to changes in the length of the first stage by five percent, its throw weight is the maximum throw weight achieved in flight tests over a distance of not less than 11000 kilometers.

This represented a radical limitation on the modernization, in particular, of the 'Topol' missile, which possessed considerable reserves of its energy capacities. This was well known by the American experts who tried not to permit to enhance the strike effectiveness of this missile. Without the transfer to the classification of a new type it was prohibited to arm a 'Topol-M' with several warheads instead of one. The same applied to SLBM. And the transfer to a new type required changes in the construction, new tests, which costs a great deal of time and money.

The final texts of the 1991 START may evoke by the contemporary reader a number of contradictory evaluations. This if one does not take into account the considerable number of compromises on the majority of principal propositions of the Treaty. However, for the experts who have taken part in the negotiations or in the formulation of the positions at all stages of the negotiating process, their former and current opinions and evaluations often become contradictory because of the radically different conditions. Thus, for instance, the demolition of half of the Soviet heavy missiles 'P-36 UTTX' was at the time extremely difficult to agree on. Today, bearing in mind the disintegration of the Soviet Union and the changes in the whole military and political situation, this demolition appears not only justified, but without alternative. Not only because these missiles were produced in Ukraine, but also because in the structure of the SNF stationary ICBM with a great number of warheads on each predominate. This became a substantial destabilizing factor.

In order to differentiate between the evaluations of the START provisions depending on the time, attempts will be made below to define to which period these evaluations belong.

In the first place, it should be noted that in the initial stages of the negotiations practically every page of the documents was covered by remarks (proposed by the American and Soviet sides) in brackets which contained text which had not been yet agreed upon. A number of disagreements could only be overcome at the completing stage of the negotiations. Thus, the USA for a long time tried to prohibit the deployment of ground-based ICBM.

This type of complexes was in the first place needed by the USSR in order to enhance the survivability of the ground-based groupings. This is connected with the fact that in the middle of the 1980s the USA started to deploy high precision ICBM 'MX' and SLBM warheads with increased strike power and precision. Warheads of these missiles possessed effective striking power against highly survivable Soviet silo-based launchers. This considerably diminished the possibility of a retribution strike while the sea-based SNF could not sufficiently compensate for this loss because of the small share of submarine-based SLBM in the patrol areas. In the USA existed projects for the mobile complexes with ICBM 'MX' 'Midgetman'. The USA gave this up in the first place because of the high effectiveness of their sea-based nuclear forces which provided the necessary power for a retribution strike.

Here can be noted the curious and very open point of view of the US military. This opinion was expressed in the routine report of the Head of the Soviet delegation, secret at the time, on the results of the unofficial talk with his American colleagues during the negotiations in Geneva. To the question why the USA did not want to allow the deployment of ground-based mobile missiles, the answer was that diplomats did not object to the deployment of this type of missile, but that the military strongly objected since it made planning a nuclear strike against the Soviet facilities of the SNF very difficult. At that time this openness was regarded as a sign of the determination to deliver a disarming strike and only stimulated the efforts to strengthen the mobile groupings of SNF. This can also be looked upon as the real state of the military-political relations between the two countries at the time of the negotiations. Quite independently of the position and decisions of the leadership, the military of both states were obliged to plan for the use of their forces in every possible military contingency.

Agreement was fairly quickly reached on the prohibition on the development and deployment of air-based ballistic missiles, in as much as both the USA and the USSR had accumulated enough experience in the research and testing in regard of this problem.

The results had shown that this kind of basing in respect of the indices of military effectiveness, exploitation and cost is many times inferior to all other forms of basing and it was abandoned without regret. However, more recently, individual experts, unaware of the earlier history, again started to propose the development of aviation complexes with air-based ballistic missiles. They clearly mistakenly suppose that the new technologies are capable of changing the previous conclusions.

In Russia the 1991 START is from time to time criticized from the contemporary point of view for the limitations it imposed on the mobility of ground-based mobile complexes 'Topol' and 'Topol-M', as well as for the detailed control by American inspection groups of the facilities of the Russian SNF, the permanent control of the Votkinsk plant and a number of other limitations. However, first of all, there has never existed any real temporary and area limitations of the patrol routs of ground-based complexes, because the patrol area, as has already been pointed out before, was from the start superfluous and in a military crisis situation has no importance at all. In these circumstances it is not the patrol area which is of im-

portance, but the network of routes along which the launchers can move and which are not limited by any articles.

Secondly, the control system of the Treaty was indeed excessively burdensome and superfluous, especially from a contemporary point of view. However, it should be borne in mind that this system was elaborated in conditions of the Cold War, immediately after the sharp deterioration of relations between the USSR and the USA, and the degree of mutual distrust was extremely high. That the intensity of the inspection activities by the USA was higher can only be explained by the fact that the visits of the inspection teams were to be paid for by the monitoring side. The permanent control was only carried out at the Votkinsk plant for the reason that this plant was defined as a facility for the production of ICBM.

On the whole it should be admitted that the negotiations with the USA were conducted by the USSR which was not inferior to its partner in respect of military power and influence on world events. That is why the concessions by both sides were practically of equal importance. The American experts focused their attention mainly on limitations of the Soviet ground-based ICBM and heavy missiles, the principal component in respect of the number of warheads.

The Soviet negotiators succeeded in compensating for the reduction of heavy ICBM by a considerable reduction of the sea-based component of the SOF of the USA and the cessation of the further strengthening of the ICBM 'MX' grouping which was limited to 50 units. It should be noted that the ICBM 'MX' was in no way inferior in counter silo striking power to the Soviet heavy missiles of the 'P-36 UTTX' and 'P-36M' type because of the enhanced strike precision with almost the same tonnage equivalent of the warheads.

As far as the decision-making process is concerned, it should be remembered that the 1991 START was signed by the presidents of the USA and the USSR, passed through a long stage of elaboration of each article, memoranda, protocols, agreed statement etc. in conditions of vehement discussions between the two sides and a search for compromise.

In the USSR the elaboration of the positions on every controversial question was carried out by-now legendary 'Five' which consisted of professionals of the highest class from the Military-Industrial Commission of the Council of Ministers, the Ministry of Defense, the Ministry for Foreign Affairs, the KGB and the Central

Committee of the Communist Party. Any disproportionate concessions were unthinkable.

The answer to all criticism of the START boils down to the fact that if looked at from the position at the time when it was signed, with all the reductions in accordance with its conditions, the Soviet SNF did not only preserve, but increased its potential of nuclear deterrence, that is the effectiveness of the retribution strike, because of the diminished power of the disarming strike of the SOF of the USA.

After the disintegration of the Soviet Union positive evaluations of the Treaty became even more justified. In order to understand this it is sufficient to consider the state of SNF of Russia by this time.

In 1992 the nuclear triad of the former USSR amounted to 10299 warheads among which 6642 of the ground-based grouping, 2804 of the sea-based grouping, 853 of the air-based grouping.

The SNF were composed of 308 silo-based heavy ICBM of the 'P-36 UTTX' and 'P-36M' type with 10 warheads each in a silo-based missile; 300 silo-based ICBM of the 'UR-100 NUTTX' type with 6 warheads each; 56 ICBM of the 'PT-23 UTTX' type, 36 missiles of the same type on railway-based launchers; 288 'Topol' ICBM with one warhead each on mobile ground-based launchers and 366 ICBM of the silo-based 'UR-100' and 'RT-2P' type.

The sea-based component consists of 62 missiles-carrying submarines with eight of projects of 940 SLBM. Five types of SLBM ('R-27', 'R-27U', 'R-29', 'R-29D', 'R-31') armed with one warhead and three types of SLBM ('R-29R', 'R-29', 'R-29RM') with independently targeted separating warheads. Air-based component counts 15 HB 'Yu-160', 84 HB of the 'Tu-95mc' type with ALCM and 61 'Tu-95k' with aviation bombs.

The particular aspect of the SNF of the USSR which Russia inherited consists of the fact that a considerable part of the weapons had been in service for a long time. ICBM of the 'UR-100K' and 'RT-2P' type had been deployed since 1971–1972, ICBM of the 'MRUR-100' and 'UR-100 NUTTX' type with independently targeted separating warheads – since 1977–1988, heavy ICBM – since 1978.

In the sea-based component consisting of missiles-carrying submarines of 667 projects with SLBM with one warhead were commissioned in the period 1968–1974.

Secondly, the excessive variety of types of ground-based and sea-based missiles (8 types each) required considerable expenses which were in no way justified.

One dramatic episode was connected with the demolition and transfer to Russia of part of the strategic armaments deployed in the new states of the CIS.

At the time of the disintegration of the Soviet Union 176 silo-based ICBM were deployed on the territory of Ukraine among which 130 ICBM of the 'UR-100 NUTTX' type and 46 ICBM of the 'RT-23 UTTX' type, 13 HB 'Tu-160' and 21 HB 'Tu-95mc'. In Kazakhstan 104 silo-based heavy ICBM and 40 HB 'Tu-95mc' were located. In Belarus there were 54 launching complexes for 'Topol' missiles.

The disintegration of the USSR disrupted the modernization process of these missiles which were to enhance the effectiveness in overcoming the US BMD. It proved not possible to replace 'the P-36 UTTX' by the modernized 'P-36M' missiles. Work on the repair of existing and the building of new missile carrying submarines, the improvement of SLBM, the modernization of heavy bombers and cruise missiles were considerably retarded.

That is why the strength of the Russian SNF was reduced in this way without the influence of the 1991 START. By the time it entered into force in December 1994, the number of warheads in the nuclear triad had been reduced from 10299 to 7059 units in 2002. In particular, the number of heavy missiles diminished from 308 to 204 units, the number of missiles-carrying submarines diminished from 62 to 47 units.

By this time the strength of the US SNF remained virtually without change, but was to be reduced in accordance with the START. In this way, the 1991 START enabled even in the critical conditions for the Russian SNF and the military-industrial complex to preserve the strategic nuclear balance with the USA.

The prospects for the further reduction of the SNF

'The Joint understanding' on the question of further reductions and limitations of strategic offensive arms signed at the summit in Moscow in July 2009 showed a certain progress in the strategic dialog between Russia and the USA as well as considerable problems which still have to be resolved. These problems are not only con-

nected with the known disagreements between Russia and the USA on the question of the BMD, but also in respect of the arming of strategic carriers with conventional high-precision warheads, the presence of retribution potential of the American SNF after the implementation of a follow on arrangement.

Both in the USA and Russia there are circles which consider that substantial strategic dialogue between the two sides is not in the interests of national security. It is enough to remember the sharp protests in the USA against President Obama decision to reduce the expenses on the BMD by 14 percent, to confirm the abandoning the R&D program for new warheads, etc. In Russia, too, the opinion exists that the USA intends to draw Russian SNF into the disarmament process with the aim of achieving general military pre-eminence as a result of absolute superiority of conventional forces.

Quite independently of the general climate in Russian-American relations, the two sides have made considerable efforts in the process of the negotiations to overcome the differences noted above.

In accordance with 'the Joint understanding' the new START is designed for duration of 7–10 years.

The ceiling of 1500–1675 strategic warheads and 500–1100 carriers is established. The narrowing of this corridor is to be agreed in the course of further negotiations. The agreed range is evidence of the considerable differences on the attitude to key propositions in the project of the new treaty. More than symbolic cuts in warheads as compared with the 2002 SORT (by 25 units in all) after the two Presidents had agreed that in the new treaty the ceiling for warheads should be lower than 1700–2200 units was noted by the Russian delegation and could only be reduced after the solution to the BMD problem.

The prospects for the possibility of finding a solution to the BMD problem appear to be real. In the first place, the Obama Administration abandoned the plans to build a location area for strategic BMD in Poland and Czech Republic. This decision is in the first place due to the criteria of the effectiveness, the cost and the expediency of implementing within the time frame planned by the previous administration, i.e. to place the missiles in the silos by the year 2012–2013. At the same time, the BMD system equipped with GBI anti-missiles missiles did not pass the necessary number of field tests to confirm the required combat capability close to real conditions, even with the equipment with which these missiles are de-

ployed on the bases in Alaska and California (with a three-stage booster engine). It was planned to deploy in Eastern Europe a two-stage variant of the BMD which passed an even smaller number of tests.

However, the renunciation of the BMD plans of the Bush Administration does not mean that work in this field has been stopped by the USA. The problem is what configuration of BMD the USA will develop instead of the abandoned BMD scheme in Europe.

As far as is known, Washington does not plan the further deployment of GBI intercept missiles in Alaska and California (apart from the already existing 30 launchers) and it halted the program of the building of fast KEI intercept missiles. This considerably reduces the effectiveness of strategic BMD.

The Pentagon was instructed to study various types of BMD systems as a defense against Iranian and North Korean missiles including the use of the sea-based 'Aegis' BMD systems with 'Standard-3' anti-missile missiles and the ground-based THAAD system.

Besides, the prospect of cooperation on the elaboration, deployment and joint use of various BMD boundaries with divided zones of responsibility should not be excluded. In this connection the words of President Obama said in Moscow should be recalled: 'I want to work together with Russia on a new BMD architecture which will provide us with more security. But if the threat of the Iranian nuclear program disappears, there will be no longer any point in building a BMD system in Europe. This answers our mutual interests'.

At the Moscow meeting the decision of the Presidents of Russia and the USA taken in 1998 was recalled on the setting up in Moscow of a Joint Data Exchange Center for data exchange of missile launches and missile carrying space vehicles launches. If such a center is set up, it would make it easier to solve the problem of arming of strategic vehicles with high-precision nuclear warheads.

It was decided that a Russian-American group would jointly evaluate the missile threats. The proposals for the setting up such a group were repeatedly put forward by Russia in the past, but these efforts were not supported by the American side. It can be supposed from the start that there will be a number of differences in respect of the estimates. The Russian experts will question the possibility of Iran and North Korea being able to build long-range missiles, in as

much as the se countries use old Soviet technologies. On the other hand, the American estimates are likely to be based on information pointing out that these countries use more up-to-date technologies obtained from other states.

In this connection of significant interest is the report prepared by the East-West Institute (EWI), with offices both in Moscow and Brussels³.

The report contains an analysis of the characteristics of the whole specter of the ballistic missiles of Iran and North Korea. It shows substantial progress in the development of missile technologies, including information on the two launches of an Iranian two-stage, solid-fuel missile of advanced range.

New architecture of American BMD in Europe providing for four deployment stages till 2020, may lessen Russian concerns for some time, since in the first stages this system will not possess a strategic potential and will not pose a threat to Russian SNF.

But the new US plan may (if attempts to agree on the BMD joint development and deployment fail) only postpone the BMD problem in the US-Russian relations. In 2018–2020 as a result of continuous modernization of the naval Aegis BMD equipped with ‘Standard-3’ interceptors and of its land-based version the system will possess a prominent strategic potential. In that case hundreds of anti-missiles will pose a serious challenge to the Russian SNF if by that time bilateral relations are not radically improved (in contrast to a mythical threat of ten anti-missiles in Poland and Radar in the Czech Republic).

Nevertheless, resetting the American BMD has reduced the acuteness of the problem on the path to a follow on START.

The difference in respect of the ranges of which the strategic missiles are capable is determined by the considerable distinctions between the current and the prospective state of SOA of Russia and the USA.

In Russia at the beginning of 2009 the combat strength of the nuclear triad amounted to about 650 vehicles. In the nearest future if radical steps are not taken this number will only become less.

It is clearly not to the advantage of the USA to considerably reduce the number of carriers which may still remain part of the

³ Iran’s Nuclear and Missile Potential. A Joint Treat Assessment by U.S. and Russian Technical Experts. East West Institute. May 2009, available at <www.ewi.info>.

strength for a long time. This is especially true for the 'Trident-2' SLBM launchers on 14 SSBN of the 'Ohio' class which may contain 336 missiles as well as nearly 500 mobile ballistic missiles 'Minuteman III'.

The limit of 1100 carriers, initially proposed by Washington, should at this stage be looked at as a too high figure. However, it can hardly be expected that the Americans would agree to lower this ceiling to less than 800 units. In this case the USA would theoretically retain only a sea-based component of about 1500 warheads as a retribution potential.

This would be unacceptable for the Russian side. At an expert level various ways of lowering the US retribution potential are being discussed. Different options are being discussed to lower the retribution potential of the USA, for instance, by introducing the notion of operationally deployed means with the exception of two SSBN which as a rule are under repair in plants. Another example would be modifying part of the launching tubes on the SSBN so that they can no longer be used to carry missiles (which can usually be controlled), as well as other means.

The possibility of dismantling the warheads removed from the carriers in order to reduce the retribution potential is being discussed from time to time. However, the implementation of proposals of this kind seems completely unrealistic for various reasons if only because of the control problem. As a precedent one may mention the controlled destruction of only containers of the warheads of the medium and shorter-range missiles subject to destruction. At that time, however, the whole class of these missiles was destroyed, and it was not permitted to arm other carriers with the removed warheads.

Apparently, a solution is found in the US plans to arm part of the sea-based 'Trident-2' missiles with conventional warheads. If the USA plans to have on its submarines not more than 100–200 warheads, than these warheads could be fully taken into account together with nuclear warheads without thereby noticeably weakening the nuclear forces. The suppositions that the launching of strategic missiles with conventional warheads could give rise to inadequate Russian reaction to early warning information and provoke the launching of retribution nuclear missiles can not be considered well founded. The decision to launch missiles based on early warning information can only be taken for the purpose of removing the mis-

siles from a massive strike, but can never be taken as a result of the launching of a solitary missile.

One of the difficult questions in the elaboration of the follow on arrangement consists in coming to an agreement on the new control system and confidence-building measures. The basis of the new system has already been set out in the 1991 START which could be considerably constrained and simplified.

The American side insisted on a more wide-spread control system including the retention of the exchange of telemetric information procedures when ICBM and SLBM are launched in order to control the parameters of new types of Russian missiles and when existing missiles are modernized. The American side also insisted on the retention of the permanent control facilities in the Votkinsk plant.

It looks likely that a follow on arrangement might be agreed on the first months of 2010. At the same time one may anticipate ratification problems in the American Senate with the Republicans proposing a number of conditions, in particular demands related to the modernization of warheads and missiles.

If the follow on treaty is not ratified pending the 2010 NPT Conference this situation may negatively impact on the work of the Conference. But if the new treaty comes into force in 2010 it will open the way to deeper reductions of strategic nuclear arms as well on arranging consultations on the limitation and the reduction of substrategic nuclear weapons new negotiations in unilateral and bilateral formats. Besides, it is high time to start multilateral consultations and involve Great Britain, France and China in the process of verifying the nuclear arms of these states. They should be persuaded to accept at least partially unprecedented measures of verification and confidence-building practiced by the USA and Russia under the 1991 START.

2. PREVENTING AN ARMS RACE IN OUTER SPACE

Alexei ARBATOV

The history of negotiations on the prohibition of weapons in outer space (including the ones held between the USSR and the USA in the late 1980s) demonstrated the enormous complexity of full-fledged and legally-binding treaties on banning or limiting these types of arms. For a number of reasons, the current military strategic and legal environment for such negotiations and agreements is even less favorable today despite the fact that the Cold War ended nearly two decades ago.

First of all, of particularly an unfavorable affect is the nearly-complete destruction of the system of international disarmament treaties that began with the United States' refusal to ratify the Comprehensive Nuclear Test-Ban Treaty (CTBT) and decision to withdraw from the ABM Treaty at the start of the current decade. Also quite telling is the fact that since 1994 (START), the disarmament area has not been joined by a single new agreement that actually entered into legal force, unless one counts the 2002 Treaty on the Reduction of Strategic Offensive Potentials (SORT), whose status is dubious. All of the subsequent treaties and agreements were either not signed, or were signed but never ratified, or were ratified but remain unsupported by a system of counting and verification (see table 1).

Matters are complicated still further by the fact that some military space programs of certain nations – above all, that of the USA – are aimed at creating instruments of war in this environment that have either the unconcealed objective of winning military dominance, or which function under the pretext of the impossibility of such weapon systems' prohibition or limitation. At the same time, outer space information capabilities and other support (non-weapon) systems are turning into an important and irreplaceable component of new types of conventional wars – or, potentially, of wars that apply the combined use of nuclear and high-precision-guided conventional arms.

Table 1. Degradation of the Nuclear Disarmament System

Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water (Partial Test Ban Treaty, PTBT)	1963	In force, provided with verification measures
Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty)	1967	In force, not provided with a verification system
Treaty on the Non-Proliferation of Nuclear Weapons (Non-Proliferation Treaty, NPT)	1968	In force, verification system insufficient
Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil thereof (Seabed Treaty)	1971	In force, not provided with a verification system
Treaty Between the USSR and the USA on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty)	1972	The USA denounced the Treaty in 2002
Interim Agreement Between the USSR and the USA on Certain Measures with Respect to Limitation of Strategic Offensive Arms (SALT-1)	1972	Became null and void in 1977
Treaty between the USSR and the USA on the Limitation of Underground Nuclear Weapon Tests (Threshold Test Ban Treaty, TTBT)	1974	In force, provided with verification measures
Treaty Between the USSR and the USA on Underground Nuclear Explosions for Peaceful Purposes (Peaceful Nuclear Explosions Treaty, PNET)	1976	In force, provided with verification measures

Treaty between the USSR and the USA on the Limitation of Strategic Offensive Arms (SALT-II)	1979	Did not enter into force
Treaty between the USSR and the USA on the Elimination of their Intermediate-Range and Shorter-Range Missiles (INF Treaty)	1987	Executed, provided with verification measures, Russia considers the possibility of withdrawal
Treaty between the USSR and the USA on the Reduction and Limitation of Strategic Offensive Arms (START-I)	1991	Expired on 5 Dec. 2009
Treaty between the USSR and the USA on Further Reduction and Limitation of Strategic Offensive Arms (START-II)	1993	Did not enter into force
Comprehensive Nuclear Test-Ban Treaty (CTBT)	1996	Did not enter into force (not ratified by the PRC, the USA and other countries)
Fissile Material Cut-off Treaty		The negotiations that began in 1993 have stalled
Framework between the Russian Federation and the USA on the Reduction of Strategic Arms (START-III)	1997	Did not enter into force
Agreement between Russia and the USA on the Delimitation of Strategic and Non-Strategic ABM	1997	Did not enter into force
Treaty between Russia and the USA on the Reduction of Strategic Offensive Potentials (SORT)	2002	Shall remain in force until 31 December 2012, at which point it may be extended; is not in full force: will use START verification measures until that Treaty expires

Note: The table does include nuclear-free zone treaties, which relate to general politics.

This inevitably makes such spacecraft into a tempting target of strikes that use space weapons as part of defensive, asymmetrical countermeasures that exceed the likely opponent's offensive potential¹.

The new US strategic Global Strike concept which provides for enemy nations' objects being taken out of commission by conventionally-armed delivery vehicles (Trident II SLBM) is quite indicative in this context: this initiative is hardly possible without a reliance on space-based support systems². Although Russia is not named as one of such opponents, Moscow still does not believe that such expensive conventionally-armed delivery vehicles could be used against rogue nations considering the cost-effectiveness parameters involved.

Projecting the experience of recent wars in Yugoslavia, Afghanistan and Iraq, Russia's military and political establishments and expert community have, for their part, countered with a new military doctrine concept that focuses on defeating 'aerospace' attacks³. Only a small minority of Russian experts questions these newfangled ideas⁴.

The concept for defeating 'aerospace attacks' obviously gives important priority to strikes against this threat's most vulnerable link – spacecraft which would, in turn, require a reliance on anti-satellite systems. In this vein, the Russian experts write: "Considering the growing dependence of modern armed forces' effectiveness on the space component ... the threat and actual use of anti-satellite capabilities against the enemy could be viewed as an additional – and, in some cases, independent – factor in deterring the aggressor from employing force. ... And it cannot be ruled out that anti-satellite weapons' creation within the Armed Forces of the Russian Federation could become that 'bridle' that greatly deters the implementation of such ambitious plans of the USA and NATO 'cowboys'»⁵.

¹ Gallagher, N., Steinbruner, J., *Reconsidering the Rules for Space Security* // *American Academy of Arts & Sciences*. – [S. I.]. 2008.

² Myasnikov, E., *The Counterforce Potential of High-Precision Weapons* [Kontrsilovoi Potentsial Vysokotochnogo Orughiya], *Nuclear Proliferation: New Technologies, Weapons and Treaties*, ed. by Arbatov A., Dvorkin V.; Moscow: Carnegie Moscow Center, Moscow: ROSSPEN, 2009, pp. 109–118.

³ Sukhanov, S., Grinko, V., Smirnov, V., *Space in Combat Affairs* [Kosmos v Voorosakh Vooruzhonomoi Borby] // *National Defense* [Nats. Oborona], 2008, July, no. 7 (28), pp. 28–42.

⁴ Dvorkin, V., *'What is Aerospace Defense?'* [Chto Takoye Vozdushno-Kosmicheskaya Oborona?], *Nezavisimoye voennoye. obozrenie*, 3 March 2007.

⁵ Sukhanov, S., Grinko, V., Smirnov, V., *op. cit.* p. 42.

Finally, also playing a negative role is the escalation of tensions that developed in the Russian-USA relationship following the South Caucasus conflict of August 2008. In addition, the crisis provided an outlet for all the latent grievances, mistrust and animosity that the powers had accumulated against each other over the preceding decades. And those grew with the number of problems that remained unresolved in the two nations' relations, being masked instead by cosmetic declarations of partnership and cooperation.

Nevertheless, the subject of space will inevitably return to the disarmament agenda should political relations between the leading powers improve. This is especially true in the context of the serious disarmament negotiations – particularly on nuclear arms – that have once again returned to the forefront of global politics in response to the four respected US analysts' initiative. These positive developments are essential to establishing a favorable environment for future negotiations. But they by no means eliminate the need for profound and substantive study and development of all the aspects involved in a process on which the prospects of negotiations just as much depend.

The subject of the non-militarization and non-armament of outer space remains just as relevant today, something confirmed yet again by the Chinese anti-satellite system test of 2007 and the US satellite destroyer experiment of 2008. That same year, the Geneva Conference on Disarmament witnessed the presentation of a new joint Russian-Chinese draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or the Use of Force against Outer Space Objects (PPWOST), which while perhaps not resolving all of the many problems, at least confirms their pertinence. This is also confirmed by the largely-positive response the draft received from most of the conference participants

Proposals for universal agreements

Contemporary space law prohibits placing nuclear and other types of weapons of mass destruction (WMD) in orbit around the Earth, installing them on celestial bodies, or placing them around these bodies' orbits. In truth, however, this ban is still not supported by a system of verification and control. The law also prohibits: testing nuclear weapons in outer space, establishing military bases or conducting military tests and maneuvers on celestial bodies or around their orbits, conduct-

ing hostile actions or using force on celestial bodies or around their orbits, and deliberately obstructing orbits in order to disrupt the normal operation of spacecraft, SC (provisions of the 1977 Convention).

But the law does not currently prohibit the placement in outer space of any weapons that are not WMD. Neither is there a ban on the creation, testing and deployment in outer space of anti-satellite weapons. The US withdrawal from the ABM Treaty in 2002 left no restrictions in place on the creation, testing and deployment of space-based ABM systems or their components. The law also tacitly allows: anti-ABM systems and weapons as well as active and passive satellite defense capabilities; the creation and deployment in outer space of optoelectronic (for example, laser) and electronic countermeasures; and the conduct of applied military space experiments of any type, except for those conducted on hostile environmental modification techniques.

The Russian Federation and the People's Republic of China presented the Geneva Conference on Disarmament with a joint draft of the Treaty on the Prevention of the Placement of Weapons in Outer Space on 12 February 2008⁶. Until then, the subject had remained under Conference discussion for more than five years.

The initial proposal to assume the development of a universal agreement on the non-placement in outer space of any weapons, the non-use of force or the threat of force against outer space objects, and a moratorium on the placement in outer space of weapons until such an agreement is reached, was made by the Russian foreign minister at the 56th Session of the UNGA on 24 September 2001. A working paper entitled 'Possible Elements for a Future International Legal Agreement on the Prevention of the Deployment of Weapons in Outer Space, the Threat or Use of Use of Force against Outer Space Objects' was further submitted to the Geneva Conference on Disarmament on 27 June 2002. And in 2004–2005, Russia and China supplied the Conference with materials about the rules of international law that regulate military activity in outer space.

The draft PPWOST was submitted to the Conference with a research mandate in 2008 in the hope that a corresponding commit-

⁶ Zhukov, G., 'Russian-Chinese Initiative on the Prevention of the Placement of Weapons in Outer Space', *Russia: arms control, disarmament and international security: IMEMO Supplement to the Russian Edition of the SIPRI Yearbook 2008*, compiled and edited by Kaliadine A., Arbatov A., Moscow, 2009, pp. 33–39.

tee would initiate the draft's discussion in case of a favorable review. The document's introduction reaffirms that outer space is playing an ever-increasing role and that states have the right to explore and use outer space freely for peaceful purposes. It notes the positive role played by existing agreements on arms control and disarmament in outer space, including bilateral ones and the existing legal regimes.

Turning to specifics, Art. I of the draft defines the term 'outer space' as 'space beyond the elevation of 100 km above ocean level of the Earth'. The definition is not new and is contained in the laws of several nations. The Russian interpretation of international space law has accepted the norm of limiting aerospace to 100–110 km above the ocean level of the Earth. Also expanding on generally-accepted legal practice, the term 'outer space objects' is defined as 'any device designed for functioning in outer space, being launched into an orbit around any celestial body, or being in the orbit around any celestial body, or on any celestial body except the Earth, or leaving the orbit around any celestial body towards this celestial body, or moving from any celestial body towards another celestial body, or placed in outer space by any other means'. At the same time, it draws a distinction between two types of outer space objects: objects that are designed to conduct launches and remain under national jurisdiction, and objects that are assigned first and second cosmic velocities for entering outer space. In case of the latter, the space object falls under the jurisdiction of the rules of international space law.

For the purposes of the Treaty, the term 'weapons in outer space' is defined as 'any device placed in outer space, based on any physical principle, specially produced or converted to eliminate, damage or disrupt the normal function of objects in outer space, on the Earth or in its air, as well as to eliminate population, components of biosphere critical to human existence or inflict damage to them'. At the same time, it qualifies that a weapon will be considered as placed in outer space if it orbits the Earth at least once, or follows a section of this orbit before leaving this orbit, or is stationed on a permanent basis somewhere in outer space. It thus excludes various-class ballistic missiles whose trajectories cross outer space during military missions (including spacecraft interception missions), but which do not enter near-Earth orbits. The use of force and threat of force is understood as any hostile actions against outer space objects including, *inter alia*, those aimed at their destruction, damage, temporary or permanent

disruption of their normal function, the deliberate alteration of their orbit parameters, or the threat of these actions.

According to Art. II, the States Parties undertake not to place in orbit around the Earth any objects carrying any kind of weapons, not to install such weapons on celestial bodies, and not to station such weapons in outer space in any other manner; not to resort to the threat or use of force against outer space objects; and not to assist or encourage other states, groups of states or international organizations to participate in activities prohibited by the PPWOST.

At the same time, Art. IV proclaims: 'Nothing in this Treaty should be interpreted as impeding the rights of the States Parties to explore and use outer space for peaceful purposes in accordance with international law, which include but are not limited to the Charter of the United Nations and the Treaty on Outer Space'.

The draft states that the verification of compliance with the Treaty may be the subject of an additional protocol. It indicates that 'with a view to facilitate assurance of compliance with the Treaty provisions and to promote transparency and confidence-building in outer space activities the States Parties shall practice on a voluntary basis, unless agreed otherwise, agreed confidence-building measures' (Art. VI).

The Executive organization of the PPWOST is seen as one of the mechanisms for resolving disputes about the application or interpretation of the Treaty's provisions. When a dispute does arise, the States Parties are to consult together with a view to settling the dispute by negotiation and cooperation. But should the States Parties fail to come to an agreement after such consultations, the disputed situation may be referred to the Executive organization of the PPWOST along with provision of the relevant argumentation (Art. VII).

The Russian-Chinese PPWOST was generally well-received by the international community (with the exception of the Republican Administration of the USA). Germany, for example, announced that it intended to take a constructive part in a discussion about the draft, and that it supported the adoption of a new mandatory document controlling weapons in outer space. At the same time, like the other members of the European Union (EU), Germany believes that the primary objective should be a discussion and the adoption of a Code of Conduct for Outer Space Activity which it considers to be the best mechanism for improving security in this sphere. Germany believed that the political conditions were not yet ripe for the adoption of a full-scale treaty banning space weapons (the Code is being devel-

oped within the frameworks of the European Union and submitted to the Geneva Conference on Disarmament).

Syria supported the draft on behalf of the Group of 21⁷. Also speaking in favor the draft's review were Kazakhstan and other members of the Commonwealth of Independent States (CIS) as well as the Netherlands, Romania and several other nations.

Washington's negative stance on the Russian-Chinese draft is explained by its unwillingness to be constrained in its freedom in military space program development. Essentially, the USA is only interested in discussing specific transparency and confidence-building issues that could help to resolve individual problems linked to the use of space.

The new Russian-Chinese initiative once again confirmed the mutual approach to this strategic issue that existed between the two powers. It is evident that this concurrence of interests rests upon concern over the US strategic BMD program which is theoretically capable of first reducing the nuclear deterrence potential of countries such as China – and then, in the future, Russia.

Also conspicuous here is the fact that this draft treaty only covers weapons that have been deployed in space and excludes Earth-to-space class systems which are developing the most rapidly and could become operational in the foreseeable future. Instead, it only addresses ABM and ASAT space systems and space-to-Earth class weapons that will emerge in the distant future, if they are created at all. This marks a significant departure from the Soviet stance of the 1980s, which was unrealistic but comprehensive. Apparently, the reason is that China and, possibly, Russia are working on ground-based anti-satellite systems that would provide an asymmetrical response to the potential space-based BMD of the USA. They also appear intent on targeting the space support systems that provide for both the US BMD and the long-range, high-precision conventional weapons that would be used in a new type of a highly-technological war. This discriminating approach is quite explicable from the military standpoint, but could hardly form the basis for practical negotiations.

Also characteristic is the fact that verification problems – which become most difficult but also important when dealing with military space systems – are bypassed via reference to an additional protocol and voluntary confidence-building measures. In the mean time, veri-

⁷ The group includes nonaligned and neutral nations of various political leanings.

fication capabilities (which, by the way, are more easily applied to ground-based space weapons) play an absolutely key role in determining what may or not be banned or restricted during the first stage of the negotiations – as was the case, for example, with the negotiations on START.

The multilateral format of the proposed draft also raises grave doubts. The highly-advanced engineering systems covered by the draft essentially concern strategic weapons and systems that are only accessible to a few states, while the issues involved are exceptionally delicate. For this reason, it would hardly be realistic to expect practical negotiations from this multilateral approach which would assume the model of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons, or the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological [Biological] and Toxin Weapons and their Destruction – or CWC and BTWC, respectively.

A bi- or, at the very most – trilateral format (Russia – the USA – the PRC) would seem more logical, at least in the initial stage.

It should be underscored that the non-militarization of outer space is a problem impossible to resolve all at once in one comprehensive treaty. Outer space is a fundamentally new environment for military conflicts and a potential arms race, and the nations' stakes here are extremely high – in military, scientific and commercial terms. All of these weapons systems are still undergoing development and their technologies are exceptionally complex, multifunctional, and expensive and covered by a thick veil of secrecy. The monitoring and control methods involved are exceptionally difficult. So, if talks on space disarmament and armament limitations ever are held in a practical format, this will be a complicated, drawn-out and multi-stage process that is probably more comparable to the negotiation of a strategic arms reduction and limitation agreement than the adoption of the CWC or BTWC.

On the whole, it could be said that the 2008 Russian-Chinese initiative has been to a certain extent successful, but only in terms of political propaganda rather than practical disarmament. This is not entirely futile, especially when the official US position remained negative in military terms. But should Washington's stance shift along more constructive lines and the non-militarization of space becomes a point of practical negotiations that includes the cardinal problem of control, Russia and China could expect many surprises and complications on the way.

Historical precedent is set here by the experience of United Nations debates on general and complete nuclear disarmament, which transformed in the 1960s into negotiations on specific ABM systems and strategic ballistic missiles within the frameworks of SALT-I. It is instructive to recall here that when the US secretary of defense of the time, R. McNamara, after two decades of heated polemics at all international forums proposed to the Soviet premier A. Kosygin in Glassboro in 1967 that the sides begin the armaments limitation process and mutually renounce anti-missile defenses, he was flatly turned down. The supporting argument was that ABM was a morally-justified system for defending people against offensive nuclear arms. This was the start of a long journey through successes and failures that is far from over today, and the end of which is not yet in sight.

Defining the subject of negotiations

The experience of years of initiatives and negotiations on this issue testifies first and foremost to the fact the diplomatic and expert milieu abounds with enormous ambiguities and misinterpretations about the very subject of legal regulation. Consequently, the main and fundamental objective – defining the subject of negotiations – remains unresolved.

Experts have more or less accepted the view that space weapons and space armaments are deadly mechanisms that were created and tested for striking any target from space objects (in other words, from objects that have completed at least one full revolution along a near-Earth orbit – nothing is being said about other celestial bodies or their orbits for now), as well as deadly mechanisms that were created and tested for striking space objects (in other words, objects that have completed at least one full revolution along a near-Earth orbit). a simpler and less-strict definition of space weapons says that they are deadly mechanisms that are space objects themselves or which are meant to destroy space objects. It was this broad interpretation of ‘space-strike weapons’ that the Soviet Union used as the subject legal prohibition during the treaty negotiations of the mid-1980s, and which it used for its campaign against the US SDI program (see table 2). In other words, space armaments were defined either according to their target location or to the place of their own deployment.

Table 2. USSR Proposals on the General Prohibition of Strike Weapons (early 1970s)

Launcher location	Target location				
	Space Object	Object in Space	Ground-based	Air borne	Sea-based
Space object	Space-Based anti-satellite system	Space-based ABM	Space-to-Earth space-strike weapons	Space-to-Air space-strike weapons	Space-sea space-strike weapons
Object in space	Sub-orbital anti-satellite system	X-ray Laser ABM	Fractional Orbital missiles	?	?
Ground-based object	Anti-satellite system	Ground-based ABM	Inter-continental BM	Anti-aircraft defense	Anti-ship and anti-submarine weapons
Airborne object	An anti-satellite complex based on an F-15 aircraft and carrying 'air-space' SRAM-Altair Rockets	Airborne ABM	Heavy bombers	Anti-Aircraft defense	Anti-ship And anti-submarine weapons
Sea-based object	The Aegis-Standard Multifunction national information and navigation system	Sea-based ABM	SLBM, SLCM	Anti-aircraft defense	Anti-ship and anti-submarine weapons

A vital nuance here rests in the clearly-defined distinction between the terms 'space object' and 'object in space'. The latter presumes any object that has been either placed in space or which travels through space, but which does not complete a single full revolution along a near-Earth orbit. Had this distinction not been made, then space weapons could have also included all IRBM, ICBM and all ABM systems with an interception range of more than 100 kilometers, which were created by many governments a long time ago and which remain the subject of other negotiations, treaties and proposed arrangements. However, even this consensus does not alleviate perceptibly the problem's solution.

The problem is that ballistic missiles, anti-ballistic missiles and satellites share a wide range of mutual velocities and orbital altitudes (the so-called 'grey area'). For this reason, the technical specifications of strike systems and the various-weapon deployment systems, first and foremost, ABM and ASAT strike systems as well as ABM, ASAT and missile warning systems (MWS) may both have a dual capability and use.

A striking example of just how vague these distinctions are is provided by the so-called fractional orbital missile (FOM). This system was created by the USSR on the technological basis of heavy ICBMs, which were meant to strike against the USA from southern directional headings. The US targets were covered by radar missile warning systems that pointed at the missile-threat directions from the North, West and East. This ICBM was meant to avoid the usual ballistic trajectory by using a near-Earth orbit to make an incomplete revolution along the Antarctic Circle before descending from orbit and striking the territory of the USA. This system was banned by the 1991 START (Art. V, p.18). From the logistic point of view, not being intended to make a full revolution around the Earth, a FOM is neither a space weapon nor becomes one upon its entry into orbit. In this sense, it is comparable to any other ICBM or SLBM. But technically, nothing prevents this missile from completing a full revolution upon its launch, or even making several such revolutions, before descending from orbit and striking its target. In this version, the very same system will start behaving like a space object and be considered a space weapon.

In other words, two different classes of weapons – a strategic missile and a space-to-Earth class space-strike weapon – are distinguished not by some technical differences, but by only an extra half-

hour spent in a near-Earth orbit. Although FOMs are banned by the 1991 START, the latter expired in December 2009. In addition, this treaty only banned nuclear weapon-carrying FOMs (or those carrying other WMD), but not the ones carrying conventional warheads. For this reason, such a system could theoretically be created and tested along an incomplete revolution around the Earth while at the same time not falling under the 1991 START – or under any other existing definitions of space weapons, including those used in the joint Russian-Chinese draft of 2008.

A similar situation is occurring to the US Falcon system – a design-stage space bomber that reaches orbit before descending to hit its surface targets. For now, this project is raising serious technical and financial doubts. But if they are resolved and the system begins to undergo tests, making partial circuits around the Earth, it too would not fall under any of the current definitions of space weapons and, accordingly, not be the subject of treaties.

There is another special paradox inherent in space weapons. It rests in the fact that some of them were created in the past and have since been either mothballed or unilaterally eliminated, while others are still at the fairly early stage of technical development. On the one hand, this brings hope that the new weapons will be banned before they are tested, developed and put into commission status, which would create tremendous difficulties in both strategic terms (due to their variety, asymmetrical nature and difference of the roles they play in various nations' policies) and in terms of control (which will be discussed in further detail below). On the other hand, it is also this initial stage of military technical development that impairs the definition of the subject of negotiations, prohibition or limitation. In essence, our current definitions of space weapons are framed in terms of their deployment environment (space) and (or) the environment of their targets (space), and not by their specific technical characteristics. By analogy, one can well imagine the difficulty of implementing disarmament measures if their subject matter was designated as, say, 'any sea-based or sea target weapon'.

Previous successes in disarmament negotiations have always been built upon a set of concretely established (or mutually assumed) technical characteristics and definitions of these systems' classes and types. For example, the highest achievement of strategic arms reduction and limitation – START, which was signed in 1991 – defines one of the main subjects of agreement as follows: 'for the purpose of

counting a deployed ICBM and its associated launcher, a silo launcher of ICBMs shall be considered to contain a deployed ICBM when excavation for that launcher has been completed and the pouring of concrete for the silo has been completed, or 12 months after the excavation begins, whichever occurs earlier, and a mobile launcher of ICBMs shall be considered to contain a deployed ICBM when it arrives at a maintenance facility ... or when it leaves an ICBM loading facility' (Art. III, p. 6, d).

And another document of historical importance – the Treaty on Conventional Armed Forces in Europe (CFE Treaty), which was signed in 1990 – defines one of the most important subjects of agreement, the battle tank, as: 'a self-propelled armored fighting vehicle, capable of heavy firepower, primarily of a high muzzle velocity direct fire main gun necessary to engage armored and other targets, with high cross-country mobility, with a high level of self-protection... Battle tanks are tracked armored fighting vehicles which weigh at least 16.5 metric tons unladen weight and which are armored with a 360-degree traverse gun of at least 75 millimeters caliber. In addition, any wheeled armored fighting vehicles entering into service which meet all the other criteria stated above shall also be deemed battle tanks' (Art. II, p.1, c.).

Nothing similar exists for space weapons for reasons that include objective ones.

Quite clearly, the 2008 Russian-Chinese draft does contain a stricter interpretation of the term space weapons: it does not include ground-based (as well as sea-based and airborne) systems, but covers only space-based systems – first and foremost, satellite ones. On the one hand, this simplifies matters by sidestepping the complicated issue of their differentiation from existing ABM systems (both strategic and theater ABM systems). But, on the other, this definition ignores the Earth-to-space class anti-satellite systems that have already been created and tested by the USSR and the USA, and pays no heed to what will soon become the most attractive – from the military standpoint – anti-satellite systems that are now being developed by the USA, the PRC, and, potentially, Russia and other nations (see Table 3).

It appears that in the foreseeable future, these particular systems will pose the greatest danger to satellites in high orbits of up to 1000 km and above.

A substantial part of the various-use satellites and manned craft are either being deployed or will soon be deployed in these orbits, with their list including electronic intelligence, communications, weather and

Table 3. The 2008 Russian-Chinese Draft

Launcher Location	Target Location				
	Space Object	Object in Space	Ground-based	Air-borne	Sea-based
Space object	Space-based anti-satellite system	Space-based ABM	Space-to-Earth space-strike weapons	Space-to-air space-strike weapons	Space-to-sea space-strike weapons
Object in space	Sub-orbital anti-satellite system	X-ray laser ABM	Fractional orbital missiles	?	?
Ground-based object	Anti-Satellite system	Ground-based ABM	ICBM	Anti-Aircraft defense	Anti-ship and anti-submarine weapons
Airborne object	An anti-Satellite complex based on an F-15 aircraft and carrying 'airspace' SRAM-Altair rockets	Air Borne ABM	Heavy bombers	Anti-Aircraft defense	Anti-ship and anti-submarine weapons
Sea-based object	The Aegis-Standard Multi function national information and navigation system	Sea-based ABM	SLBM, SLCM	Anti-Aircraft defense	Anti-ship and anti-submarine weapons

anti-missile defense (SBIR-LOW) satellites, as well as high-elliptical orbit SC whose perigees pass over the Antarctic (and which are used for communications and as part of MWS). It also appears now likely that these same high altitudes will soon provide the orbital base for anti-satellite and anti-missile defense battle platforms (if these do ever appear), as well as those belonging to the space-to-Earth class of systems.

To a lesser degree, these ASAT with intercept altitudes of up to 1000 km will also pose a threat to high-orbit satellites, including the geosynchronous and semi-geosynchronous ones used for communications, MWS and navigations (GPS, GLONASS and Galileo). However, these satellites may soon also fall victim to systems that either launch their ASAT to corresponding orbits from the ground, sea or the air, or otherwise plant themselves near their targets in advance (the so-called 'land mines'). Considering the difficulty in verifying even its second version, the 2008 draft Treaty does not appear to be a very effective mechanism. Its latest version simply leaves ASAT out of the subject matter altogether. The same also concerns potential airborne, ground- and sea-based laser systems, which should still be able to keep destroying and impairing high-orbit satellites with a fairly high degree of efficiency.

In addition to these gaps, the 2008 draft PPWOST contains many ambiguities about its definition of 'weapons in outer space'. As noted above, this document identifies these as 'any device placed in outer space, based on any physical principle, specially produced or converted to eliminate, damage or disrupt normal function of objects in outer space, on the Earth or in its air, as well as to eliminate population, components of biosphere critical to human existence or inflict damage to them'.

This leads us to the following question: what does 'specially produced or converted' mean? How and by using what characteristics will this capability be defined? Could, say, a shuttle that in addition to other missions also captures, repairs and removes satellites from orbit be subject to this agreement? Even less clear – what 'components of biosphere' and their 'elimination' and 'damage' imply. Does this, for example, refer to the ozone layer damage that is caused by every space launch? Or does this instead refer to nations that shoot down their outdated satellites or otherwise remove them from orbit and sink them in the ocean?

And just as many ambiguities surround the phrase 'to eliminate damage or disrupt the normal function of objects in outer space'. The

normal function of objects can be disrupted in many different ways, depending on their environment and actual system characteristics. Spacecraft may be simply destroyed using conventional (explosive), kinetic (direct contact), nuclear or laser weapons. But for interference, this would either require sources of ECM (electronic counter-measure) equipment, or laser, particle-beam, X-ray and super-high-frequency weapons.

Nations do not deliberately create interference for the normal function of other states' SC in times of peace. And in times of war, one could hardly expect the observance of a ban on interference with systems such as GLONASS, NAVSTAR and Galileo, which served as the main support systems for the enemies' high-precision weapons. Neither could one expect nations that are at war refraining from efforts to disrupt the performance of other supporting space systems, as well. These efforts would likely focus not only on military, dual-purpose and commercial space systems, but also on the space-based data accumulation and replay (retransmission) centers, as well as the land-based flight control centers. Neither does the phrase 'interference with the normal function' explain if this also refers to the laser and radar illumination of satellites, which is done for identification purposes from either the ground or space.

The mutual interests of preventing the uncontrolled escalation of conflict make it likely that there could theoretically be an agreement on nations not to attack each other's MWS satellites, but this agreement would be limited to these systems alone (and are similar to some nations' already-existing agreements not to strike against each other's nuclear power stations).

However, the actual prohibition of the development of these systems is still extremely hard to agree, even if it were justified by the motive of hindering their development and use by other nations. This is especially the case because many of them are, as a rule, multipurpose, and their development, testing, deployment and use are not restricted by any international treaties or agreements. These, for example, include laser, kinetic, electromagnetic, particle-beam and other weapons of this type.

The prohibition of weapons systems that are based on energy beaming technologies – first and foremost, lasers – is especially difficult. These systems are not only capable of striking against aircraft, satellites, ballistic missiles and their components while they are in flight, but also of discovering, probing and identifying objects on

Earth, under water and in outer space, targeting other weapons systems, and, in the future, quickly transmitting vast quantities of information – in other words, communications. Theoretically, the effectiveness of lasers could be curbed (thus distinguishing laser-based weapons systems from supporting systems) by using the beam-output-power to cross-section-area correlation which is an indicator integrating the laser's energy and the area of its mirror reflection.

But this restriction would also be extremely difficult to agree to: lasers come in many variations (due to the diversity of laser excitation methods) and pass through environments whose properties diverge (outer space, the atmosphere). For example, a laser that lacks a destructive potential in the dense atmosphere may become an effective means of striking far-removed satellites in outer space. It would also be capable of hitting ballistic missiles as they enter the boost phase upon leaving the atmosphere, although this would have to be done over closer distances. It would also be capable of striking missile warheads at close range.

The effectiveness of a space-based laser's anti-satellite capabilities depends on its distance from the target. However, since both battle platforms and their potential targets not only move along orbits but can also change them, such weapons' performance restrictions are extremely difficult to translate into limitations of actual combat capabilities. This is their other distinction from, say, the practice of introducing limitations on nuclear arms, whose technical characteristics closely determine their range of action and make their distinction – between strategic systems and intermediate-range and tactical nuclear weapons – easier for the purpose of defining the subjects of various agreements on the non-deployment of nuclear weapons abroad (thus, ICBM were assigned a distance of above 5500 km, IRBM – from 1000 to 5500 km, tactical missiles – from 500 to 1000 km, SLBM and air- and sea-launched cruise missiles – above 600 km, and so on).

But the development, testing and use of weapons and weapons systems – as well as the ability to disrupt the function of ground control and communications objects – are nearly impossible to ban. After all, this could be accomplished by almost any tactical or nuclear offensive weapon system, electronic warfare technology, or system based on new physical principles.

In the mean time, many of the systems that are intended for other purposes may also have additional possibilities of striking against

space objects: these include various-class offensive ballistic missiles, fractional orbit ballistic missiles, and manned spacecraft.

The most complicated overlapping of this type is created by strategic ABM systems of any deployment that carry an imminent anti-satellite potential at orbital latitudes of up to about 1000 km. Besides intercepting missiles in their early boost phases and final reentry trajectories, ABM systems target pass through the very same environment as the orbits of most SC with apogees of up to 1000 km. These satellites move somewhat faster than the final-stage missiles and their warheads (around 8 and 5–7 km/s, respectively), but they do represent easier intercept targets in other respects.

As a rule, SC are not only larger than the missiles and warheads, but also represent very delicate forms of equipment (this is especially true of solar batteries, communications antennae and optoelectronic sensors). And most importantly, satellites travel along predictable orbits that may be traced at length, thus greatly simplifying their targeting. The satellite's point of interception may be programmed many days or even weeks in advance, while the impact-point times of ballistic missiles range between seven and 30 minutes, depending on their class, type and trajectory configuration. And finally, unlike ballistic missiles, SC are neither multiple-target packages nor combined with dummy targets and other means of ABM penetration.

There are, in fact, various ways for improving these space systems' survivability: the protection of both spacecraft and ground centers against the effects of different physical properties can be raised through operational and engineering measures, the duplication of the most important SC, the deployment in orbit of 'dormant' reserve satellites, the preparation of delivery vehicles and satellites that can quickly replace decommissioned craft, and so on. However, such measures often require considerable outlays of resources and time.

Particularities of arms control in outer space

Control over the observance of agreements is a fundamental and indispensable condition of practical disarmament, rather than that engaged in for political and propaganda ends. Historically, treaties such as the 1972 SALT were only reached through the creation of national technical means of verification (NTMV). But at the same time, the compulsory nature of technical means of verification must also not be

seen as a cure-all. As mutual trust and progress toward more radical disarmament measures grew, NTMV began to be complemented with transparency, confidence-building and assistance measures, as well as on-site inspections (including the dismantling of missile fairings and the counting of warheads), continuous site monitoring and other measures. Treaties such as the 1990 CFE Treaty, the 1992 CWC, and the 1991 START and the 1996 CTBT were unprecedented in this respect. The reverse is true as well. The 2002 SORT, for example, is not being implemented in full because it lacks both the systems of verification and the rules for counting the subjects of limitation (nuclear warheads).

The achievement of dialectical progress in space weapons' disarmament and control is also within reach. However, it would be naïve to expect breakthroughs at the first attempt. This is compounded by the novelty and particularity of the subject of negotiations. In most of the previous and existing disarmament treaties, the center of gravity of control rests on the system's deployment stage and its place in the combat system (as is the case with the ABM Treaty, SALT I, START, the INF Treaty, the CFE Treaty, and the CWC). The 1967 Outer Space Treaty also refers to this stage (in terms of the non-deployment of WMD), but is not provided with any control measures. These disarmament treaties' control measures also cover the weapons systems' testing stages, but to a much smaller degree (they do not cover those of the CFE Treaty at all). The only exclusions to this case are the 1991 START, whose missiles tests are strictly controlled (and include the prohibition of telemetric encryption), and the CTBT which completely applies to tests. As for the creation stage – in other words, the period between the start of the weapons system's development and its testing stage – it remains untouched by all the treaties except for the CWC and the BTWC, although the latter convention was never provided with a system of control. The ABM Treaty does ban the 'creation' of several ABM systems, but the parties never were able to agree on what this term meant – something that was especially-sharply pronounced during the USSR-USA debates, and within the USA itself, following the early-1980s announcement of the SDI program.

But the prohibition or restriction of space weapons at their deployment stage or its place in the combat system is especially difficult for space weapons, especially if this concerns their deployment in outer space as is the case with the 2008 draft PPWOST. It would be extremely difficult to use NTMV to identify the banned armed sat-

ellites from among the 700 or so SC that currently travel in various orbits. And it is even more difficult to prove their accessory to the subject matter without their inspection in space or return to Earth (and this is provided that the treaty actually defines the banned systems' technical characteristics instead of simply referring to their deployment environments and target locations).

This also concerns the prospects of using mini-satellites to stage SC inspections at all orbits. Such on-site space inspections – or the satellites' return to Earth – are often technically impossible, dangerous and, most likely, unacceptable to nations because of the classified nature of their military and space programs. In addition, the creation of such systems and means of control may, in and of itself, be viewed as either a type of anti-satellite weapons or a type of military operation.

Military and commercial secrecy considerations also make it unlikely that nations could, in any foreseeable future, introduce controls over each other's launch sites. By the way, this issue was in fact addressed in the late 1980s when the USSR-USA space weapons negotiations touched upon the prohibition of satellite ABM systems. But it was recognized at the time that such methods of on-site controls were too intrusive and – for technical reason – difficult to implement in practice (since this would require opening the working load containers and identifying the cargo prior to its placement on the launch vehicle). With time, as disarmament measures become more radical and nations step back from their military confrontation, such pre-launch inspection methods will become a possible means of implementing space non-armament controls. But they appear unrealistic for now – particularly in respect of the 2008 Russian-Chinese draft.

Neither is the picture clear in respect to ground-, air- and sea-based space weapons, whose emergence appears most likely in the foreseeable future (but is not addressed by the Russian-Chinese draft). It would not actually be all that difficult to either prohibit or limit such systems which were deployed by the Soviet Union in the 1970s and 1980s (and whose missile was experimentally tested by China in 2007). All this would require an agreement on their technical characteristics and deployment locations with the methodology borrowed from the INF Treaty and START.

However, these controls would be extremely difficult to implement for aerial systems such as the 'F-15 SRAM-Altair' which the USA deployed by the 1980s or the Soviet ASAT pilot project which was intended for deployment on the 'MiG-31' interceptor jet. This is

the case because both jets are dual-use and broadly applied by both nations' air forces. These systems' interceptor missiles are also small enough to make them suitable for almost any AF airfield storage site. And of course, these ASAT have special systems of navigation and control, although their prohibition would require intrusions into the ground infrastructure of the space complex and is therefore unrealistic. The numerical limitation of such systems is within closer reach. But this would require broad transparency, agreement on the functional distinctions of the various aircraft and missiles, measures that promote controls and permit individual ASAT deployment sites, as well as, perhaps, the adoption of the right to stage short-notice on-site inspections of other nations' suspicious AF bases.

The extreme difficulty of prohibiting and restricting the deployment of airborne laser systems and sea-based missile systems that are currently being developed and improved (such as the Standard-3 missile, whose 2008 cruiser launch allowed the USA to shoot down one of its outdated satellites) rests within the range of technical characteristics and dual capabilities available to these anti-missile and anti-satellite weapons and systems (see Table 4).

Table 4. Ability to control space weapons at various stages of their life cycles

Type of armament	Research activities	Tests with destruction of target	Tests without destruction of target	Deployment in commission status
Impact systems:				
Space object	1	3	1	1
Object in space	1	3	2	3
Ground-Based	1	3	2	3
Airborne object	1	3	2	2
Sea-based	1	3	2	2
Directed-energy weapon	1	3	1	1

Note: 1 – impossibility of control; 2 – limited controllability; 3 – sufficient controllability.

Thus, the principal distinction of space weapons – especially those based in orbit – from all the other types of armaments that have been the subjects of disarmament agreements until now, rests on the fact that they are extremely difficult (if not impossible) to either prohibit or restrict once they are deployed in the commission status of nations' corresponding services and branches of the armed forces. This is explained both by the difficulty of their control and the divergence of their characteristics and their potential purposes and uses. At the same time, the fact that space weapons have these very specific points of deployment and target locations also helps to substantially limit their development through the restriction of full-scale tests.

Prospects for limiting and prohibiting space arms

The absence of good will – with this first and foremost applying to the USA – the most advanced of all the space powers – has until now prevented nations from even approaching the practical negotiation of this problem. This same state of affairs also frustrated all proposals on the non-militarization and non-armament of space to come off sounding like political and propagandist demarches rather than real disarmament initiatives. This is also largely true of the 2008 Russian-Chinese draft PPWOST.

However, should the US position change and good will prevail among other states; such negotiations could become a practical goal of nations seeking to revive the entire disarmament system and process. If the Obama Administration begins to conduct either a comprehensive or partial review of the U. S. military space policy, then a 'window of opportunity' could open to practical negotiations on these points. And in that case, considering the past experience and previously-posed initiatives, nations will have to take a completely new approach to the subject, format and methods of legally regulating today's and potential space powers' strategic relations in this field.

It would be advisable for nations to address the subject of negotiations by withdrawing (at least in the initial stage) from the positions that the USSR held in the 1980s, and the proposal that Russia and China recently made in Geneva. Specifically, nations should narrow their subject of negotiations and stop trying to institute – as they had done for 20 years – the sweeping prohibition of all Earth-to-space,

space-to-Earth and space-to-space class systems, whose technical properties are as unclear as the agreements' verification potentials.

Noble calls for the prevention of space militarization can hardly serve as the basis of future talks. It is worth recalling that the practical basis of strategic disarmament treaties rested not on the peaceful aspirations of powers, but on the balance of the sides' asymmetrical military interests. SALT-I only became possible because the USA was interested in putting a halt to the buildup of Soviet ballistic missiles, and the USSR – in the limitation of ABM systems. SALT-II rested on the U. S. interest to limit Soviet multiple-warhead missile and the Soviet drive to restrict US cruise missiles. The 1991 START embodied a compromise between the reduction of heavy ICBMs and the limitation of mobile land-based Soviet missiles on the one hand, and the reduction and limitation of the superior US strategic sea-based and airborne forces, on the other.

By the same logic, an obvious balance of the parties' practical interests in outer space could rest between the prohibition or strict restriction of anti-satellite systems, and the foregoing of developing ABM space systems that are based on space-based strike systems (in other words, interceptors). The former is expedient to the USA, and the latter – to Russia and the PRC. This treaty format could thus use the technological overlap between ABM and ASAT, which complicates the prohibition of one without the prohibition of the other, to promote measures that either limit or prohibit them as one (see Table 5).

An enormous role in the success of the practical negotiations will be played by the nations' ability to clearly agree on the subject of their agreements, and to develop realistic and reliable measures of transparency and control. The consequence is that the parties properly select their sequence of stages and format of the negotiating process. After all, the most advanced and 'tangible' – in the technical sense – systems before us today are the anti-satellite defenses. Space-based ABM systems, meanwhile, are the subject of a more distant agreement (which rests 10 or 15 years away) whose prospects remain quite vague today. This especially concerns the space-to-Earth class systems. It will hardly be possible to agree on everything in one package considering the nations' different interpretations of the individual subjects of negotiations. In this respect, it would make sense for Moscow and Washington to keep in mind the historical experience of how the USSR and the USA engaged in such dialogue in the 1970s and 1980s, and to consider various initiatives being put forward by independent experts from different countries.

Table 5. The Reduction and Prohibition of Anti-Satellite and Space-Based ABM Systems

Launcher Location	Target Location				
	Space Object	Object in Space	Ground-based	Air borne	Sea-based
Space object	Space-based anti-satellite system	Space-based ABM system	Space-to-Earth space-strike weapons	Space-to-air space-strike weapons	Space-to-sea space-strike weapons
Object in space	Sub-orbital anti-satellite system	X-ray Laser ABM	Fractional orbital missiles	?	?
Ground-based object	Anti-satellite system	Ground-based ABM	ICBM	Anti-Aircraft defense	Anti-ship and anti-submarine weapons
Airborne object	An anti-satellite complex based on an F-15 aircraft and carrying 'air-space' SRAM-Altair rockets	Air borne ABM	Heavy bombers	Anti-Aircraft defense	Anti-ship and anti-submarine weapons
Sea-based object	The Aegis-Standard Multifunctional information and navigation system	Sea-based ABM	SLBM, SLCM	Anti-Aircraft defense	Anti-ship and anti-submarine weapons

The preferred objective, of course, is it to prohibit the deployment of all ASAT regardless of their base. But this is elusive and hard to achieve. As noted above, the prohibition of ASAT cannot be controlled in outer space through realistically-accessible methods, while on Earth; this experimental class of systems probably belongs only to China (which may explain why the 2008 joint Russian-Chinese draft referred only to space systems and nothing else). Russia and the USA have either been mothball or withdrawn their old systems, while new ones are either under development or have a dual use (such as the US GBI and Aegis-Standard destroyers).

Instead of prohibiting their deployment, the parties could indirectly achieve this objective by initially agreeing to ban the testing of anti-satellite and space-strike ABM systems. This ban would focus on tests involving the actual destruction of either target satellites or ballistic missiles and their components during flight – the types of tests that the USSR conducted between the 1960 and the 1980s and which the USA joined in 1980, and China in 2007. The verification of this agreement could rest on the parties' NTMV – preferably, in conjunction with measures of mutual assistance and well-defined transparency. For example, the nations should confirm and expand the existing format of notifying others about all missile launches, including those conducted in outer space, and further including all actions or experiments with a destructive effect on space objects.

The elimination of outdated satellites that threaten to fall to Earth should be conducted under the supervision of the other party (parties) with the presentation of information that removes all suspicions of secret ASAT experiments of the type the USA held in 2008. Peaceful satellite docking operations should be regulated according to their approach speeds, and conducted after the notification and under the supervision of the other party (parties).

An initial treaty could be limited in duration to perhaps 10 years, with its potential expansion. This would be shorter than the expected time for the initial emergence of technically-feasible systems of space-based ABM. As any other such treaty, it would also contain a provision on the party's right to withdraw from the treaty should an extraordinary event jeopardizes 'supreme interests» of the country. Russia (and the PRC, if it joins) could issue a unilateral statement notifying that the creation by the USA of either a space-based or a space-to-Earth class ABM system would constitute one such extraordinary event. If exercised in a controlled manner, this would provide an added deterrent to the USA considering its interest in introducing the utmost limitation of ASAT.

This treaty format could initially include the USA, Russia and, preferably, the PRC. It would also provide for the future potential membership of any other powers. The control and resolution of disputes should be conducted through a specially-created permanent joint commission (that could be potentially associated with the Joint Missile Exchange Center).

The advantages of such a treaty include:

- the prevention of the creation and improvement of the most advanced class of space arms – anti-satellite weapons, regardless of their physical principles and deployment locations;
- the relatively simplicity of verification with the emphasis put on NTMV in conjunction with minimal measures of transparency and assistance;
- the inhibition of space-based ABM systems' development of their strike components;
- the prevention of experiments that result in 'space debris' that threaten the SC of all nations;
- the early inclusion of the PRC (and, thereafter, other powers) in the new stage of the strategic weapons limitation process;
- the inhibition of the 'peripheral' development of ABM systems that are capable of striking the most important MWS, navigation, communication and monitoring satellites.

At the same time, the proposed treaty is not without shortcomings, some fairly substantial ones.

These, in part, include:

- the capability to conduct the indirect testing and deployment of anti-satellite systems, which occurs during the testing and deployment of other, non-space ABM systems;
- the capability to preserve (without target tests) the nation's anti-satellite potential, which would be based on ICBMs, SLBMs, fractional orbit missiles and IRBMs (for China), and have the guaranteed ability to destroy satellites with nuclear detonations (which put out of action all SC stationed within the engagement zone including the nation's own);
- the capability to secretly deploy 'space mines' in times of peace or a prewar period, with these having first been placed in geostationary orbits without their prior testing or guaranteed ability to destroy the satellites;
- the capability to secretly rehearse low-intensity anti-satellite operations by using manned and unmanned SC to approach, capture and remove spacecraft that have outspent their service time or which require repairs;

- the capability to secretly test directed-energy weapons (laser, particle-beam) and electronic warfare capabilities that aim to disrupt satellite operations without physically destroying them;
- the capability to create space-to-Earth class space-strike weapons, including those based on fractional orbit missiles, shuttle spacecraft and other still-hypothetical technologies and operational ideas;
- the incapability to engage in the purposeful creation of anti-satellite capabilities that provide for an asymmetrical response to the development of new systems and means of conducting conventional operations – including ones that rely on long-range, high-precision weapons which are backed by space information systems;
- the incapability to directly counteract hypothetical space-to-Earth class systems, should such ever appear.

Recognizing these problems, it should simultaneously be underscored that the proposed option's advantages seem to outweigh its shortcomings. Furthermore, as a practical first step in preventing the militarization of space, this option appears to be relatively more effective from the standpoints of its mutual strategic acceptability to the parties and its grasp of the technical military parameters of the both the subject matter and its verifiability and enforcement.

For both political reason tied to the military and by virtue of objective technical and physical circumstances (including space being a special arena), the proposed arrangement could be partial and selective, if required. The same was true, by the way, of the 1972 Interim SALT-I agreement and the 1979 SALT-II. However, had they failed to pass through those natural stages of disarmament, the parties would have never reached the unprecedented across-the-board reductions, restrictions and transparency measures that the 1991 START implemented 20 years ago. If the first, even if small, step is made toward the non-armament of space – which would include the verifiable prohibition of any ASAT testing – it could be followed by other broader and more intrusive verification measures, as was the case with the limitation of strategic nuclear arms.

Just like space-based ABM systems, a nation's capability to indirectly develop its anti-satellite potential through allied military technologies will not provide it with the confidence in its abilities it needs in case of a real armed conflict. This even more so, if it is not a demonstrative act but a fast and coordinated strike on the enemy's entire orbital constellation – with the cardinal and irreparable degradation of the enemy's overall military potential at stake. The very same is true

of ABM system intercepts of ballistic missiles, which are being rehearsed without the orbital deployment or testing of battle platforms – such tests will not inspire a nation with confidence in its ability to destroy multiple missiles and warheads in their flight trajectories.

Without full-scale testing, responsible powers will hardly take the step of deploying such expensive and pivotal, in terms of military planning, weapons systems. Besides, asymmetrical countermeasures can be provided by other means and methods apart the future space-based ABM systems under discussion here.

The change of the US Administration in 2009 and the deepening global financial and economic crisis are making the prospects of an expensive and intricately complex strategic ABM system – especially in its space-based version – doubtful. This is especially true in regards to space-to-Earth class systems.

The issue of anti-satellite systems being used to help deflect a so-called aerospace attack is also rather complex. The very threat in relation to Russia and the proposed means to combat it both appear somewhat far-fetched⁸. In any case, there are other ways of limiting these threats: it can be achieved through legal agreements or countermeasures that avoid nations from getting dragged into an anti-satellite arms race whose outcome is uncertain and whose expense is great.

Nations could rely on other military means of counteraction, on other disarmament treaties and efforts to alter the powers' military and political relations as a whole (including a decision by NATO not to expand further east). As for strike systems from the space-to-Earth class, these belong to a more distant future whose prospects and characteristics are still unclear and whose negotiated prohibition can afford to be delayed.

Finally, the main argument for the proposed treaty is the question whether there is any realistic alternative to preventing ASAT and space-based ABM through the prohibition of their full-scale testing. It appears that this alternative could not be implemented by the USSR and is unlikely to succeed in the 2008 Russian-Chinese draft, which can be seen as a gesture of good will. The alternative means no legal restriction of space armament and this environment becoming an arena of military rivalry and potential armed conflicts.

⁸ Dvorkin, V., *op. cit.* p. 4.

3. THE NON-PROLIFERATION REQUIREMENTS: ENFORCEMENT CHALLENGES

Alexandre KALIADINE

The proliferation of nuclear weapons and of potentially dangerous nuclear technologies, equipment and materials has posed a grave challenge to the security of the global community. According to the World Nuclear Association (WNA), in two decade's time 25 additional states will be able to produce weapon-grade plutonium and enriched plutonium and have the know-how to make nuclear weapons¹. At the same time the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)² and the international legal regime based on this treaty are under stress.

Several factors have increased the risks of proliferation: the globalization of destabilizing international processes, the expanding

¹ According to the World Nuclear Association (WNA), the present total of 436 nuclear power reactors in the world (operating in 30 states plus Taiwan) is expected to grow to as many as 800 by 2030. 25 countries, which do not currently have nuclear power reactors, are either considering or have already decided to make nuclear energy part of their power generation capacity (some of them are situated in zones of domestic and regional instability). The biggest proliferation risk in the expansion of nuclear energy is the expansion of sensitive nuclear technologies – principally enrichment or reprocessing – to non-nuclear-weapon states (NNWS). As a result a great deal more fissile material will become potentially available for destructive purposes. To ensure properly management of rapid expansion in civil nuclear energy represents a big challenge. See: International Commission on Nuclear Non-proliferation and Disarmament Report, *'Eliminating Nuclear Weapons: a Practical Agenda for Global Policy Makers'*, Canberra/Tokyo, November 2009, p. 48. Further on: *'Eliminating Nuclear Threats...'*.

² The NPT concluded in 1968, in force since 1970. Now has 190 members assuming that North Korea's purported withdrawal in 2003 is not accepted at face value. The Treaty has served as a cornerstone of the global non-proliferation regime and of the process of international nuclear disarmament.

demand for nuclear power, including the expansion of nuclear power production facilities in volatile, conflict-prone regions of the world; negative impact of the world economic and financial crisis on international politics.

World's most volatile regions largely coincide with the proliferation-risk zones.

Issues of compliance with non-proliferation requirements have risen to the level of threats to international peace and security in the Middle East and the North-East Asia.

The world community has been confronted with grave breaches of non-proliferation obligations and attempts to use the NPT membership as a political cover for illegitimate nuclear programs and easier access to dual-purpose technologies, materials and weapons of mass destruction (WMD).

Furthermore, 'traditional' challenges are being complemented by the new ones: black market supply networks, smuggling of dangerous nuclear materials and trafficking in enrichment and reprocessing technology; the likelihood of weapons and materials falling into the hands of terrorist groups.

The NPT itself has no executive machinery to determine compliance with the treaty. This function is entrusted to the IAEA Board of Governors, through the Agency's conclusions regarding compliance with safeguards agreements.

Non-compliance incidents are to be reported to the IAEA Board of Governors, which is empowered to undertake findings of non-compliance in relation to the IAEA safeguards agreements and make compliance determination. The Board is required to report the non-compliance, affecting international peace and security, to the UN Security Council, which may then take any action it deems appropriate³.

³ The IAEA Board of Governors consists of 35 states and meets five times a year. It is empowered by its Statute to refer breaches of safeguards agreements involving diversion of nuclear materials and questions of peace and security to the UNSC. Non-proliferation verification is the primary task of the IAEA safeguards. Under the NPT, the IAEA is responsible to provide timely warning of diversion of nuclear fissile materials and, thus, of weaponization activities. Agency's conclusions regarding non-compliance with the safeguards agreements under the NPT amount to a finding that the state is in violation of Art. III of the Treaty and, possibly, also of its Art. II on the non-acquisition of nuclear explosive devices.

The inadequacy of the non-proliferation enforcement arrangements became apparent in recent years. In 2008–2009 several countries were investigated for non-compliance with their safeguards or NPT obligations. The nuclear programs of Iran and North Korea have been subjected to UN sanctions for violations of their non-proliferation obligations.

The UN record of antiproliferation sanctions to date has highlighted the need to make more effective compliance and enforcement provisions of the current non-proliferation regime and to strengthen the associated institutional machinery.

The NPT parties, both nuclear-weapon states (NWS) and overwhelming majority of non-nuclear-weapon states (NNWS) faithfully observe their non-proliferation obligations. They do not express any wish to withdraw from this treaty and are committed to its unconditional implementation by all the parties. The summaries from of the third session of the Preparatory Committee of the 2010 NPT Review Conference, held in May 2009 in Geneva, have indicated that movement toward strengthening the global non-proliferation regime, including improved safeguards, verification, compliance and enforcement measures, enjoy broad international support. The Preparatory Committee has laid some useful groundwork for the 2010 NPT Review Conference. It should be noted that the previous NPT Review conferences failed to make significant contributions to the non-proliferation enforcement processes.

The UN Security Council's prerogatives to enforce compliance

Possessing broad authorities the UN Security Council is well positioned to act expeditiously and convincingly to prevent proliferation.

Under Art. 39 of the UN Charter, the Council is authorized to determine the existence of any threat to the peace, breach of the peace, or act of aggression and decide what measures shall be taken to maintain or restore international peace and security.

Chapter VII of the UN Charter 'Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression' provides for a lucid system of enforcement measures to ensure the maintenance of international peace and security.

The authority and responsibility in adopting such measures within the UN framework are concentrated in the Security Council.

Member states conferred on this body primary responsibility for maintaining international peace and security and empowered it to take necessary enforcement measures⁴. In Art. 25 of the UN Charter they agreed to carry out decisions of the Council.

Acting on behalf of all the member states, the Council may decide on a wide range of coercive measures involving economical, financial and political actions (Art. 41⁵) as well as the use of force (Art. 42⁶).

The Council is authorized to take action 'as it deems necessary' to address the threats posed by the spread of nuclear and other WMD, including the situations of non-compliance with non-proliferation requirements.

Back to 1992, the Council qualified the spread of all kinds of weapons of mass destruction as 'a threat to international peace and security' and pledged to make efforts to prevent the spread of technologies related to research into weapons of mass destruction or its development⁷.

In subsequent years the UNSC acted upon major challenges to the NPT regime. On several occasions the UNSC made non-proliferation sanctions determinations regarding states found in material non-compliance with the NPT.

A Council response has been taken under Chapter VII of the UN Charter opening the way to the authorization of coercive meas-

⁴ The Security Council's powers are set out in chapters VI, VII, VIII, and XII of the UN Charter.

⁵ Art. 41 says: 'The Security Council may decide what measures not involving the use of force are to be employed to give effect to its decisions and it may call upon the Members of the United Nations to apply such measures. Those may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio and other means of communications, and the severance of diplomatic relations'. The list of measures enumerated in Art. 41 is not exhaustive. Additional measures may be applied under this article, provided they do not involve the use of military force.

⁶ Art. 42 says 'Should the Security Council consider that measures provided in Article 41 would be inadequate, it may take such action by air, sea or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations'.

⁷ UN document. S/2350. 31 January 1992.

ures. On a number of occasions the Council has resorted to economic, financial and other sanctions to enforce compliance with basic non-proliferation requirements. Its role in addressing compliance enforcement issues increased.

A meeting of the UN Security Council on 24 September 2009, held on heads of states and government level, produced the wide-ranging consensus Resolution 1887⁸. In this resolution the Council reaffirmed that proliferation of weapons of mass destruction and their means of delivery ‘constitutes a threat to international peace and security’. The resolution articulates more stringent requirements for proof of non-proliferation and sets forth a robust non-proliferation agenda.

The focus of the resolution is on strengthening responding to the cases of non-compliance in which some states feel they can violate their non-proliferation obligations and defy the UNSC with impunity. In fact, Resolution 1887 has pointed out to additional non-proliferation commitments beyond those in the NPT which the UN Security Council assumes to enforce.

In its first operative paragraph the resolution says that ‘a situation of non-compliance with non-proliferation obligations shall be brought to the attention of the Security Council which will determine if that situation constitutes a threat to international peace and security’. It emphasizes ‘the Security Council’s primary responsibility in addressing such threats’. The Council declares its resolve to monitor closely any situation involving the proliferation of nuclear weapons and to take such measures as may be necessary to ensure the maintenance of international peace and security. In particular, in Resolution 1887 the Council demands that the parties concerned comply fully with their non-proliferation obligations under the relevant UNSC resolutions. The resolution outlines major non-proliferation measures complementing the NPT.

One may conclude from the above-mentioned review that much is left to the discretion of the UN Security Council in addressing threats to the nuclear non-proliferation regime.

Regrettably, in the NPT context its members failed to make full use of the authority available to the UNSC and to employ sufficiently strong instruments and arrangements to ensure full compliance.

⁸ The full title of the resolution: ‘Maintenance of international peace and security. Nuclear non-proliferation and nuclear disarmament’. UN document. S/RES/1887 (2009). 24 September 2009.

In this respect, the record of the implementation of the UN anti-proliferation sanctions imposed on Iran and the Democratic People's Republic of Korea (DPRK) deserves scrupulous scrutiny.

Iran's case: attempts to enforce compliance by applying targeted sanctions

Under the NPT (1970) and Safeguards Agreement with the IAEA (1974)⁹, the Islamic Republic of Iran (IRI) assumed legal obligations not to acquire nuclear weapons and place its nuclear activities under international control.

In 2002 an undeclared and extensive nuclear program in Iran going back to nearly two decades has been revealed. The IAEA inspection team determined that Iran had been conducting clandestine nuclear activities for a period of eighteen years, including various sensitive aspects of the nuclear fuel cycle in violation of its obligations under the NPT and IAEA Safeguards Agreement¹⁰. Thus, Iran had failed to comply with a number of provisions of its Safeguards agreement with the IAEA; in particular, it failed to meet its reporting requirements. These violations undermined international confidence in the exclusively peaceful nature of the Iranian nuclear program (INP).

There is evidence of foreign expertise assisting in Iran's past nuclear efforts. It came from the secret nuclear sale network of Pakistani nuclear scientist A. Q. Khan¹¹.

⁹ The Nuclear Non-Proliferation Treaty grounded in international law the mandatory obligation to apply IAEA safeguards to the non-nuclear weapon states that are party to the Treaty with respect to 'all source or special fissionable material in all peaceful nuclear activities within the territory of such state, under its jurisdiction, or carried under its control anywhere'. The IAEA safeguards are designed to verify the fulfillment of the obligations not to divert nuclear energy from peaceful uses to nuclear weapons (Art. III). Safeguards play an essential role in deterring diversion through the risk of detection, and through providing timely warning of diversion, to enable the international community to intervene.

¹⁰ Iran's undeclared nuclear sites included facilities for converting natural uranium into uranium hexafluoride (UF₆) for subsequent enrichment and other aspects of nuclear fuel cycle activities, which are not banned under the NPT. But they should have been put under IAEA safeguards.

¹¹ The Khan investigation revealed that a number of European companies defied national and international export controls and aided the Khan network.

In February 2006 the IAEA Board of Governors voted to report Iran to the UN Security Council. The document lists a number of outstanding questions with regard of the past nuclear activities of Iran, including the themes which might have a military dimension.

The IAEA Board of Governors demanded that Iran returns to the system of complete and consistent suspension of enrichment and re-processing activities subject to control by the Agency, including scientific research and design and construction work; that it reconsiders the construction of a research reactor with a heavy-water moderator; that it immediately ratifies and fully implements the IAEA Additional Protocol¹². In expectation of ratification Iran should continue to act in compliance with the provisions of the Additional Protocol and implement transparency measures (including, in part, access to persons and documents related to the acquisition of dual-purpose equipment)¹³.

Initially the UN Security Council confined itself to expressions of support of the IAEA demands. It called Iran to fulfil the decisions of the IAEA Board of Governors¹⁴.

A. Q. Khan, director of a nuclear research center in Kahute, confessed in 2004 to having transferred technology and information to Iran between 1989 and 1991. The well organized clandestine network included scientists, engineers and middlemen from Pakistan, Switzerland, Germany, Sri Lanka, and Malaysia. The dealers were engaged in proliferation activity selling nuclear weapon designs, bomb making material and know-how to North Korea, Iran, and Libya and, possibly, other nations. The network was broken, but Khan himself avoided any hush punishment and most of his foreign accomplices remain free, and there still exist gaps in the international framework of export controls.

¹² IAEA GOV/2006/15. Introduced in 1997 The NPT's Additional Protocol to the Safeguards Agreements (APSA) established wider access rights by the IAEA inspectors (at nuclear sites and anywhere in a state) to investigate questions and inconsistencies, which arise from information analysis. The APSA constitutes an essential element of the contemporary IAEA safeguards system. Of the 62 NNWS NPT parties with significant nuclear activities, 45 have the APSA in force and in addition 11 signed and one approved by the IAEA Board – a total uptake of 90 per cent of such states.

Iran signed the Additional Protocol and applied it on a 'provisional' basis from December 2003 but suspended cooperation under it since 2005. This move by the Iranian authorities heightened international suspicions that the IRI had something to hide.

¹³ IAEA GOV/2006/14.

¹⁴ The initial agreed position of the members of the UNSC regarding the Iranian nuclear program was set forth in the Statement of the UNSC Chairman of 29 March 2006 (UN document. S/PRST/2006 /15) and in UNSCR 1696 of 31 July 2006 (UN document. S/RES /1696/2006). These documents indicate that the

In view of the fact that Teheran failed to take the steps demanded of it by the IAEA, the Council moved to punitive enforcement measures.

On 23 December 2006 the UN Security Council unanimously passed a resolution providing for limitations on certain Iranian nuclear activities. Acting on Art. 41 of Chapter VII of the UN Charter, the Council ordered Iran to suspend without further delay all enrichment-related and reprocessing activities; work on all heavy water-related projects; the construction of a research reactor moderated by heavy water. The UNSC also decided that all states should take the necessary measures to prevent the supply, sale, or transfer to Iran of all items, materials, equipment and technology, which could contribute to Iran's enrichment-related, reprocessing or heavy water-related activities or to the development of nuclear weapon delivery systems¹⁵. Resolution 1737 provided also for freezing foreign funds and other financial assets of a number of Iranian entities and persons, involved in the military program¹⁶. To facilitate the implementation of Resolution 1737 the UNSC established a Committee consisting of all members of the Council (the 1737 Committee).

In two subsequent resolutions on Iran –1747 (24 March 2007)¹⁷ and 1803 (3 March 2008)¹⁸ the Security Council extended the sanction regime because Teheran refused to comply with its previous resolutions.

The new resolutions expanded the scope of restrictions on nuclear-related technology transfers to Iran to include all dual-use equipment and materials regulated by the Nuclear Suppliers Group (NSG)¹⁹.

IAEA can not make a conclusion about the absence of undeclared nuclear material. Concern is expressed in connection with the danger of proliferation posed by the Iranian nuclear program. Resolution 1696 was adopted on the basis of Art. 40 of the UN Charter which deals with provisional measures designed to prevent an aggravation of the situation. The resolution demanded that Iran should carry out measures required by the IAEA but it did not yet authorize sanctions. Iran's non-compliance with resolution 1696 was taken into consideration during subsequent consideration of enforcement measures by the Security Council.

¹⁵ UN document. S/RES 1737 (2006).

¹⁶ Sanctions are to be lifted as soon as the IAEA Board of Governors confirms the fulfillment by Iran of the requirements of the UNSC and IAEA.

¹⁷ UN document. S/RES 1747 (2007).

¹⁸ UN document. S/RES 1803 (2008).

¹⁹ The NSG plays an important role in the international exports control regimes addressing non-proliferation issues. The NSG has elaborated two lists of

Financial sanctions were extended to additional persons and entities, including front companies and contractors, believed to be 'engaged in, directly associated with or providing support for Iran's proliferation sensitive nuclear activities or for the development of nuclear weapon delivery systems'. In addition, states were authorized to carry out inspections 'at their airports and seaports' of cargo carried on aircraft and vessels owned or operated by certain Iranian companies, provided that there were 'reasonable grounds to believe' that the cargo contained goods prohibited under the sanctions resolutions.

Nevertheless, the agreed sanctions preserved their targeted and limited character. They continued to be linked to those aspects of Iran's activities that threaten the NPT regime.

The sanctions proved to be insufficient to compel the Teheran regime to take the steps demanded by the UNSC resolutions²⁰.

On 27 September 2008, following a report from the IAEA Director General, Mohammad ElBaradei, that Iran had made significant progress with its centrifuge enrichment program, the UN Security Council unanimously passed Resolution 1835 calling on Iran to 'comply fully and without delay with its obligations' set out in the earlier resolutions and meet the requirements of the IAEA Board of Governors²¹.

controlled items involving nuclear exports and export of dual-purpose goods. Under the NSG auspices the work is being carried to strengthen control over the transfer of nuclear technologies and goods in the sphere of uranium enrichment and reprocessing of irradiated nuclear fuel. It is now broadly accepted that stronger international supply rules are needed to stem the proliferation dangers of an expanded civilian nuclear energy sector, especially to new countries. The NSG membership is currently standing at 45.

²⁰ Iranian authorities profited from the weaknesses of the international sanctions regime, imposed by the UNSC on Iran and from its inconsistent implementation. The press reported cases when Tehran succeeded in sanction-busting. For example, the probe by custom officers in Great Britain identified in 2008 a number of British dealers trading illegally with Iran. They revealed sanction-busting, sales of arms, missile technology and nuclear components to Iran. See: 'British dealers supply arms to Iran', *The Observer*, 20 April 2008.

In order to forcefully implement the UN sanction regime against Iran by Russian legal and physical persons a special normative act was passed: Decree no. 682 of the President of the Russian Federation of 5 May 2008 'On the Measures for the Implementation of Resolution no. 682 of 3 March 2008'.

²¹ UN document. S/RES 1835 (2008). Unlike the four prior UNSCR on Iran, Resolution 1835 was not adopted under Chapter VII of the UN Charter.

While reaffirming its previous resolutions and the dual-track approach to the Iranian nuclear issue, the Security Council did not impose additional sanctions on Iran.

The dual-track approach combines sanctions (in order to hamper efforts to acquire a military nuclear capability) and 'positive incentives' designed to increase Teheran's interest in cooperation with the IAEA and compliance with its non-proliferation obligations²².

The UNSC members have been of one mind on the need to advance on Iran's nuclear issue through a dual-track approach to secure Iran's compliance with the non-proliferation obligations. Sanctions and the threat of them have been accepted as a vital part of this dual track strategy. However, internal differences have diluted the Council's ability to implement the agreed strategy.

It should be noted that UNSC members have somewhat differing perceptions on the implementation of the dual-track approach toward Iran.

Russia and China emphasizes diplomatic engagement with Iran and positive incentives rather than coercion and punishment although both powers do not exclude sanctions commensurate to the risks to the NPT regime.

At the same time China has closer economic ties with Iran and depends on the latter for its imports of energy resources. This factor tends to affect the Chinese stance on the INP.

Great Britain, France, Germany and other EU states generally do not deviate from the dual-track strategy but appear to be more willing to move to the pressure track.

²² A negotiating mechanism for addressing issues arising from the INP was established to engage Iran – the group 'P5 + 1' comprising five permanent members of the UNSC plus Germany. In May 2008 the Group made proposals to Iran suggesting a substantive dialogue. It offered Iran political, security and economic benefits, if Teheran agrees to comply with UN resolutions on the Iranian nuclear program and in particular to manifest restraint in the field of uranium enrichment.

Iran failed to respond to a deadline for it to agree to halt all nuclear activities in exchange for a freeze on further UN sanctions. In April 2009 the group P5 +1 announced that they would seek direct engagement with Iran to discuss its nuclear program. On 9 September the Iranian government submitted a proposal to the P5 + 1, in which it offered to hold negotiations on global nuclear disarmament. Talks between Iran and the P5 + 1 were held on 1 October 2009 in Geneva. A tentative agreement was reached to hold a second round of negotiations in October 2009. But the second round did not take place because the Iranian top leadership went back on what had been agreed and refused to engage in the discussion of its nuclear program.

The non-permanent members of the UNSC representing the non-aligned movement (Brazil, Nigeria and others) generally took a cautious stand on using sanctions as a tool to influence Iran's behavior in nuclear matters and consider 'positive incentives' as a most important instrument to secure Iran's compliance with the NPT.

The USA under the Bush Administration made an emphasis on coercive options, relying mainly on instruments of isolation and punishment in handling the Iranian nuclear challenge. Besides, under the Bush Administration US policy on the NPT compliance was subordinated to the broader aims unrelated to the nuclear non-proliferation ('the spread of democracy', 'the promotion of regime change', etc.). This policy failed.

In 2009 the new administration under President Obama reviewed the confrontational stance toward Iran and took a more positive approach to multilateral diplomacy than its predecessor. It embraced 'a dual-track approach' to Iran, including the offer of diplomatic engagement and taking part in nuclear talks. However, the military option was not abandoned altogether.

The positive shifts in the US stance have constituted a new factor facilitating the search of a diplomatic solution of the INP.

An objective assessment of the character of the Iranian nuclear program as well as of implications of the totality of individual violations by Iran of the IAEA safeguards for the global non-proliferation regime has been of key importance for determining a UN course on the Iranian nuclear challenge²³.

Judging from the IAEA documents issued in 2008–2009 one can not give a conclusive answer to the question whether Iran's nuclear ambitions are confined to the tasks related to exclusively peaceful uses of atomic energy²⁴.

Emphasizing its rights under the NPT, Iran flouted the UNSC resolutions ordering temporary limitations on its nuclear civilian activities. The Iranian authorities have not suspended works related to heavy water reactor projects²⁵ and to uranium enrichment²⁶, as required by the UNSCR.

²³ In 2007–2009 the majority of outstanding questions related to the past Iranian nuclear activities were resolved through cooperation between the IAEA and the IRI.

²⁴ IAEA GOV/2008/36, 15 September 2008; GOV/2009, 8 June 2009; GOV/2009/55, 28 August 2009; GOV/2009/74, 16 November 2009.

²⁵ The heavy water reactor (IR) being built at Arak may in future be used to produce weapon-grade plutonium

Moreover, Iran proceeded secretly with the construction of a second uranium enrichment plant 'Fordu' in the mountains near the city of Qum in defiance of several UNSC resolutions²⁷.

At the same time it should be noted that the first fuel enrichment plant (FEP) at Natanz as well as an experimental fuel enrichment facility (EFEP) are placed under the IAEA safeguards²⁸. In October 2009 the Iranian government also agreed to allow inspectors from the IAEA to visit the facility which is being built near the city of Qum. IAEA inspectors found nothing to be worried about this site.

According to the IAEA, uranium enrichment levels at FEP are up to 4.9% U-235 which correspond to the quality of uranium used in nuclear power stations²⁹. Iran does not currently possess any nuclear explosive devices. Iranian officials deny seeking to build nuclear weapons and claim that nuclear weapons have no place in the 'defense structure' of the country. Teheran has professed willing-

²⁶ On 12 August 2009, 4592 centrifuges were being fed with UF₆ (4920 in May 2009) and an additional 3716 centrifuges had been installed at the Fuel Enrichment Plant (FEP) in Natanz. See: GOV/2009/55, 28 August 2009.

The enrichment plant at Natanz operates at a fraction of its capacity. By January 2010 the number of the operating centrifuges has dropped by 20 per cent since summer 2009. It is believed that a decline is due to technical problems. See: *International Herald Tribune*, 2 January 2010.

²⁷ The plant is reportedly at a mountain site located on an Iranian military installation near the city Qum and capable of housing up to 3000 centrifuges of a new generation used to enrich uranium. Iran admitted to developing a covert uranium enrichment facility only in September 2009. Under the Subsidiary Arrangement to its Safeguards Agreement with the IAEA (2003) it should have given notice once it had decided to build the enrichment plant about three or five years ago. The facility is to go on line in 2011. The delayed declaration of the second uranium enrichment plant raised concern about other secret nuclear sites. In 2009 the IAEA did not receive from Iran clarifications about the purpose of the nuclear site near the city of Qum. It should be noted that exposure of the Qum site seriously impacted upon Iran's ability of covertly producing the HEU needed to make fuel for nuclear weapons.

²⁸ All nuclear material at FEP, as well as all installed cascades, remains under Agency conservation and surveillance, as well as all uranium in the form of UF₆ (342 t), produced at the uranium conversion facility (UCF). See: IAEA.GOV/2009/35, 8 June 2009; GOV/2009/55, 28 August 2009; GOV/2009/74, 16 November 2009.

²⁹ The enrichment level of a weapon-grade uranium amounts to 80% of U-235 or over. It is estimated that Iran has produced about 1700 kg of low enriched uranium (LEU). To make it suitable for the fissile core of a nuclear explosive device (nuclear bomb) the LEU should be enriched to a higher degree. About 1500 kg LEU would be needed to manufacture a nuclear bomb.

ness to resolve the concerns raised by the IAEA through negotiations and said that its nuclear program was designed to produce civilian energy and medical research.

Nevertheless, one can not disregard the fact that both in 2008 and 2009 the IAEA was unable to provide credible assurance about the absence of undeclared nuclear material and activities in Iran.

Intentions are changeable. Iranian plans may be reviewed especially in an environment beset with domestic political unrest, political infighting and turmoil in the streets.

The data contained in the IAEA reports point out to Iran's growing ability to redirect nuclear fissile material for non-civilian purposes and the progress in building up a nuclear technology infrastructure that can be retrofitted to manufacture a nuclear explosive device. Iran may have in future a weapon-making capability if it chooses to go down this path. But it appears that Iran has not crossed 'the red line' in actual weaponization.

Iran has refused to discontinue nuclear activities which aroused suspicions in the world community. Iran's simultaneous endeavors to build up a robust missile capability and its notable advancements in long-range ballistic missile technology have added to international concern about its nuclear ambitions. According to the IAEA, there remain a number of outstanding issues which give rise to concerns and which need to be clarified to exclude the existence of possible military dimensions to Iran's nuclear program³⁰.

It is a matter of fact that the Iranian elite includes politicians who tend to rely on the dual potential of the civil nuclear power infrastructure to ease the access to nuclear weapons and are disposed to let themselves involved in risky military adventures (threats to wipe out the state of Israel). On the other hand, one should not discard a potential restraining force of the domestic public opinion opposing the hardliners and their irresponsible policies. Polls con-

³⁰ Iran failed to resolve questions about the so-called alleged studies, a set of documents smuggled from the country that purport to show that up until 2003 the nation conducted nuclear experiments and considered bomb design consistent with illicit nuclear weapons program. Iran refused to implement arrangements with the IAEA on the early provision of design information on nuclear facilities which are being constructed. The Agency has complained that it has been unable to make a substantial progress in the investigation of possible military dimensions of the Iranian nuclear program. See: IAEA GOV/2008/36 15 September 2008; GOV/2009, 8 June 2009; GOV/2009/55, 28 August 2009; GOV/2009/55, 28 August 2009; GOV/2009/74, 16 November 2009.

ducted in the country had shown that 66 percent of Iranians would oppose the development of nuclear weapons³¹.

All this ought to be taken into account in calibrating enforcement measures contemplated by the UNSC.

The pressure track has played an important role in deterring nuclear adventurism, although specific objectives of the sanctions practiced so far have not been achieved. The Iranian authorities agreed to take the steps to resolve a number of outstanding issues relating to the Iranian past and current nuclear activities. They provided the IAEA with somewhat broader access to their nuclear facilities and sites (in Natanz, Arak and Qum) although the level of transparency of the Iranian nuclear activities remains insufficient. In August 2009 Iran and the IAEA agreed on the improvements to the containment and surveillance measures at the Natanz fuel enrichment plant. The improvements were put in place on 12 August. In August 2009 Iran provided the IAEA with access to the IR-40 heavy water reactor at Arak.

Nevertheless, Tehran seems to underestimate the negative impact of the international mistrust of certain Iranian nuclear activities on the country's reputation and security.

In 2009 the government missed the opportunity of reducing international mistrust of its nuclear ambitions by prevaricating on the IAEA scheme providing for shipping part of the Iranian low enriched uranium stocks out of the country for processing into a form that could be used in a medical nuclear reactor in Tehran³². This deal was not embraced by Iran's leadership although it was consistent with Iran's own needs and declared aspirations. The IAEA proposal enjoyed the backing of the P5+1 group.

³¹ British American Security Information Council. Iran Update. No. 117 – 24 April 2008, available at <<http://www.basicint.org/updates/iran.htm>>.

³² Under this proposal Iran was to ship about 1200 kg of its LEU enriched at its Natanz facility to Russia by the end of 2009. There it would have been enriched to a higher level (about 20%) and then converted into fuel plates in France, after which it would have been shipped back to Iran to power the Teheran research reactor which is devoted to producing radioisotopes for medical purposes. The deal would have reduced Iran's available supply of potential bomb fuel and bought time for further diplomacy. It gave a chance to defuse international mistrust over Iran's nuclear program. At the meeting with the P5+1 group, which took place in Geneva on 1 October 2009 the Iranian representatives tentatively agreed to the IAEA project but subsequently the authorities in Tehran went back on it.

Tehran's sticking to the foot-dragging tactics over the diplomatic track has not helped to dispel the widespread suspicions of the long-term nuclear goals of the Iranian leadership.

Should Iran cross the weaponization red-line, there might be efforts to get a ban on international investment in the Iranian oil and gas sectors and on financial and insurance dealings, targeting key vulnerabilities of the economy. Consideration may be given to stopping the export to the IRI of refined petroleum products. (Iran lacks facilities for producing such products).

However, any additional UN sanctions should be prepared carefully and not impair the rising reformist movement in Iran but increase the pressure on the Islamic Revolutionary Guards Corps, believed to run nuclear activities prescribed by the UNSC.

In a resolution, passed by the IAEA Board of Governors at its meeting on 27 November 2009 in Vienna (the first such resolution since February 2006), the Board notes with serious concern that Iran continues to defy the requirements and obligations contained in the relevant the IAEA Board of Governors and UN Security Council resolutions. The Board reiterated its previous demands regarding the limitations on the IRI nuclear program and urged Iran to suspend immediately the construction of its second uranium enrichment facility at Qum. The resolution urges Iran to engage with the IAEA on resolving all outstanding issues and to confirm that it has not taken a decision to construct any other nuclear facility that has not yet been declared to the IAEA.

The Board requested the IAEA Director General to send Iran's case to the UNSC³³.

In defiance of this resolution, Iran's Cabinet authorized on 29 November the construction of 10 new enrichment facilities. Iran's official news agency IRNA reported that the IRI will begin construction for five nuclear sites within two months and identify five more locations for the future. (Nuclear experts say that the new enrichment plants if attempted may not materialize for decades).

³³ IAEA GOV/2009/82. 27 November 2009. The resolution was adopted with 25 votes in favor, 6 abstentions, 3 against (Cuba, Malaysia and Venezuela) and one not voting (Azerbaijan). The resolution won the support of five permanent members of the UN Security Council. The full title of the resolution: Implementation of the NPT safeguards agreement and relevant provisions of Security Council resolutions 1737 (2006), 1747 (2007), 1803 (2008) and 1835 (2008) in the Islamic Republic of Iran.

Declarations and actions of Tehran's policy-makers in defiance of the UN Security Council and the IAEA have aggravated tensions in the region and the world at large and increased pessimism about a diplomatic solution.

The international community is yet to find better ways to engage Iran and address the proliferation dangers arising from its nuclear program and to move forward the enforcement process. A satisfactory solution lies along the lines providing for the retention of the Iranian enrichment capability, on the one hand, and a very intrusive IAEA inspection regime, which would give the international community confidence that the IRI nether has or is seeking nuclear arms.

In any case, preserving political solidarity among the UNSC members and particularly among the members of the P5+1 group and forging a more effective partnership in addressing the non-compliance challenges and full implementation of UNSCR 1737, 1747 and 1803 remain crucial for the success of the UN dual-track strategy over Iran.

Sanctions regime imposed on the DPRK

The UN Security Council was slow to respond forcefully to the violations of the NPT regime by the Democratic People's Republic of Korea (DPRK)³⁴.

In 2003 the DPRK withdrew from the Nuclear Non-Proliferation Treaty³⁵ and in 2005 it declared itself in the possession of nuclear

³⁴ As far back as 1993 the IAEA Governing Board informed the UNSC on North Korea's non-compliance with its Safeguards Agreement with the IAEA. The IAEA conclusions amounted to a finding that the DPRK was in violation of Art. III (on verification) and of Art. II of the NPT (not to seek to nuclear weapons or explosive devices). The UNSC did not take reporting violations seriously and refrained from acting on verification findings in the early stages of the DPRK's confrontation with the IAEA. In about 16 years the DPRK moved from the ownership of undeclared stocks of plutonium to the possession of nuclear explosive devices.

³⁵ Many NPT parties questioned the validity of the DPRK's withdrawal. Under Art. X of the NPT a Party may withdraw only if it 'decides that extraordinary events, related to the subject matter of this treaty have jeopardized the supreme interests of the country'. North Korea has not demonstrated satisfactorily that there were any such extraordinary events. Thus, a formal withdrawal had not in fact been accomplished. The NPT requires that notice of withdrawal be given

weapons. The UNSC failed to reach a decision for want of consensus among its permanent members and the matter was referred to the Six-Party Talks – a special negotiating mechanism established in 2003 comprising the DPRK, the Republic of Korea (South Korea), China, Russia, the USA and Japan. However, the Six-Party Talks were not backed with sufficiently strong collective pressures and have not succeeded so far³⁶.

On 5 July 2006 North Korea carried out serial ballistic missile tests and on 6 October tested a nuclear explosive device.

In Resolution 1695, adopted unanimously on 25 July 2006, the UN Security Council ordered the DPRK to suspend all activities related to its ballistic missile program; return immediately to the Six-Party Talks without preconditions; abandon all nuclear weapons and existing nuclear program and to return at an early date to the NPT and IAEA safeguards.

Following the North Korean test of a nuclear explosive device, the UNSC took new steps to bring the DPRK back to the NPT regime. On 14 October 2008 the UN Security Council acting under Chapter VII of the UN Charter unanimously adopted Resolution 1718. The resolution stated that the nuclear test by North Korea represented ‘a clear threat to international peace and security’ and jeopardized peace, stability and security in the region and beyond. However, the reference to Chapter VII of the UN Charter was confined to Art. 41 providing for non-military enforcement measures (economic, financial, political, etc.)³⁷.

Stating that ‘North Korea cannot lay claim to the status of a nuclear- weapon state’, the Council urged the North Korean leadership to refrain from conducting any further nuclear tests or ballistic missile launches, renounce completely all nuclear weapons and existing WMD and ballistic missile development program and ban export of all items related to nuclear weapons, ballistic missiles and other types of WMD.

to the UN Security Council. However, the UNSC did not address the legality and implications of North Korea’s withdrawal for international security.

³⁶ In April 2009 the DPRK withdrew from the Six-Party negotiating process. At one time (in 2005) North Korea promised to give up its nuclear weapons and dismantle the corresponding infrastructure in exchange for diplomatic concessions and economic assistance but the subsequent negotiations stalled and finally broke out. The North Korean authorities took advantage of the negotiations to mask their missile-nuclear build-up.

³⁷ UN document. S/RES/1718(2006).

The resolution provided for a number of specific enforcement measures.

UN member states were required to act to prevent supply, sale or transfer to North Korea of any materials, goods or technology that could be used in the DPRK's WMD programs. In addition to WMD- and ballistic missile-related goods, the ban on transfer from and to North Korea was extended to enumerated categories of conventional weapons and to luxury goods.

The resolution directed all UN member states to freeze financial assets of individuals/entities associated with funding North Korea's nuclear programs and to deny entry and transit through those countries to persons linked to North Korea's nuclear, ballistic missile and other WMD development programs. These individuals/entities are to be designated by the sanctions committee – the 1718 Committee.

UNSCR 1718 contains a call on states to take cooperative action, including through inspection of cargoes to/from North Korea to ensure compliance with the sanctions. However, the stipulation calling for the inspection of vessels suspected of carrying prohibited goods from or into North Korea was formulated in the form of a recommendation to the states (the states were 'called upon') rather than as a legally binding commitment under Art. 25 of the UN Charter.

A Committee was established comprising the UNSC members to oversee the implementation of the sanctions regime, for example, to define additional lists of goods, materials, and technology that should be banned from delivery to North Korea. The UNSC resolved to continue taking active steps to enforce North Korea's compliance with Resolution 1718³⁸.

On 5 April 2009 the DPRK tested a long-ranged missile masked as an artificial Earth satellite. In his statement issued on 13 April 2009 the UNSC Chairman demanded that the DPRK refrain from further launches and comply with UNSCR 1718.

³⁸ The 1718 Committee was established by the UNSC on 14 October 2006. On 20 June 2007 the Committee approved the guidelines for its activities. The Committee issued four reports about its activities covering the period from 1 January to 16 July 2009. On the practical plan, the sanctions regime against the DPRK, stipulated by Resolution 1718, became fully operational after April 2009, when North Korea tested a long-range ballistic missile in defiance of the UN Security Council.

Following this statement North Korea withdrew from the Six-Party Talks and on 25 May 2009 carried out a second test of nuclear weapon.

On 12 June the UN Security Council responded to the defiant behavior of North Korea by unanimously adopting Resolution 1874³⁹.

This resolution contains a number of provisions which develop and reinforce the sanctions regime imposed on DPRK.

Toughening arms embargo. Resolution 1874 provides for: a total ban on all arms transfers from the DPRK; a ban on all arms transfers to the DPRK, except for small arms and light weapons; a requirement that states notify the 1718 Committee (for not later than five days) before transferring small arms / light weapons to North Korea⁴⁰.

The extended inspection regime. Resolution 1874 calls upon states to conduct inspections on their territory when there are 'reasonable grounds' that banned cargoes are on a ship. States are requested to consent to inspections on the high seas of their flag vessels where such grounds exist. If the flag states refuse to grant consent for such an inspection on the high seas they have got to direct their vessels to an appropriate and convenient port for inspection. Resolution 1874 includes new transparency requirements for states to report on their inspections and to report when other states deny permission to inspect ships.

States are authorized (and even obliged) to seize and dispose of banned cargo. States are not to provide support (e.g., fuel, water) to vessels suspected of carrying banned cargo (unless necessary for humanitarian purposes).

More stringent financial constraints. Resolution 1718 provided for the freezing of assets of persons and legal entities designated by the Sanctions Committee.

Resolution 1874 calls on states not to provide grants, assistance, loans or public financial support for trade if such assistance could contribute to North Korea's proliferation efforts. It also calls

³⁹ UN document. S/RES/1874 (2009). The resolution was adopted under Art. 41 of Chapter VII of the UN Charter.

⁴⁰ Resolution 1718 provided for ban on import in and export from the DPRK of some categories of conventional armaments (for example, tanks, armored vehicles, artillery systems of big caliber, combat helicopters, etc.) as well as items related to WMD and ballistic missiles.

on states to deny financial services, including by freezing assets, where such assets could contribute to prohibited DPRK programs (even in the absence of an explicit Committee designation). Initially, the UNSC sanctions list includes eight legal entities and five persons from the DPRK. On 16 June 2009 the Sanctions Committee extended this list by adding five military industrial state companies and five persons, as well as two commodity items.

UN states members are requested to submit reports to the UNSC (through the 1718 Committee) on the steps they have taken to implement sanctions. By 22 June 2009 70 states and the European Union submitted such reports.

One should mention an interesting development in the enforcement technology – the provision for the creation of a group of up to seven experts (‘Panel of Experts’) for an initial period of one year, acting under the direction of the Sanctions Committee to carry out the following tasks: (a) assist the Committee in carrying out its mandate; (b) gather, examine and analyze information from states, relevant United Nations bodies and other interested parties regarding the implementation of the measures imposed in resolutions 1718 (2006) and 1874 (2009), in particular incidents of non-compliance; (c) make recommendations on actions the Council, or the Committee or member states, may consider to improve implementation of the measures imposed in resolutions 1718 (2006) and 1674 (2009); and (d) provide an interim report on its work to the Council no later than 90 days after adoption of this resolution, and a final report to the Council no later than 30 days prior to the termination of its mandate with its findings and recommendations.

The enforcement regime for North Korea is more inclusive than that for Iran. But it is not yet proved sufficiently biting to persuade the DPRK leadership to back from its course on nuclear armament.

North Korea made it clear that it wants to be accepted as a nuclear-weapon state and is not willing to proceed down the road of denuclearization. In September 2009 the North Korean government announced that it had reached the final stage of enriching uranium giving the DPRK a second way of making nuclear bombs, in addition to its plutonium program. North Korea is likely to have five or six nuclear explosive devices. It has tested and deployed MRBMs but it has not so far been able to miniaturize its nuclear explosive devices sufficiently to allow their delivery by missiles or aircraft.

Many experts are of the view that it is premature to describe North Korea as a 'nuclear-armed state'.

North Korean nuclear tests and attempts at developing long-range missiles constitute both grave challenges to the global non-proliferation regime and threats to peace and stability in North and East Asia and beyond. In addition, Pyongyang may be willing to proliferate anticipating an international market for its bomb technology, fissile materials and hardware.

The strict observance by all members of the world community of tougher sanctions provided by UNSCR 1874 would substantially hold back North Korean attempts at developing its nuclear-missile capability. In addition, the tougher sanction regime would hold back 'secondary proliferation', that is North Korean sales of sensitive nuclear and missile items to potential proliferators.

On the whole, one may say that the steps undertaken by the UN Security Council in 2009 has become a factor which increases the chances of holding back the DPRK nuclear-missile program and persuading it to return to the Six-Party Talks and the NPT regime in return for security guarantees and economic assistance.

One cannot but agree with an assessment offered by the International Commission on Nuclear Non-Proliferation and Disarmament that fully deploying both incentives and disincentives (including the continued application of all current Security Council measures until North Korea's behavior changes) is the only available way forward and it is in everyone's interest⁴¹. It is to be hoped that North Korea can be persuaded to resume commitments to the NPT in return for security guarantees and economic assistance.

The enhanced enforcement regime for North Korea constitutes a significant contribution to the international non-proliferation enforcement practices.

An important precedent has been created: the consequences for carrying out nuclear proliferation activities have been made harsher. Additional enforcement measures are not excluded.

The NPT enforcement regime for North Korea has created a higher standard for responding to situations of violations of non-proliferation obligations.

⁴¹ 'Eliminating Nuclear Threats...', p. 183.

PSI: role of informal enforcement arrangements⁴²

Difficult tasks in the field of arms control and non-proliferation arose as a result of a developing practice of transfers of mass destruction materials and technologies through the channels of illicit trade networks comprising suppliers, intermediaries, transport and servicing structures and end users⁴³.

UNSCR 1540 has established legal frameworks to respond to the new challenges⁴⁴. Pursuant to it the monitoring systems were put in place. In this resolution the UNSC, acting on Chapter VII of the UN Charter, called on all states to take cooperative action to prevent trafficking in WMD, their means of delivery, and related materials, to develop and maintain appropriate national border control and law enforcement. States have been obliged to maintain effective national export and trans-shipment controls over WMD items; establish and enforce criminal or civil penalties for violations of such export control laws and regulations. The resolution has laid out principles and mechanisms for trafficking in WMD-related goods.

The Proliferation Security Initiative was designed to address the threats posed by 'black market' dealers, terrorists seeking to get hold of WMD and states in breach of their non-proliferation obligations by taking specific actions in support of interdiction efforts.

The PSI objective is 'to establish a more coordinated and effective basis through which to impede and stop shipments of WMD, delivery systems, and related materials flowing to and from states and non-state actors of proliferation concern'. Targets of interdiction activities are states and non-state entities involved in WMD proliferation (through efforts to develop or acquire WMD or transfers of related materials, etc.)

The PSI arrangement provides for: exchange of information concerning suspected proliferation activity; dedication of appropriate resources for interdiction operations; coordination among participants in interdiction efforts; the strengthening of relevant national legislation and international law to support PSI objectives.

⁴² Proliferation Security Initiative (PSI) was launched by the USA in May 2003.

⁴³ In 2003 a clandestine network of traffickers in nuclear items originating in Pakistan was exposed (and later on broken), see note 11.

⁴⁴ The resolution was adopted unanimously on 28 April 2004. UN document. S/RES/1540 (2004).

The Initiative envisages measures to interdict proliferation activities: in particular, providing consent to the boarding and searching of a state's own flag vessels by other states, and to the seizure of WMD-related cargoes; actions to stop and/or search any vessels in their internal waters and the identified cargoes; enforcing these conditions on vessels entering or leaving state's ports, internal waters or territorial seas; denial of use of states' territorial facilities as transshipment points, including the seizure of WMD-related cargoes.

The Initiative is not an international forum or organization. The PSI operates without a charter, headquarters, chairman or budget.

The partnership is oriented to 'cooperative practical effort' of interested states. The Initiative participants are encouraged to cooperate with states outside of the PSI framework. Specific activities are implemented by state partnerships based on joint agreements. Holding exercises on interdicting illegitimate WMD transfers is an important area of the PSI activities. Exercises on interdiction of illegitimate WMD trafficking were held regularly. Ongoing is work on improving the legal basis of interdiction, including with countries outside of the PSI.

Participating states now number 95 (as of November 2009).

Russia joined the PSI on 31 May 2004. Moscow considers that on the whole, PSI strategic ends and tasks meet national interests of the Russian Federation.

Russia bases its PSI participation on a number of principles: compatibility with the norms of international law (and in particular provisions of international agreements related to non-proliferation and export control) and national legislation; cooperative threat assessments and voluntary nature of decision-making; non-interference with legitimate economic and technical cooperation; utilization of non-proliferation potential of the UN and other international institutions and mechanisms; unbiased treatment of any individual state. Russia emphasizes a leading role of the UN in counter-proliferation efforts.

Russia is an active participant of the PSI Operational Expert Group (OEG) meetings.

PSI mechanisms, including those for exchange of sensitive information and combating the proliferation networks can be employed to disrupt the WMD and related materials trafficking into the Russian and post-Soviet territories.

Russian efforts in this area are focused on strengthening control over the entire territory, territorial waters and air space of the Russian Federation. Obviously, Russia has been and will be handling these tasks independently and in close cooperation with its neighbors.

A deeper Russian involvement in the PSI activities could be of special significance for the success of this multilateral counter-proliferation project because Russia is a country possessing both nuclear weapons and considerable stocks of fissile nuclear materials and thus holding special responsibility for their safety. Besides, Russia borders zones of higher WMD proliferation concern (from the Middle East to the Korean peninsula) and is capable of providing major contribution to development and implementation of the PSI activities.

The National Security Strategy of the Russian Federation for the Period till 2020, approved on 12 May 2009, provides for Russia's closer interaction with other states within the framework of multilateral arrangements and informal international institutions⁴⁵.

The PSI is increasing its visibility in a variety of international formats. It has been mentioned in G-8 documents; and its elements have been included in UNSC resolutions. Issues raised by the PSI are being discussed in the International Maritime Organization, the International Civil Aviation Organization as well as multilateral export control regimes.

The PSI has become an element of the global nuclear order and a widely accepted enforcement instrument applied under pre-specified conditions.

But much has yet to be done to strengthen the potential of PSI partnership in the enforcement area, and especially intelligence and rapid identification and neutralization of wrong-doers.

In particular, it is very important to achieve a qualitatively new level of cooperation between the intelligence, military, and law enforcement agencies of the Russian Federation and the USA. This sphere of cooperation is subject to certain restrictions and stands in need of further formalization of interaction and clear definition of procedures. A positive 'reset' of the American-Russian relations could bring respective policies of dealing with potential proliferators closer to each other and activate interaction in this area, which

⁴⁵ <<http://www.mid.ru/ns-osndoc.nsf/0e9272befa34209743256c630042d1aa/8abb3c17eb3d2626c32575b500320ae4?OpenDocument>>.

could open new possibilities for effective and legitimate (both bilateral and multilateral) activities, including bans, sanctions and punishments, in countering the WMD development programs.

Punitive actions against would-be proliferators are essential, but such actions should be coupled with the prerogatives of the UNSC and carried out in compliance with the norms of international law.

Some states question the legality of interdiction actions under the PSI, particularly in cases where the goods being transported are dual-use items which have civilian as well as WMD uses. They argue that trading in WMD is not directly prohibited by international law.

This matter should be resolved by the UNSC by passing a resolution expressly permitting the interception of WMD shipments in international waters or airspace. There should be a formal link between the PSI partnership and the UNSC (such a link is currently absent). This circumstance is an additional factor undermining the legal validity of the PSI. The PSI should be brought effectively into the UN system.

It is necessary to work out an appropriate procedure of informing the UNSC of PSI plans, and coordinate coercive actions undertaken within this framework with the UNSC prerogatives, bearing in mind a significant confrontational potential of such enforcement actions. It is essential to strengthen the legal basis of PSI activities and ensure a more effective use of these instruments – combined with rewards and positive stimuli – in the interests of the NPT regime's stabilization. This could bolster the international support of PSI effort.

In this connection it is appropriate to draw attention to the recommendation of the Report of the International Commission on Nuclear Non-proliferation and Disarmament: to reconstitute the PSI within the UN system as a neutral organization to assess intelligence, coordinate and fund activities and make generic and specific recommendations and decisions concerning the interdiction of suspected materials being carried to or from countries of proliferation concern⁴⁶.

The PSI partnership could bring greater benefits in the context of more formalized relations between the PSI and UNSC and in-

⁴⁶ *'Eliminating Nuclear Threats...'*, p. 97.

creasing mutual trust between Russia and the USA. It could become a more substantive bilateral project and an advanced cooperation track. Possibly, then it would be easier to utilize the PSI potential to strengthen the UN sanctions regimes, in particular, to support implementation of UNSC antiproliferation resolutions 1718 and 1874 (on North Korea) and 1803 (on Iran).

Promoting the enforcement processes

UNSCR 1887, extending the world's non-proliferation agenda, has made an important contribution to rebuilding the consensus among the UNSC members on the non-proliferation enforcement. But it is necessary to sustain momentum and achieve a qualitatively new level of interaction on these matters in future to create favorable enforcement conditions, ensuring that in the event of a serious violation adequate enforcement actions would be employed.

Improvements in the Security Council enforcement operations would largely depend on achieving closer alignment of interests between the lead-players – USA, Russia and China⁴⁷.

The need for the UNSC to be prepared to effectively intervene in situations of material non-compliance with the international non-proliferation regime at an early stage has been a major lesson of the consideration by the UNSC of the Iranian and North-Korean nuclear crises.

Measures to strengthen the enforcement system proposed below aim at better use of the UNSC's capability, pending resolving various other issues involved in reforming the UNSC, which are currently debated in the United Nations.

The UNSC should be seen by would-be proliferators as willing, prepared and capable of employing all measures available to it to ensure compliance. To give credibility to it, enforcement arrangements and procedures need to be improved and be in place before a next act of proliferation occurs. Specific penalties should be expressly indicated in advance, as well as procedures for their swift implementation.

⁴⁷ This characterization has been offered by the authors of the Report of the International Commission on Nuclear Non-Proliferation referred to above. See: '*Eliminating Nuclear Threats...*', p. 207.

One way of proceeding with this mission would be to draw the 'the red line' (actual acquiring of nuclear weapon, manufacturing and testing a nuclear explosive device, breaking out from the NPT, expelling the IAEA inspectors, etc.), crossing of which inevitably triggers a range of coercive collective actions under Articles 41 and 42 of the UN Chapter to thwart and roll back the nuclear weaponization process.

If the forewarning is made to look credible, many would-be proliferators will be more susceptible to political pressure.

The intention is not so much to make the existing enforcement system look repressive as to enhance its deterrent efficiency, with the UN Security Council at its center and capable of powerfully demonstrating its authority in addressing material breaches of the non-proliferation norm.

1. UNSCR 1887, which emphasizes the primary responsibility of the UN Security Council for addressing threats to international peace and security caused by situations of non-compliance of states with their non-proliferation obligations, needs to be concretized and backed up by the appropriate follow-on arrangements.

This task may be facilitated by agreement of UNSC members on guidelines for addressing the threats posed by nuclear proliferation and nuclear terrorism. The guidelines could be supplemented by arrangements putting potential perpetrators on notice.

In particular, there is a need for adequate UNSC contingency planning against states in material breach of their international non-proliferation obligations and believed to be calculating to breakout from the NPT constraints with impunity.

Taking into account the fact that a state remains responsible for violations of the NPT committed prior to its withdrawal, it would be appropriate for the UNSC to elaborate in advance modalities to respond to the notification of withdrawal which endanger international peace and security.

The option of withdrawing from the NPT of non-complying states should be made extremely unattractive and costly with no ambiguity left about forceful responding of the international community to brazen acts of proliferation.

One way to strengthen collective measures to deal with unjustified withdrawal from the NPT is advocated by the International Commission on Nuclear Non-proliferation and Disarmament. Its recommendation: the UN Security Council should severely discour-

age withdrawal from the NPT by making it clear that this will be regarded as *prima facie* a threat to international peace and security with all the punitive consequences that may follow from that under Chapter VII of the UN Charter⁴⁸.

In view of the nature of the proliferation threat it would be appropriate to work out special procedures for initiating collective coercive actions (including pre-emptive ones) under Chapter VII of the UN Charter in a situation of imminent switch of a non-complying state to actual nuclear weaponization. With this contingency in mind the UNSC might consider it desirable to adopt a framework resolution (moving forward the relevant provisions of Resolution 1887) which would identify and develop concrete punitive options if a proliferating state does not meet conditions for limiting its nuclear activities). That would help to facilitate operational response to extremely dangerous acts of nuclear proliferation.

In this connection it is also important to strengthen the IAEA ability to investigate possible weaponization activity. The International Commission on Nuclear Non-proliferation and Disarmament has advanced valuable recommendations in this field by proposing to update the Additional Protocol by adding to it specific references to dual-use items, reporting on export denials, shorter notice period and the right to interview specific individuals⁴⁹.

Such measures taken well in advance of anticipated acts of nuclear proliferation could become a significant factor in deterring by political means nuclear weaponization by would-be proliferators. If deterrence fails (in case a would-be proliferator seriously miscalculates), there should be facilities at hand for timely intervention in emergency situations and rolling back the nuclear weaponization process.

Potential proliferators should be left under no illusion about the seriousness of the UNSC's intent (and willingness) to apply a full range of coercive measures to thwart nuclear proliferation acts.

A separate problem should be mentioned – that of elaborating agreed rules of engagement in a situation of imminent threats from substate actors – groups of extremists, fanatics, terrorists, who seized (or are about to seize) nuclear explosive devices.

⁴⁸ 'Eliminating nuclear threats...', p. 90.

⁴⁹ 'Eliminating Nuclear Threats...', p.252.

2. In the context of advancing the non-proliferation enforcement arrangements it seems pertinent to return to the Russian proposal on reviving the dormant UN Military Staff Committee (MSC).

Russian Foreign Minister Sergey Lavrov drew attention of the international community to this theme at the UN General Assembly 61st Session in 2006, by suggesting using the MSC's potential as a coordination mechanism both among the UNSC P5 members and between other members of the UNSC and UNO in the whole.

Incidentally, the Final Document of the UN World Summit (September 2005) contains a request addressed to the UNSC to consider the composition, mandate and the working methods of the MSC⁵⁰. Subsequently, in a lecture, delivered in the New York East-West Institute on 24 October 2008, UN Secretary General Ban Ki-moon again referred to the desirability of benefiting from the MSC potential in the interests of international arms control⁵¹.

Various enforcement functions could be envisaged for the MSC making it a workable mechanism in this field. The Committee would certainly be well-placed to elaborate specific enforcement procedures of responding swiftly and effectively to the moves of potential proliferators toward actual nuclear weaponization.

For example, the MSC could be of special assistance in setting up prompt communication between the UN Security Council and such international informal partnerships, as the Proliferation Security Initiative (PSI) and the Global Initiative to Combat Nuclear Terrorism (GICNT)⁵².

The MSC would be also well-placed to provide the UNSC with appropriate expertise on matters of 'hard security' such as early detection, operation planning, logistical support.

It would be logical to entrust the MSC with the task of working out an arrangement involving the placing under international control of missile-nuclear assets of a proliferating state that pose threats to international peace and security.

⁵⁰ UN document. 2005 World Summit Outcome. A/RES/60/1. Par. 178. 16 Sept. 2005.

⁵¹ This theme was mentioned by UN General-Secretary Ban Ki-moon in a lecture he delivered on 24 October 2008 in the New-York based East-West Institute, <<http://www.acronym.org.uk/textonly/dd/dd89/89news01.htm>>.

⁵² The GICNT is a partnership of 75 partner-states (as of 16 July 2009) committed to preventing, protecting against and responding to the threats posed by nuclear terrorism. Russia and the U. S.A. are co-chairmen of the GICNT.

In case of need, the MSC may be requested to develop plans for establishing international naval task groups in dangerous regions in order to combat nuclear terrorism at sea successfully. Such counter-terrorism naval task groups operating under the uniform command might include a commander-in chief of the UN naval force and appropriate UN regional naval commanders with proper staffs and squadrons of ships capable of implementing aggressive counterterrorist missions and inflicting pre-emptive strikes against terrorist assets and in particular to thwart terrorist nuclear ambitions⁵³.

Vitalizing the MSC and other UN enforcement tools would materially help to create enforcement conditions that will enhance confidence that any state breaching its obligations under the NPT will be effectively penalized, thus providing an added deterrent to the violation of the non-proliferation norm.

Advances along the lines indicated above would strengthen deterrence of nuclear weaponization activities by the existing NNWS; improve the enforcement system, its ability to deal with cases of the NPT violations. More far-ranging and productive international cooperation under the auspices of the UN Security Council in combating nuclear proliferation and nuclear terrorism would enhance the prestige of this world body and facilitate the long-needed progress towards a world free of nuclear weapons.

⁵³ Makeev, B., 'Naval arms control and countering terrorism at sea', *Russia: arms control, disarmament and international security: IMEMO Supplement to the Russian Edition of the SIPRI Yearbook 2008*, compiled and edited by Kaliadine A., Arbatov A., Moscow, 2009, pp. 46–47.

4. FRAMEWORK FOR A NEW EUROPEAN SECURITY ARCHITECTURE

Nadia ALEXANDROVA-ARBATOVA

Urgent demand for a reform of European security

The Caucasus crisis of 2008, which raised fears of a new Cold War in the Russian-Western relationships and created a risk for a direct military confrontation between Russia and the USA in the Black Sea, has attracted attention of the international community to President Medvedev's initiative on the urgent need to build a new European security architecture based on a legally binding treaty.

Usually all world wars ended with peace conferences – be it the Peace of Westphalia or the Yalta conference – which established a new world order and new rules of behavior in the international relations. Unlike the past world wars the end of the Cold War, which by its nature differed from ‘the hot wars’, but by the substance was an event that brought about tectonic shifts in international relations, did not result in reconsideration of these radical changes. As Russian political analyst Dmitry Trenin has rightly pointed out, the processes that were developing throughout the XXth century turned out to be deeper than those that followed both world wars, and the formation of a new international system was delayed¹.

Russia, which contributed more than any other country to the relatively peaceful culmination of the bipolar confrontation, could not significantly influence the reform of the international system because of its economic and political weakness in the beginning of

¹ <www.carnegie.ru/ru/pubs/books/volume/69701intro.pdf>.

the 1990s. Political elite of the West was prone to regard Russia as the Cold War loser thus giving the logical explanation to its domestic problems and weak international position.

As a result, the existing system of the international relations in Europe still contains a number of rudimentary elements inherited from the Cold War period. This system as a whole suits the interests of the West but it cannot satisfy Russia which has recovered from the crisis. Attempts to transform some of its elements did not bring any tangible results. Despite numerous efforts to adjust NATO to the existing realities this institution still remains the source of serious problems in the Russian-Western relationships and maintains 'the spheres of influence' logic in the post-bipolar Europe. Russia's attempts to put the emphasis on the OSCE as a main decision-making institution for Europe did not meet any understanding by Russia's partners in the early 1990s, which resulted in the gradual marginalization of the OSCE structures. In other words, the post Cold War hopes about a new common security structure, which would replace the old binary construct and embrace the old opponents, have not materialized.

During the Russian-Georgian conflict over South Ossetia none of the existing international security institutions designed to resolve such situations appeared capable of effectively accomplishing their missions. The UN Security Council was not able to respond to the South Caucasus crisis in a constructive and result-oriented way having become enmeshed in futile discussions. NATO under the pressure of the USA has unequivocally taken the part of Georgia in the conflict. The OSCE – the key mediator in the conflict resolution process – appeared paralyzed. The European Union (EU), strictly speaking, not being a security organization and not having security space separate from NATO, has become the unique international partner of Russia, which under its own initiative took a difficult intermediary mission in the conflict.

The Caucasus crisis, which was triggered by local developments, as a matter of fact, was an embodiment of fundamental security contradictions between Russia and the West. NATO's eastward expansion into the CIS space is the most painful development in Moscow's eyes. In this respect the opinion of the well-known Italian observer Sergio Romano deserves to be cited: 'In 2003 the USA intruded in Iraq without the UN Security Council's mandate. In 2004 NATO absorbed seven countries: Bulgaria, Romania, Slova-

kia, Slovenia and the Baltic States, namely three former Soviet republics. Besides, the Bush Administration advocated inclusion of Ukraine and Georgia into the alliance. The assumption that Russia will look at all these developments with indifference and humility is unrealistic, and, perhaps, it is dangerous².

It is obvious that one of the major lessons of the Caucasus crisis is that security and stability in Europe cannot be achieved against Russia's interests. Unfortunately, the Western partners of Russia have realized this obvious reality only after the military conflict.

At the same time prospects for the replication of the Caucasus scenario in the Ukraine prompted NATO to review its plans to expand into the CIS space. December (2008) NATO summit meeting postponed terms for Georgia's and Ukraine's membership action plan (MAP) for an uncertain time.

The very threat of a major conflict in respect of Ukraine, which could generate a new confrontation in Europe, revived in the West discussions about President Medvedev's initiative for a broader European-Atlantic security treaty. Aside from this, approaches of the European countries to the most urgent problems of European security were strongly influenced by the Russia-Ukraine gas crisis in January 2009. Already existing concerns about the so-called energy security in Europe were reinforced by this crisis. Consumers of Russian gas which experienced consequences of the energy deficit will insist even more persistently than earlier on the inclusion of the energy issues in a new treaty on European security.

In other words, the conflicts of 2008–2009 have highlighted the need for Russia's partners to discuss a number of problems related to her initiative.

The wide spread opinion prior to the conflicts that the existing security arrangements in Europe are effective and therefore there is no need to revise them is losing support in Europe. Nonetheless, there is no definite position in the European countries which gives an unequivocal support to the Russian initiative. Politicians in a number of these countries are prone not to make loud statements on this question. It looks that significant difference in the approaches of certain countries in the region on the security reform will remain topical in future.

² <www.inosmi.ru/.../240713.html ->.

Evolution of Russia's approach to a new European security architecture

Presenting his idea of a new European security architecture in Berlin on 5 June 2008, Dmitry Medvedev made an effort to assert himself not only as a pragmatic politician but also as a politician-conceptualist, addressing the most urgent subject of European security. He put forward a proposal to hold a European summit and develop a new universally binding international security agreement. 'A regional pact based, naturally, on the principles of the UN Charter and clearly defining the importance of force as a factor in relations within the Euro-Atlantic community could be considered. This pact could achieve a comprehensive solution of the security and arms control issues in Europe that are of such concern to us all. – Dmitry Medvedev said. 'I also propose, he continued, that we consider holding a general European summit to start the process of drafting this agreement... The Euro-Atlantic space should be a single one from Vancouver to Vladivostok'³.

In its substance Medvedev's initiative should be viewed as a message to the West, first and foremost to the US/NATO, which calls for formulation of a new agenda for transatlantic cooperation and a change in the situation where Russia, the biggest European country is excluded from the main regional security structures.

Medvedev's proposal has provoked an ambiguous response in the West. Some observers compared it with 'peaceful initiatives of the USSR' of the Gromyko period, or – with Gorbachev's idea of 'a common European house', and Kozyrev's 'strategic democratic initiative': 'say something glamorous first, and worry about implementation later'. Some Western politicians and political analysts considered this proposal as Moscow's 'dagger's blow at NATO's heart'. And only very few of them have correctly understood motives of the Russian side.

As the German political scientist Reinhardt Mutz pointed out, 'after the end of the Cold War many in Europe hoped that the military confrontation of two blocks would be replaced by a common structure uniting the former adversaries. But these intentions were more and more undermined by a policy of the West, which solved problems of the European security without participation of Russia'⁴.

³ http://news.uaclub.net/10_291548.html.

⁴ <http://www.dw-world.de/dw/article/0,2144,3400249,00.html>.

Medvedev's initiative has been developed in the new 'Foreign Policy Concept of the Russian Federation' presented on 15 June 2008. This document put the emphasis on enhancing the role of international law and of the UNO as the supreme international institution and on reducing the role of force as an instrument of resolving international disputes and on the need for diplomacy and tools of 'soft power'.

A number of positions, which had been advocated by D. Medvedev in the past and which were reflected in the 'Foreign Policy Concept of the Russian Federation', are directed at changing the existing world order based on a block approach to international problems. From this document follows that Russia is not going to take a revenge for humiliations of the 1990's, to restore the Soviet Union, to revive Communist ideology and military parity with NATO⁵.

This document reflects the existing foreign policy consensus in Russia, first and foremost, on the question of the Ukraine's and Georgia's membership in NATO as well as on NATO's military infrastructure approaching Russia's borders, which violates the very principle of the indivisibility of European security and creates a risk of new dividing lines in Europe.

These positions have not undergone changes as a result of the Caucasian crisis. But as a whole more pragmatic character has been given to the Russian official concept.

It was reflected in President D. Medvedev's statement containing five points. First, Russia acknowledges the pre-eminence of the fundamental principles of international law, which are to define relations between civilized nations. Second, the world should be multipolar. a single-polar world is unacceptable. Third, Russia does not seek a confrontation with any other country. 'Russia is not looking for isolation', he said. 'We will develop, in as much as is possible, friendly ties with Europe, the USA and other countries in the world'. Fourth, Russia will protect the lives of its citizens, 'wherever they are'. The fifth point: Moscow will seek to develop ties in regions with which it has traditionally had friendly relations. 'Russia, just like other countries in the world, has regions where it has its privileged interests'⁶. It is the last point, or to be precise the unusual word-combination – not 'special', but 'privileged interests' of Russia – that have caused a brisk discussion in the West, and in some CIS countries with regard to Russian foreign policy.

⁵:<<http://www.kreml.org/interview/186797975>> .

⁶ <<http://www.kremlin.ru/transcripts/1275>>.

The idea of a new European security architecture has been developed in President D. Medvedev's speech at the World Policy Conference on 7 October 2008 in Evian (France) in which it has formulated five basic principles for a new treaty.

Firstly, the commitment to fulfil in good faith obligations under international law; respect for sovereignty, territorial integrity and political independence of states and respect of all other principles set out in the UN Charter. Secondly, the inadmissibility of the use of force or threat of its use in international relations. Thirdly, the guarantee of equal security. Fourthly, no state (including Russia) and no international organization may have exclusive rights with regard to the maintenance of peace and stability in Europe. Fifthly, basic parameters of arms control and of reasonable sufficiency in the military domain should be established.

The President of France Nicolas Sarkozy proposed to place the theme of a new European security architecture firmly on the agenda of the OSCE and convene an OSCE summit to move forward the discussion of this matter. France's interest and involvement in the discussion of a new security architecture in Europe have contributed to a favorable environment for the promotion of this idea in the Euro-Atlantic region.

Germany has on the whole also positively responded to the Russian initiative. Its own historical experience has prompted the German political elite to pay particular attention to security issues including Russia's concerns in this area, first of all, NATO's eastward expansion into the CIS space.

German Minister for Foreign Affairs Frank-Walter Steinmeier in the open letter to US President B. Obama underlined the importance of D. Medvedev's initiatives for complete renunciation of the Cold War logic and called on the USA to engage in a sincere dialogue about a new shape of security architecture⁷.

The governments of Italy, Spain, Portugal, Greece, Cyprus and Serbia also welcomed the Russian initiative and urged other countries to consider it favorably. Cyprus not only supported Medvedev's proposal, but became the first country of the European Union to officially articulate this position in the joint declaration with Russia⁸.

⁷ www.ng.ru/editorial/.../2_red.html .

⁸ www.prime-tass.ru/.../show.asp?>

Austria, Belgium, Luxembourg, Finland, Norway and Bulgaria view the Russian initiative with reserved optimism. Turkey in principle supports the idea of the all European summit.

The political elite of the mentioned countries as a whole has expressed hope that the consideration of the issues related to a new European security architecture would help to revive the CFE Treaty processes and lead to a break-through in the solution of the frozen conflicts and adoption of new rules in the sphere of energy security.

In other words, many countries are willing to discuss with Russia reform of European security. Nonetheless, there remains the open question of agreeing on a final document which would pass all necessary procedures for ratification.

It is crystal clear why the Bush Administration, whose policy generated the majority of problems in the field of European security, rejected the idea of reform. The election of Barack Obama as the new US President followed by the review of US foreign policy opened a window of opportunity for new approaches towards a post Cold War security architecture in Europe. It won't be an exaggeration to say that Washington's position on this issue as well as the future of the US-Russian relationship will have an important bearing on the shaping of the policies of the 'countries-sceptics' – Canada, Great Britain, the Netherlands, Denmark, Sweden, as well as the majority of the countries of 'the new Europe'. In their view Russia's initiative was directed primarily at limiting the US presence in Europe and defining new spheres of influence in the region. Apart from this, they claim that Medvedev's principles establish only general norms of behavior leaving in the dark the substance of a new treaty as well as of European security architecture.

Substance of a Treaty

On 30 November 2009 the Russian leadership sent a draft treaty on European security⁹ to the leaders of others countries and international organizations in the Euro-Atlantic space. President D. Medvedev said the draft which should stretch 'from Vancouver to Vladivostok' will 'finally do away with the legacy of the Cold

⁹ See the full text on Russia's presidential website, <http://www.kremlin.ru>, 30 November, 2009.

War'. The draft treaty calls for mutual cooperation between signatory countries 'on the basis of principles of indivisible, equal and undiminished security'. The draft treaty would enable any signatory to call a summit when it considers its security under threat. The document includes collective security clauses, similar to NATO's; giving the signatories wide-ranging rights to object to actions by others that it considers contrary to its security interests.

Many Western diplomats and analysts commented sceptically this document. They argued that the USA and other NATO members are worried that the new arrangement could be used to undermine existing security institutions, NATO in particular.

Under Art. 1 of the draft treaty, 'security measures undertaken by any participant, whether individually or in the framework of an alliance or coalition shall be implemented taking into account security interests of all participants in conformity with this treaty'. Art. 2 stipulates: 'Treaty participants shall not undertake actions or steps that substantially affect the security of other treaty participants'. Participants that are members of alliances and coalitions shall 'strive to ensure that decisions by those alliances and coalitions would not substantially affect the security of other treaty participants'. Furthermore, 'no treaty participant shall allow the use of its own territory, and shall not itself use another participant's territory ... for any actions that substantially impinge on the security of other treaty participants'¹⁰.

The opponents to Medvedev's proposal are fearful that limitations under certain articles would give Russia the possibility to claim a 'droit de regard' over NATO decisions¹¹. Finally, those sceptical of the Russian proposal, point out that the Russian draft makes no reference to human rights standards and democratization.

It looks as if Medvedev's five principles presented in Evian, and the draft of a new Treaty are addressing not so much problems of the post Cold War era and approaches to their solution but rather rules of behaviour for its signatories. At the same time it is always easier to criticize than to advance concrete proposals. If the NATO members are concerned about Moscow's efforts to marginalize the

¹⁰ Ibid.

¹¹ Socor, V., 'Russian President Medvedev Submits Draft Security Architecture Treaty', Publication: *Eurasia Daily Monitor*, volume: 6 issue: 223, December 4, 2009, available at < www.jamestown.org. >.

Alliance, they must engage frequently in strategic discussions with Russia on key security challenges and present their own views on the post Cold War architecture. Their reactive negative position on Russia's initiative will be viewed in Moscow as just new evidence of the fact that the West does not want to change anything being quite satisfied with the existing security model. Russia has presented just a draft for a treaty which means that it is to be discussed and that other countries can contribute to its final version.

It is quite obvious that with regard to arms control a new treaty can establish only general parameters. Concrete directions should be a subject of separate negotiations and agreements. In spite of all the complexities of the process of limitation and reduction of armed forces (the present deadlock in the follow up CFE Treaty), there exists the very subject for negotiations that gives a chance to reach arrangements containing clear and unconditional obligations of the participants.

The Treaty in its substance should address three fundamental contradictions of our time.

First, there is the contradiction between the principle of territorial integrity and the right of nations to self-determination. The Helsinki Final Act recognized in principle nations' right to self-determination. It has given clear priority to the principle of territorial integrity, because in the bipolar world the risk of global confrontation was very high. Territorial integrity and inviolability of borders were perceived in the era of bipolarity exclusively through the prism of external aggression. What is the priority of these principles today? The disintegration of Yugoslavia and the USSR has shown that the most immediate threat to peace and stability is not so much external aggression, but rather separatism of ethnic minorities, big enough to contemplate statehood which, in turn, can trigger conflicts and wars. Moreover, the problem of armed separatism today is not limited only to the postcommunist space; it is topical for many countries of Western Europe. Some surveys estimate that today there are over 200 secessionist movements worldwide¹².

If the principle of territorial integrity is still as important as it has been, the question arises: what to do with independence of Kosovo, South Ossetia and Abkhazia. Should they be seen as an exception from the common rule established by a new treaty, and treated

¹² *Duridansk Darko*, 'Balkan Earthquake is Felt Far Away', <balkaninsight.com/en/main/analysis/15364/?tpl=299&ST1=Text&ST_T1=Article&ST... - 19k >.

as some kind of a creation of ‘the time of troubles’ preceding new arrangements?

While explaining Russia’s position on the recognition of independence of South Ossetia and Abkhazia, President D. Medvedev called this decision difficult: ‘It was not a step taken lightly or without full consideration of the consequences. But all possible outcomes had to be weighed against a sober understanding of the situation: the histories of the Abkhaz and Ossetian peoples, their freely expressed desire for independence, the tragic events of the past weeks and international precedents for such a move...’

Meanwhile, ignoring Russia’s warnings, western countries rushed to recognize Kosovo’s illegal declaration of independence from Serbia. Russians argued consistently that it would be impossible, after that, to tell the Abkhazians and Ossetians (and dozens of other groups around the world) that what was good for the Kosovo Albanians was not good for them. In international relations, one cannot have one rule for some and another rule for others¹³. One cannot the fact that the separatists in the North Caucasus as well as in Europe – from Ulster to the Basque Country draw courage from the cases of Kosovo, South Ossetia and Abkhazia.

Under what conditions do national minorities have the right of self-determination? It is obvious that a policy of genocide of titular nations towards national minorities, massive violations of human rights can be the reason for independence of the oppressed nations. However, a major question remains who will be the arbitrator in these disputes and impartially investigate the facts of genocide and violations of human rights excluding practice of double standards.

The Declaration on Principles of International Law, adopted 24 October 1970 states that ‘the establishment of a sovereign and independent State, the free association or integration with an independent State or the emergence into any other political status freely determined by a people constitutes modes of implementing the right of self determination by that people’¹⁴.

However, in practice realization of this principle in the multinational state is fraught with serious conflicts. In Moldova in the latter part of 1989 appeals of national movement under the slogan

¹³ <pk.kiev.ua/russia_vs_west/2008/08/27/110052.html - 88k>.

¹⁴ Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations. UN General Assembly Resolution 2625 (XXV) 24 October 1970.

‘one language – one people!’ served as a trigger for the Transdnestrian conflict. This conflict has not been resolved up to this day; the Moldavian nationalists still call for the association with Romania. What about national minorities in Moldova, which do not want this association? Would the self-proclaimed Transdnestrian Moldova Republic have the right to statehood and the international recognition in this case?

On 16 December 1991 the EU adopted two documents: Declaration on ‘the Guidelines on the Recognition of the New States in Eastern Europe and former Soviet Union’ and ‘the Declaration on Yugoslavia’. In these documents the European Community and its member states confirmed their commitment to the principles of the 1975 Helsinki Final Act of 1975 and the 1990 Paris Charter for a new Europe. The EC guiding principles on recognition included, in particular: guarantees for the rights of ethnic and national groups and minorities; respect for inviolability of all frontiers, which can only be changed by peaceful means and by common agreement. However, in practice the EU violated these principles many times during the Yugoslav conflict. The best known example – the disregard for the opinion of the Bosnian Serbs on the referendum about independence of Bosnia on 1 March 1992 which led to the military conflict.

In this connection one is inevitably faced with another question related to the right of the oppressed nations to seek independence relying on the use of force? And if so, in what conditions? And if the nations have the right to seek their independence exclusively by peaceful means, should there be established any time framework for achieving this goal?

Second, this is the contradiction between the right of nations to sovereignty (non-interference in the domestic affairs of states) and the right of nations to humanitarian intervention. When in 1999 NATO states justified their military intervention against Yugoslavia citing ‘the humanitarian catastrophe’ in Kosovo, they could not even imagine that this principle could be applied by other nations as well. The conflict around South Ossetia has proved that it is possible.

In July 2009 The UNGA debated the question of legitimacy of international humanitarian intervention in those countries where human rights are violated. It is telling that Russia, which qualified the conflict in South Ossetia as a humanitarian catastrophe, opposed the discussed concept, seeing a linkage between ‘humanitarian intervention’ and the concept of ‘limited sovereignty’, assuming pos-

sibility of an external intervention, including use of force, in internal affairs of states under humanitarian pretexts.

Actually, in its pure form there were few humanitarian interventions authorized by the UNO (Somalia, 1992). There were peace-making and peace-enforcement operations as well as operations for the prevention of conflicts (Macedonia, 1992) that aimed at preventing humanitarian catastrophes.

The concept of humanitarian catastrophe is much wider, than massive violations of human rights. Humanitarian intervention provides for the use of force for the sake of the rescue of civilians – from genocide, ethnic cleanings, and consequences of civil war, natural catastrophes and cataclysms. But who is to define parameters of humanitarian catastrophe, decision-making procedures on intervention or the mechanism of military intervention for its prevention and how? It is obvious that only the UN Security Council acting in accordance with the Charter of the United Nations has such authority.

Third, there is the contradiction between the right of nations to freely choose and join security alliances and the right of nations to oppose the expansion of the security alliances when they are perceived as a threat to national security. Nowadays this contradiction is viewed through the prism of NATO's enlargement to the CIS space, but in principle it can be applied to the CSTO as well. However, it is difficult to imagine this scenario at present, when the CIS and CSTO are undergoing the deep crisis after the Caucasian events. Of all three contradictions the draft treaty presented by Russia in November 2009 partly addresses only the last one.

It is obvious that a new arrangement for collective security in Europe should give definite answers on the questions raised. This would require a broad consensus of all members of the Euro Atlantic community on these questions on the basis of the detailed analysis of the existing international law and the adoption of new rules of law where it is needed.

The post Cold War architecture in the light of old problems and new opportunities

The post Cold War architecture of European security is a chaotic mixture of old and new institutes without clear division of

roles and functions between them that assumes rivalry of institutes and leads to paralysis of all security system.

Certainly it is much easier to build than to rebuild, but we are doomed to deal with existing institutions. 'We do not suggest establishing any new organizations, nor – discontinuing or dissolving any existing ones', – said the Head of the Russian Foreign Ministry, Sergey Lavrov, in his TV interview on 10 February 2009¹⁵.

It would seem that the optimal solution can be found within the context of a new distribution of roles and functions between the existing institutions and formats in line with the main directions of the European security – economic and energy security, external security of Europe, internal security, humanitarian and international law aspects of security.

It is obvious that the UNO will remain the main international umbrella security institution. As far as European security is concerned, the OSCE functions in the fields of economic and military security should be given to other institutions which are better suited to perform these missions. The OSCE is to be responsible for international law and humanitarian problems in close cooperation with the Council of Europe. Or if radically reformed it could remain the Euro-Atlantic umbrella institution, a kind of coordinating center.

The basis for economic and energy security in Europe should be the European-Russian cooperation, and in a broader context between the EU, Russia, Ukraine and Turkey with the partnership of EuroAsEc when needed. It would be worthwhile to adopt a Single Energy Charter based on the energy interests of producers, consumers and transit countries as well as on a common energy system, which would strengthen security and exclude conflicts in this sphere. Such a system should be built on the long term legally binding basis with common rules of arbitration. It will be called upon to implement primarily the projects aimed at ending the 'arms race through pipelines' and to work out a model of partnership participation in the energy distribution systems of each other and the development of new fields in hard-of-access areas of the mainland or offshore.

Nonetheless, despite the European-Russian common interests in many spheres, their relations are deeply affected by the fundamental contradiction between their interdependence and mutual mistrust.

¹⁵ < www.poland.mid.ru/inf_09_13.html > .

Despite the positive assessment by the parties of the ongoing negotiations on the new agreement on strategic partnership, which should replace the existing Partnership and Cooperation Agreement (PCA), the terms of its conclusion remain uncertain mainly because the EU links the ratification of the Energy Charter by Russia with the new agreement.

The conflict in respect of pipelines, the Moscow-Brussels differences with regard to modernization of Ukraine's gas network, their contradictions on the Energy Charter are the problems, which show that the energy sphere remains the most politicized in the European-Russian relations. Telling evidence of this fact is the EU negative reaction to President Medvedev's proposal to help Ukraine with a syndicated loan agreement to ensure Europe's energy security. It seems that the reason for the EU rejection of this proposal is not so much financial but political. The EU does not want to create the impression of a European-Russian condominium in the CIS. At the same time, the creation of an international pool with participation of Russian and EU financial institutions to help Ukraine with a credit on gas purchases would be in the interests of all involved parties and would promote depolitization of the energy sphere.

Russia has been suspicious about the new EU initiative 'Eastern Partnership', the goal of which is stated to be the rapprochement of EU with six countries of the former USSR – Ukraine, Moldova, Azerbaijan, Armenia, Georgia and Belarus. 'The Eastern Partnership' proposed by Sweden and Poland in 2008 and launched at the Prague summit in May 2009 aimed at 'extending the zone of economic and political stability to the eastern borders of the EU', including cooperation on four directions – development of free trade zone, financial help, energy security and facilitation of the visa regime.

Initially, Russia, the EU biggest eastern partner, was not invited to join this project, although it was supposed that it could participate in the discussion of some local initiatives, for example, on the Kaliningrad region of the Russian Federation.

At the Russian-European summit in Khabarovsk (20–22 May 2009) Moscow nevertheless has received a formal invitation of Brussels to join the program. But it still remains unclear, in what forms Russia can participate in the given project which was developed without its participation. Without questioning the legitimacy of 'the Eastern Partnership' one may doubt its expediency. Opposition to Russia's direct participation this initiative as well as NATO

expansion, will be perceived by Moscow as an attempt of elbowing Russia out of the zone of its vital interests, as ‘a friendship against Russia’. Consequently, it will antagonize Russia and create a risk to stability in this region.

Generally speaking, ‘The Eastern Partnership’ is one of the most controversial EU projects in many aspects. Fredrik Reinfeldt, Swedish Prime Minister representing the EU presidency said in his interview to Radio Svoboda on 2 July 2009 that this program would be delayed due ‘to new challenges’¹⁶. However, the European Commission renounced this statement the next day.

Taking into account a fierce ideological discussions going on in Russia between modernizers and their opponents from conservative and nationalist fractions, European Union should not expect that Russian foreign policy will be consistent and clear. However, the EU itself should clearly define its policy vis-à-vis Russia articulating what the EU wants from Russia, what the EU is willing to concede to Russia for the sake of cooperation and what the EU ‘red line’ is. As European experts Mark Leonard and Nicu Popescu have rightly pointed out, ‘If the EU wants to deal with a predictable and viable neighbor, it must build its partnership with Russia on the same foundations that made European integration a success – interdependence based on stable rules, transparency and consensus’¹⁷.

The external security of Europe requires, first of all, the adoption of measures countering the WMD proliferation and international terrorism. This should be achieved through cooperation between NATO/US and Russia (NATO-Russia Council) with the participation of the CSTO in order to resolve security problems in Central Asia and the Shanghai Cooperation Organization (SCO) in the Far East. This cannot be achieved without radical changes in NATO-Russian relations, including NATO’s recognition of the CSTO and the movement forward on a new common security strategy.

In December 2008 Russia and NATO resumed their dialogue, but many programs still remain blocked except one related to the settlement of the conflict in Afghanistan where, for instance, all the military equipment for the German troops in Afghanistan is supplied through the Russian territory.

¹⁶ < www.volga-inform.ru/.../1181665/ ->.

¹⁷ <www.europesworld.org/NewEnglish/Home/Article/tabid/191/ArticleType/Default.aspx-128k>.

Relations between NATO and Russia have again taken a dramatic turn for the worse with NATO's decision to begin military exercises in Georgia in May 2009. Not unexpectedly, the NATO exercises in Georgia have encountered opposition from Russian officials. Foreign Minister Sergey Lavrov warned that the exercises could risk destabilizing the Caucasus and spoke of the maneuvers as possibly encouraging irresponsible behavior from Georgia's leadership. Russia responded to the NATO military exercises undertaking her own maneuvers in the Russian south.

At the Corfu meeting of the NATO-Russian Council in June 2009 the partners declared their objective to 'reset' their relationship. This was facilitated to a large extent by the beginning of 'reset' in the Russian-American relations. The United States still remains a key component of NATO which to a larger degree shapes the Alliance strategy. Thus, the Obama Administration made a sensational statement about Washington's readiness to consider the question of Russia's membership in the North Atlantic alliance on the following conditions: Russia should meet the required criteria; it should be able to contribute to the collective security and its membership should be approved by other NATO members. Phillip Gordon, Assistant Secretary of State, for European and Eurasian Affairs informed the House of Representatives of the US Congress of such a possibility¹⁸.

On his part, Anders Rasmussen at his first press conference as a newly elected NATO Secretary General stated that he considers partnership with Russia, after the operation in Afghanistan, the main NATO priority¹⁹. In other words, without abandoning its enlargement strategy to Georgia and Ukraine, NATO offers this option to Russia which would be a revolutionary change not only in the NATO-Russian relationship, but also in the existing security system in Europe.

At the same time there exists in NATO serious opposition on the part of politicians from Central and Eastern Europe (the so-called 'new Europe') who are uneasy about the Russian-US rapprochement. In their open letter to President Obama on 17 July 2009 some of the top politicians from the CEE countries were unambiguously clear in defining Russia as still a threat²⁰. This letter is

¹⁸ <<http://www.novopol.ru/text72676.html>> .

¹⁹ <<http://finam.fm/news/30197/>> .

²⁰ <www.rian.ru/.../177589059.html> .

a clear message to Washington saying that the new Europe does not want to change the existing security architecture in Europe. As Leszek Miller, former Polish Prime Minister has pointed out; the authors of the letter are pushing president Obama towards deterioration of the US-Russian relationship as a result of which their countries will become front states²¹.

First and foremost conflict prevention and conflict resolution in the Wider Europe as well as the fight against extremism can be assured through cooperation of the EU (in the context of ESDP) with Russia and other CIS states gravitating to the EU. The formation of common rapid reaction forces for peace enforcement and peace-keeping would be required in order to achieve these goals. Apart from this, new international mechanisms of monitoring, arbitrage and mediation should be created.

Full-fledged European Security and Defense Policy (ESDP) is one of the main preconditions for ensuring security within Europe. The biggest obstacle to the formation of a military component of the European Union is the membership of the majority of the EU countries in NATO (21 of 27), to which they have committed the bulk of their resources. Simultaneous the participation of these countries in NATO and ESDP programs often appears unrealistic as a result of the limited recourses allocated for such purposes in the states' budgets. Nonetheless, construction of the EU military component is an objective process in Europe's post Cold War evolution. From this point of view the ratification of the Lisbon Treaty is a step forward. As regards the CFSP/ESDP, the Lisbon Treaty includes practically the same provisions as the ill-fated EU Constitutional Treaty: its key elements, in fact, have been preserved, a few terminological details and 'interpretative' declarations apart.

On the whole, the new treaty offers various opportunities for greater policy coherence, effectiveness and visibility, coupled with a number of open questions related to its actual implementation. Indeed, there is now a greater potential for a joined-up common European foreign, security and defense policy. The Lisbon Treaty provides a good legal and political basis for achieving that and giving the Union the 'politics of scale' that would permit it to play a more active international role, and one commensurate to its stated ambitions²².

²¹ <news.74mail.ru/news.php?news.> .

²² <www.statewatch.org/news/2008/feb/ep-esdp-lisbon.pdf> .

The growing dissatisfaction of the majority of the European allies with the concept of ‘the US Program Leadership’²³ (according to which it is Washington that defines NATO’s security agenda) is one of the most telling evidence to this fact. As a British scholar Paul Kennedy pointed out, world politics change rapidly and on each side of the Atlantic there often appear different views on how the emerging problems can be solved. It will not be possible to return the transatlantic process in its old channel, but this is not catastrophic²⁴.

One of the most probable scenarios in the evolution of transatlantic relations is a functional and regional redistribution of the roles between the Euro-Atlantic allies. In the favorable scenario, if the threat of a new divide and confrontation in Europe is removed, NATO’s missions and resources will be diverted to the EU military program. At the same time, the EU-Russian security cooperation will be marginal, if there is no radical improvement in the NATO-Russian relationship.

* * *

Of course, a new European security architecture won’t appear quickly. Today even in Russia, which has initiated this grand design, there is no broad political consensus on the debated issues, not to mention EU and NATO. However, the existing problems do not mean that the goal cannot be achieved by definition. Many events in our recent past-disintegration of the USSR and the main structures of the so-called socialist camp – seemed inconceivable.

The post-Communist transformation of Russia and its relations with the key partners in Euro-Atlantic region which form the very basis for reconstructure of the existing security system in Europe are interrelated processes. These processes will shape Russia’s position on Europeanism and Atlanticism. At the same time, the orientation of European integration in the sphere of European security and

²³ ‘The program leadership strategy’ was formulated within the first term of Clinton presidency (1993–1996) and was tested during his second term (1997–2000). It was directed at defining the security agenda for US cooperation with the states that are subjects to this strategy. Troitsky M., *The Concept of the Program Leadership in the US Euro-Atlantic strategy*, available at

uisrussia.msu.ru/docs/nov/pec/.../3/ProEtContra_2002_3_11.pdf. >

²⁴ Kennedy, P., ‘Transatlantic relationship; three scenarios’, <www.global-affairs.ru/.../2014.html> -> .

defense will depend on the vector in Russia's domestic and foreign policy evolution.

One should remember that after the disintegration of the USSR the West (including both the EU and NATO) did not fully understand the interdependence between Russia's post-Communist evolution and the international environment. Proceeding from the past experience Russia's Western partners were putting the emphasis on preventing negative trends in its transformation, which often brought opposite results. A solid legal basis in Russia's relations with EU and NATO member states is a necessary precondition for positive interaction of the Euro-Atlantic partners and the construction of a new European security architecture.

PART II. EXPERT INSIGHTS

5. Conflict in Afghanistan and prospects of its resolution

6. Nuclear Pakistan: possibilities of neutralizing the threats to the NPT regime

5. CONFLICT IN AFGHANISTAN AND PROSPECTS FOR ITS SOLUTION

Gennady CHUFRIN

Conflict in Afghanistan draws lately a growing attention in the world. This is proved in particular by a number of representative international forums held in 2009 on this issue. Among them a ministerial conference on Afghanistan organized by the Shanghai Cooperation Organization (SCO) in Moscow in March 2009 and a conference on the same subject held under the UNO aegis soon after in the Hague. Discussions of the Afghanistan conflict, of its impact on the regional and global security and of measures to be taken for its solution became also an important part of the NATO jubilee summit in April and of the SCO summit held in June.

All this clearly shows how deeply the international community has become concerned by activities of international terrorist organizations based in Afghanistan (and lately also on the territory of the neighboring Pakistan). In addition to this, of considerable concern is the continuing escalation of violence, numerous terrorist acts as well as the transformation of Afghanistan into the world largest producer of heroin delivered subsequently by drug traffic to other countries of Asia, Europe and North America.

Beginning of the conflict

The beginning of the conflict in Afghanistan dates back to 2001 when the United States sent their troops to this country justifying it by the need to crush radical Islamist groupings operating from

there and supported by the local Taliban ruling regime. These groupings headed by Al Qaeda were accused of organizing and executing a number of terrorist acts in different parts of the world, the largest and most well known among them being the terrorist acts in New York and Washington in September 2001.

The US antiterrorist operation won a wide international support.

Several countries, primarily NATO members, joined the US-led military action in Afghanistan by sending their troops there and forming NATO's International Security Assistance Force (ISAF) in Afghanistan. Another group of countries (including several former Soviet Central Asian republics) allowed the US and their allies to establish military bases on their territory. Others limited their support by offering transit rights across their territory for military and non-military goods needed for the ISAF.

As a result of these international activities, unparalleled by the scale of their solidarity, the Taliban regime was quickly defeated and overthrown in Kabul. However, the US-led operation started so successfully, failed to achieve a complete destruction of the Islamist forces.

After the initial military defeat in Afghanistan radical Islamist groupings headed by leaders of Al Qaeda and the Taliban retreated to the territory of neighboring Pakistan. They succeeded in regrouping there, established numerous bases and camps for training militants and changed their tactics by switching to partisan activities.

With a passage of time they resumed their armed attacks in the south of Afghanistan, gradually expanding the scope of activities and by the end of 2008 succeeded in restoring actual control over almost half the territory of the country¹.

Moreover, they became active in Pakistan, too, getting a foothold in a number of regions in the North-West Frontier Province (NWFP) as well as in the so-called Tribal area of Pakistan which stretches along the border with Afghanistan and where the power belongs to local tribal chiefs and elders.

At the beginning of 2009 the Islamists further strengthened their positions there after Asif Ali Zardari, President of Pakistan, yielded to their demands and allowed the introduction of the Shariah laws in the Swat district of the NWFP. Also the Supreme Court of Pakistan released from detention Abdul Aziz, a radical re-

¹ <<http://www.bloomberg.com/apps/news?pid=20601091@sid=ai7hHCe40>>

ligious leader, who openly demanded a transformation of the country into a theocratic state.

However concessions made by the Pakistani authorities far from satisfying radical Islamists allowed them to expand a zone of their actual control by driving out secular administrative authorities from towns and villages taken over by them. They also moved dangerously close to Peshawar, a NWFP administrative centre, holding an important strategic position on the supply routes of the ISAF in Afghanistan.

As a result of the activities of Al Qaeda and Taliban followers which began in Afghanistan have finally crossed its geographic borders spilling over to the territory of Pakistan. As a result of this the conflict has developed actually into a regional one with a possibility of its further expansion to neighboring countries, such as India and Central Asian states.

AFPAK strategy

After a critical assessment of the evolving situation the new US President, Barack Obama, and his administration undertook steps aimed at adjusting original goals and the scope of the antiterrorist operation. They also started to work out a new US policy in Afghanistan and Pakistan which became known as the ‘Afghanistan plus Pakistan strategy’ or AFPAK. In his speech on 27 March 2009 Barack Obama declared that the USA ‘has a clear and focused goal’, namely, to inflict ‘a crushing defeat on Al Qaeda, to drive its supporters from Pakistan and Afghanistan and to prevent their return to either country in the future’. He rejected a possibility of a return to the Taliban rule in Afghanistan and endorsed the objective of developing in this country of ‘capable, accountable and effective government’ He also confirmed that the US goal was to ‘develop a self-reliant Afghan security force capable to lead the counterinsurgency and counterterrorism fight².

Along with these goals, a special and ever growing significance for the USA presented the task of actively preventing a threat of Al

² <<http://www.commentarymagazine.com/viewarticle.cfm/a-new-counterinsurgency-in-afghanistan-15116>>; <<http://www.google.com/hostednews/afp/article/ALeqM5hMLvUMUwzY0aLeyfHfVZBLDYdrKA>>.

Qaeda and Taliban followers gaining access to Pakistan nuclear plants and nuclear military arsenals.

The seizure of nuclear weapons by Islamists seems, however, to be unlikely since they are kept in special shelter mostly in a disassembled state and safely guarded there by the Pakistani army³. Besides, neither Al Qaeda nor Taliban possess adequate military and technical capabilities and expertise, such as air planes or missile launching systems which would allow them to use nuclear weapons. What is more likely, however, is a theft of radioactive material from the nuclear plants located in the immediate vicinity of areas of hostilities between Islamists and government forces. Such is, for instance, the plant in Khushad located only 110 miles north-west of Islamabad on the border between the NWFP and Punjab where two nuclear reactors are under construction. Another potentially vulnerable nuclear facility is the Gadwal uranium enrichment plant located 60 miles from the Buner district in the NWFP where Islamists are active.

If the Islamists succeed in obtaining nuclear material with the assistance or even with a direct participation of their supporters working at nuclear plants, then Al Qaeda and the Taliban will be able to manufacture and use a so-called 'dirty bomb' for terrorist acts in densely populated cities or for the blackmail of official authorities by threatening to use it⁴.

To achieve the goals set by President Obama the USA is willing to use a broad range of measures – from political to economic, including massive financial assistance to their friends, allies and clients, as well as to engage in direct military action against the Islamists.

In this connection, the increase of the US military force in Afghanistan became an important element of the AFPAC strategy. By the end of 2008 there were already 14000 US troops there as part of the ISAF and about 19000 servicemen more under direct US command⁵. During 2009 21000 additional troops were sent to Afghani-

³ Besides, an access to the use of nuclear weapons is properly controlled by several degrees of clearances and codes fully known only to the high military command of the country.

⁴ In June 2009 Mustafa Abu Al-Yazid, one of the leaders of the Al Qaeda, in an interview with 'Al Jazeera' (TV station), again mentioned plans to seize nuclear materials in Pakistan and to use them for military purposes. *New York Times*, 21 June 2009.

⁵ *Krasnaya Zvezda*, 27 March 2009.

stan including 4000 servicemen with the task of training local security forces and police⁶. By the end of 2009 the total number of US servicemen in Afghanistan may reach 68000, about half of whom will be under direct US command.

Building up its own military presence in Afghanistan the US Administration sought to increase the size of armed forces from other NATO countries as well. However, the US allies have been reluctant to heed the US requests. They either have evaded sending additional troops to Afghanistan at all or agreed to send mainly auxiliary units not to be used in direct combat.

Nevertheless, during 2009 the total ISAF strength increased from 65 000 to 100 000 soldiers.

Ensuring the continuous supply of the required goods both of a military and non-military nature has been highly important problems to be resolved in order to facilitate efficient operations. This problem has assumed new proportions because original supply routes across Pakistani territory became increasingly unsafe and hazardous. Thus, up to 50 percent of the cargo transported across the Khyber Pass has been looted or destroyed by Taliban units operating there. The US success or failure in Afghanistan to a large extent depended on how soon and effectively this problem was to be resolved⁷.

Therefore an agreement with Russia on transit across its territory of cargo for the ISAF was needed to help the AFPAC strategy to succeed. A preliminary arrangement was reached already in April 2008 in Bucharest at the Russia- NATO Council (RNC) meeting there. Although the US-Russian and, as a consequence, the NATO-Russian relations cooled down noticeably after the August 2008 Georgia-South Ossetia conflict, with Barack Obama coming to the White House the US-Russian dialogue was resumed. A return to earlier agreements has been the result of the improving relations. The first concrete outcome of this 'thaw' was the beginning of transit of non-military goods for the ISAF in Afghanistan across the territory of Russia in March 2009.

Another step in developing the US-Russian cooperation on Afghanistan became the signing during President Obama's visit to Moscow at the beginning of July 2009 of a supplementary agree-

⁶ < <http://www.vremya.ru/print/226018.html> >.

⁷ Malou Innocent, 'Pakistan and the Future US Policy', *Policy Analysis*, Cato Institute, April 2009, #636, p. 9.

ment allowing an air transit of military goods and US military personnel across the territory of Russia⁸.

Agreements on transit of US cargo to Afghanistan were reached also with a number of post-Soviet Central Asian states, including Kazakhstan, Kyrgyzstan, Uzbekistan and Tajikistan. This was quite understandable since development of cooperation on these issues with the USA answered in principle their interests as the return of Taliban to power in Afghanistan would have catastrophic consequences for the whole region.

The new US Administration soon after moving to the White House made fundamental personnel changes and new appointments in the military command of the US forces constituting the basis of the ISAF. Only eleven months after his appointment as a top commander of the US troops in Afghanistan General David McKiernan was replaced by General Stanley McChrystal, a former commander of the US Army Joint Special Operations command who had served in Afghanistan and Iraq. His deputy became General David Rodriguez who had already served in Afghanistan as commander of an airborne division⁹.

The appointments were aimed at upgrading efficiency of the military operation in Afghanistan taking into account the specific conditions of its implementation. Thus, the fighting was going on in a predominantly mountainous territory of Afghanistan with overstretched and poorly guarded communication lines. Also Islamist militants received substantial support in terms of weapons and human resources from the Pakistani territory and in case of necessity might retreat there while the US armed forces were not allowed to pursue the enemy on the Pakistani territory to say nothing about carrying out ground operations there.

An important role in the AFPAC strategy has been accorded to the armed forces and security services of Afghanistan itself. Their size was planned to increase substantially. In particular, the strength of the Afghan army was to increase over the next five years from the 90 000 to 130 000–140 000 servicemen. Also the size of the police force estimated to be about 80 000 men at the end of 2008 was planned to be approximately doubled during the same period. It is expected that these forces after receiving proper training will in

⁸ *Krasnaya Zvezda*, 8-14 August 2009.

⁹ *New York Times*, 11 May 2009.

time be able to take over the prime burden of maintaining law and order in the country.

Development of relations not only with the Afghan central government but also with tribal chiefs and regional leaders constitutes an important element of the AFPAK strategy.

Special attention the US Administration pays to the task of establishing relations with the so-called moderate Islamic leaders both in Afghanistan and Pakistan, including those Taliban sympathizers who are thought to be prone to cease cooperation with Al Qaeda in return for receiving US guarantees of non-interference in Afghanistan's domestic affairs. It looked as if the USA was ready to deviate from the original publicly declared goals of building in Afghanistan a society based on principles of Western democracy and recognize traditional Islamic values and principles of the Afghan society. The US Administration appears to hope that pursuing such a policy will substantially reduce the scale of support among the local population for radical Islamists¹⁰.

These assumptions were subjected to criticism in the US expert community. Professor Ashley Tellis, senior associate at the Carnegie Endowment, who previously served on the National Security Council and in the Department of State, writes '... it is virtually impossible today to distinguish between Al Qaeda and many of its Taliban confederates on the ground because their operational collaboration is so extensive and multifarious'¹¹.

Having failed to establish an effective control over the political and military situation in the conflict zone the USA sought to extend internationalization of the operation by expanding the informal coalition with such influential Asian countries like China, India and Saudi Arabia. These attempts, however, were unlikely to produce the desired results because of severe contradictions between these countries themselves and also because of deep-seated suspicions they felt towards each other about the actual goals in the conflict zone.

¹⁰ In this connection one should refer to the speech made by Barack Obama in Cairo in June 2009 in which he, trying to improve relations with the Moslem world, underscored that the aim of the US was to fight extremism and not Islam; <<http://www.guardian.co.uk/commentisfree/2009/mar/30/afghanistan-nato-taliban-insurgency>>; <http://www.rferl.org/content/Afghanistan_Strategy_Needs_To_Bring_Rule_Of_Law/1601621.html>.

¹¹ Ashley, J., Tellis, 'Reconciling with the Taliban? Toward an Alternative Grand Strategy in Afghanistan', 2009, p. 25, available at <<http://www/carnegie-endowment.org/publications/index.cfm?=22981>>.

Finally, striving to make the AFPAK strategy a success, the USA intended to use actively financial leverage and opportunities. It is with this goal in mind that Vice President Joseph Biden put forward a plan envisaging allocation of \$15 billion in non-military aid to Pakistan over the next several years. In May 2009 the US Congress approved a \$7.5 billion aid package to this country¹²,

At the same time, however, the USA was unable to establish an effective control over the use of such considerable funds. A threat was emerging therefore that the Pakistani authorities might use them not for fighting religious extremists and international terrorism but for increasing their nuclear arsenals and for military confrontation with India. Thus, after terrorist attacks of 11 September 2001 the USA provided Pakistan with financial assistance amounting to over \$20 bn. However, there is no reliable information as to how these funds were spent¹³.

Along with the USA some other countries also intended to give Pakistan financial aid to the tune of over \$4 bn. It became known from the international conference in Japan held in April 2009 that Japan (\$1 bn) and Saudi Arabia (\$700 m were among them)¹⁴.

It was also planned to increase substantially the US federal budgetary spending on the operation in Afghanistan.

Pakistan's military activities

Along with direct steps taken by the US to implement the AFPAK strategy an important condition for its success was supposed to be stepping up the activities of Pakistani army against the Islamist militants on the territory of Pakistan itself.

It was particularly important since for a long time in spite of an obvious strengthening of Islamists' positions and influence in the NWFP, the reaction of the Pakistani army command to these developments had been rather passive. This phenomenon had several reasons.

Firstly, the whole story of the creation and development of Pakistani army had been directly linked not with pacifying domestic

¹² Christian Science Monitor, 19 June 2009.

¹³ Malou Innocent, *op.cit.*, p.15.

¹⁴ *New York Times*, 23 May 2009.

disorder but with the confrontation against India. Consequently the army training, its regulations and its armament had been subordinated to that purpose. For the same reasons a major part of Pakistani army was deployed on the border with India or in its immediate vicinity and was kept on a constant alert in anticipation of a conflict with its armed forces. A possible conflict with India (not a threat from the Islamist militants of the Taliban) has been regarded by the Pakistani military command as the principle and most imperative threat to the security of the country.

Secondly, a key role in creating the Taliban movement in 1994 was played by the army Inter-Services Intelligence (ISI). It was with its assistance that the Taliban developed into a formidable political force, succeeded in seizing power in Afghanistan in 1996 as a result of internal fighting there and stayed in power until its military defeat in 2001.

It is important to point out that during its stay in power in Kabul the Taliban leadership was actually allied to Pakistan and coordinated with it its activities in confrontation with India. It is quite possible, therefore, that even after the overthrow of the Taliban administration in Afghanistan the informal ties of the Taliban leaders with the ISI continued¹⁵.

At the end of April 2009, finally yielding to unprecedented US pressure, the Pakistani army launched an offensive against Al Qaeda and Taliban militants in the Swat river valley, the Lower Dir and Buner districts of the NWFP as well as in tribal areas, in particular in North and South Waziristan¹⁶. Over 20000 soldiers took part in this operation using modern armaments that included heavy artillery and aircraft.

The regular army was confronted by about 5000 Islamist militants. Such a strong military superiority allowed the Pakistani army to kill or disperse a substantial part of militants rather quickly and to restore government control over towns and villages in the NWFP, including Mingore, an administrative centre of the Swat valley.

However, since the Pakistani army, as mentioned earlier, did not have special counterinsurgency training, it carried out a regular

¹⁵ Malou Innocent, *op.cit.*, pp. 4-6.

¹⁶ Stephen Hadley, a former US National Security Adviser, pointed out 'you can't really solve Afghanistan without solving Pakistan', *Hindustan Times*, New Delhi, 17 June 2009.

army operation with methods typical to such warfare, including carpet bombing. It caused, as a result, numerous casualties among civilian population as well as a massive flight of people, most of whom were women, old people and children. According to independent sources, the number of refugees, left without shelter, food and medical help, reached about 2 m¹⁷.

Additional problems were created by frequent air attacks by US drone planes in North-West Pakistan as well as in tribal areas of North and South Waziristan where, according to the US intelligence, Al Qaeda and Taliban militants could hide. Consequently, several scores of air attacks by US drone planes resulted in the death of hundreds of civilians and destruction of houses, schools and madrassas.

As a result of these combined actions of the Pakistani army and of the US Air Force the situation in North-West Pakistan came to a brink of a humanitarian catastrophe, the largest since India's partition in 1947.

This was duly exploited by the Islamist propaganda which used every opportunity to present activities of the Pakistani army and Americans as a purposeful campaign of cruel persecution of adepts of true faith. Besides, accusations were made against Pakistani army units manned mainly with Punjabis of allegedly conducting ethnic cleansing of the Pashtun population of the NWFP and tribal areas who supported the Taliban and suffered during hostilities¹⁸.

These accusations were followed by several terrorist acts organized by Islamists as acts of revenge in a number of Pakistani cities, including Islamabad, Peshawar, Rawalpindi and Karachi.

In search of alternative solutions

Along with escalation of military activities against radical Islamists both in Afghanistan and Pakistan what invited attention recently was the growing number of those in the United States who

¹⁷ Trying to minimize negative consequences of the military operation for civilian population the USA offered Pakistan \$110 m as additional financial aid to relieve problems of refugees who fled the zone of hostilities in the North-West of the country, <http://www.boston.com/news/nation/washington/articles/2009/05/19/us_to_give_pakistan_100_million_>.

¹⁸ <<http://www.eastasiaforum.org/2009/06/11/pakistan-risks-ethnic-strife>>.

were looking for alternative solutions to the Afghanistan problem. Among such options consideration was given to the creation of acceptable political and military conditions for the USA to pull out from Afghanistan ('exit strategy')¹⁹.

Among those supporting such views there were well-known US politicians including several US congressmen, experts on regional conflicts and international relations, university professors and journalists. It deserves to be mentioned that even after the official ACPAK strategy was adopted the views of those favoring a carefully prepared but in fact unavoidable 'exit strategy' not only did not change but strengthened.

The need to work out an alternative strategy was explained by them, firstly, because a successful fighting with Islamists might require from Washington further increases of the US military presence in Afghanistan. Already under the existing conditions such a decision raised objections from the majority of the US population. Judging by the results of an Economist/YouGov poll held in August 2009 only 32 per cent agreed with the necessity of sending more troops to Afghanistan²⁰.

Nevertheless, Barack Obama's policy over the Afghan conflict still enjoyed in 2009 support of a substantial part of the US population. But will this situation remain in the future, especially on the eve of mid-term elections to the US Congress, especially (and that is quite probable) if the US war casualties in Afghanistan increase? And it will be quite unrealistic to expect that the shortage of US own human resources needed for combat operations will be compensated by its NATO allies.

Secondly, the US Administration has actually admitted that the USA is incapable of achieving the originally declared goals of a democratic transformation of the traditional Afghan society. This means that the US Administration if it wants to be pragmatic in seeking to resolve the Afghanistan problem should limit its objectives to the most important ones, such as, for example, the prevention of the radical Islamists' return to power. In other words, the principal task is to prevent Afghanistan from becoming a sanctuary of ultra extremist forces, from being a permanent source of regional instability and from being a major international centre of drug traffic.

¹⁹ Ashley, J., Tellis, op. cit. pp. 21- 34.

²⁰ *Financial Times*, London, 30 August 2009.

As to the future of Afghanistan's statehood and of reaching an effective balance among the central government, regional, clan and tribal leaders, such problems, in the opinion of 'exit strategy' supporters, should be left for future negotiations and agreements between national political forces and movements themselves.

Quite possibly, they admit, the result of this process may become an actual fragmentation of the country. The maximum what the US may achieve in that case – is to extend political, economic and military support to their allies in Kabul and, possibly, in a few other cities of the country.

Conclusion

The US Administration continued in 2009 to pursue a hard line policy aimed at active fighting Islamist extremists, especially followers of Al Qaeda.

Those supporting this policy warn that any deviation from it or lessening of pressure on extremists will undoubtedly be interpreted by the latter as a sign of the US weakness and inconsistency and will cause serious damage to the US strategic interests in this part of the globe.

On taking the office of the US President Barack Obama promised to achieve success in implementing the AFPAC strategy by using every possible means and methods. Following this course the US government carried out a number of important measures of political, military and economic nature.

One of them became a military operation, the largest one since the beginning of the US campaign in Afghanistan, in the Helmand river valley in the south-western part of the country. About 4000 US marines took part in it alongside with British and Afghan armed units. Their activities were coordinated with the Pakistani army whose task was to prevent attempts of Islamists to retreat to the territory of Pakistan. Apart from a merely military aspect of this operation which was called upon to restore the earlier lost control over this strategically important region of the country, its no less important goal was the destruction of poppy plantations and production of narcotics which served as a source of large revenues for the Talibs²¹.

²¹ *New York Time*, 2 July 2009.

In spite of the effort the USA has failed in 2009 to achieve any sizeable progress in the resolution of the conflict.

An acclaimed military operation in southern Afghanistan confronted with serious problems. Islamist militants avoiding direct confrontation with the forces of the pro-government coalition launched an active partisan warfare and succeeded in causing sizeable material and human losses to their adversaries. As a result total ISAF human losses in 2009 became the heaviest since 2001.

As to the local population, its majority, according to Ahmad Massoud, Governor of the Helmand Province, continued to support the Taliban either because they earn most of their income from growing poppy, or for religious reasons, or because they reject the foreign military presence²². As a result the US and their allies failed to establish an effective control over the zone of hostilities while, as the chairman of the US Joint Chiefs of Staff, Admiral Mike Mullen admitted, the general situation in Afghanistan continued to deteriorate²³.

Nor was political stabilization in the country achieved through holding presidential elections at the end of August. Military attacks of the Islamists undoubtedly affected the rate of turn out of voters, especially in the southern provinces. It was much lower than at the previous elections in 2004 (being below 50 and 70 percent correspondingly). Besides, the legitimacy of elections was undermined by numerous procedural violations, fraud and ballot stuffing.

The threat of transformation of the neighboring Pakistan into an Islamic state, if not imminent or inevitable, still remains a real possibility in the opinion of Bruce Riedel who directly participated in working out the AFPAK strategy²⁴. In any case the influence of Al Qaeda and its allies among radical Islamists is no longer confined to the regions neighboring Afghanistan but has spread to the Punjab Province and many major Pakistani cities, including Karachi. Further aggravation of social tensions and growth of Islamists' influence in those regions are facilitated by the fact that the majority of refugees who came down here from the zone of hostilities in the NWFP and tribal areas (over 80 per cent of their total number) were actually left without any normal shelter and means of existence.

²² *New York Time*, 23 August 2009.

²³ *New York Times*, 24 August 2009.

²⁴ <http://www.cfr.org/publication/19321/pakistans_existential_threat_comes_from_within.html?breadcrumb= %2Fpublication%2Fby_type%2Finterview>.

It is becoming increasingly evident that much more time and effort will be needed to improve the situation. Among other conditions it will require a long US presence in Afghanistan. Supporters of this view believe that success in Afghanistan cannot be achieved through search of compromises but only by a serious commitment to building an effective Afghan state, which, in turn, will require a decision to 'invest and endure' over a long haul²⁵.

Eight years after the antiterrorist campaign began many admit that the conflict in Afghanistan does not have a purely military solution. However, it cannot be resolved either without inflicting a devastating military defeat on Al Qaeda and Taliban followers. This requires an effective sealing of the Afghan-Pakistan border in order to prevent a free flow of Islamist militants and weapons across it. For this either a significant increase in the size of the expeditionary force or a substantial improvement in the fighting ability of the Afghan army will be needed. In any case massive additional financial expenditure and human resources will be required. The question is, however, what political, financial and military capabilities and what time the US Administration has realistically at its disposal taking into account the whole range of domestic and external factors analyzed above.

At the beginning of December 2009 President Barack Obama tried to answer this question by taking a decision to send an additional 30 thousand servicemen to Afghanistan before the middle of 2010 in an attempt to significantly improve the situation there; that would allow starting the withdrawal of US troops from that country already by the middle 2011²⁶.

The conflict in Afghanistan has already become the second longest after Vietnam in the US modern history. It is quite possible that it may become the longest one depending on what goals the US intend to pursue there and what political and material costs they will be prepared to meet for this purpose.

As to interaction of Russia, the Central Asian states and the US on the Afghan issue the progress achieved by them on cargo transit to Afghanistan may not exclude other forms and areas of their future cooperation. Thus joint action against drug traffic²⁷ or in re-

²⁵ Ashley, J., Tellis, op. cit., p. 95.

²⁶ *New York Times*, 2 December 2009.

²⁷ In this connection joining operation "Channel" carried out by Russia since 2003 against narco-threats from Afghanistan by several NATO members, including the US, as observers raises certain optimism

building the Afghan economy may be considered. Russia and the Central Asian states may also increase their role in the political settlement of the Afghan problem by participation in finding an effective formula for forming a national government of Afghanistan that will take into account the interests of the whole spectrum of national political forces, ethnic and religious groups.

6. NUCLEAR PAKISTAN: POSSIBILITIES OF NEUTRALIZING THE THREATS TO THE NPT REGIME

Vladimir MOSKALENKO, Petr TOPYCHKANOV

Pakistan emerged in 1947 on confessional grounds as a state for Muslims as a result of the national liberation movement in British India. Up to 1971 it existed as two wings separated by a 1500 km stretch of Indian Territory. After the 1971 Indian-Pakistani war, its eastern part became the state of Bangladesh.

Pakistan participated in military blocks (SEATO in 1955–1973, CENTO in 1955–1979) and developed strategic partnerships with the USA and later China.

The relations between Pakistan and India incorporate a large set of problems (in particular, unresolved status of Kashmir and utilization of water resources of the Indus basin). These and other differences resulted in several wars and conflicts and have drawn the attention of the world community to the South Asian region.

Another factor which propelled Pakistan into the global arena is Afghanistan, especially after the entry of the Soviet troops into that country. (In the early 1980s Islamic states granted Pakistan the right to represent the Muslim world in the United Nations). Today, the interdependence of problems of Pakistan and those of Afghanistan even produced the new term of ‘AFPAK’.

Pakistan got in the focus of everyone’s attention due to the acquisition of nuclear weapons, as well as involvement of its citizens led by the ‘father’ of the Pakistani nuclear bomb Abdul Qadir Khan in setting up of an international nuclear materials and a technologies proliferation network¹.

¹ Pakistan is the only Muslim state possessing nuclear weapons. This is reflected in a wide-spread term often used in reference to its arsenal – ‘the Mus-

Pakistan's nuclear choice

In its military nuclear program, Pakistan followed in India's track, literally step in step. Even Pakistan's response to the Indian nuclear test of May 1998 was fully symmetrical: in two days, Pakistan exploded six nuclear devices (India carried out five explosions in 1998, earlier – in 1974, it conducted a 'peaceful nuclear explosion').

Prior to the nuclear weapon tests, Pakistan advanced a range of proposals of political and propaganda nature, possibly as an attempt to hold India back from developing a military nuclear program and thus avoid a costly and hazardous option. In particular, Pakistan proposed at different times to create a South Asian nuclear- or missile-free zone, to adopt an Indian-Pakistani declaration on foregoing the acquisition of nuclear weapons and placing all nuclear sites in India and Pakistan under the IAEA full-scope safeguards. Pakistan offered to join the NPT together with India as non-nuclear-weapon states (NNWS) and join the CTBT (together with India). After Pakistan became convinced of India's movement down the nuclear armament path, it started in the mid-1970s the development of its own nuclear military program (following the defeat in the 1971 India-Pakistan war, which resulted in the creation of Bangladesh and the Indian nuclear test of 1974).

By that time, Pakistan was able to achieve a certain progress in the nuclear power production. Its interest in nuclear power plants was conditioned by insufficient resources. Just 20 percent of Pakistan's energy resources come from inside the country while the remaining 80 percent are imported. The operation of Tarbela Dam, the largest hydroelectric facility in the country, is complicated by an unresolved dispute with India over the utilization of the water resources of the Indus basin. Its hydroelectric power industry is affected by irregular precipitation patterns. During draughts, the authorities have to save energy and resort to blackouts in the cities.

Pakistan began to develop its nuclear energy industry in the mid-1950s. In launching a military program, it was short of both a scientific and technical base and raw materials.

lim Bomb'. At present Pakistani leaders regard this term as discriminatory. 'No one else's bomb is called Hindu, Jewish, Christian, capitalist, and communist, yet our bomb becomes 'Muslim' as if it makes it illegitimate. The idea is illogical and essentially racist". See: Musharraf, P., *In the Line of Fire. A Memoir*, London, 2006, p. 286.

In 1965, Pakistan put in operation a 10-MW research reactor that used US-supplied fuel. In 1972 in Karachi, capital of the Sindh province, the first 125-MW-nuclear power facility KANUPP (Karachi Nuclear Power Plant) was put in service (built with Canadian assistance). China assisted in constructing the 300-MW Chashma power plant near Pakistan's capital Islamabad. It started operation in 2000. All these power plants have been placed under IAEA safeguards.

As a whole, nuclear plants supply about 2.3 percent of the country's electricity. Back in the early 1990s, it was planned to increase the share of nuclear stations in generating electricity from 2 to 10 percent. Pakistan is planning to build ten nuclear power stations in the coming 20 years. (Given the failed projects of the early 1990s; serious breaches of the nonproliferation regime that came to light in the beginning of the 2000 and internal political and economic instability, these plans are hardly realistic).

Apart from constructing nuclear power plants, Pakistan was extracting uranium ore which is processed in Dera Ghazi Khan and Issa Khel facilities (Punjab province, 1978 and 1990, respectively). Uranium enrichment is carried out in Kahute (Punjab, from 1984), its conversion – in Islamabad (from 1986) and manufacturing of the uranium fuel – in Chashma (Punjab, since 1986)². In the 1970s, a plutonium production facility was built in Chashma. France, which carried out this construction, terminated its cooperation with Pakistan in 1978 because by that time, Pakistan's nuclear weapon choice had become apparent. Neither of these facilities had been placed under IAEA safeguards.

In the course of the civilian nuclear program development, Pakistan created a scientific and technological base and other requisite conditions for transition to the military program. This transition did not happen exclusively due to the Indian factor. Pakistan sought to strengthen its position with Islamic states through becoming the first state in the possession of nuclear weapons. It secured assistance from wealthy Arab states. Funds came from Saudi Arabia, Libya and the United Arab Emirates.

Pakistan also got assistance from China and the DPRK. Cooperation with North Korea possibly contributed to Pakistani achieve-

² <http://www-nfcis.iaea.org/NFCIS/NFCISMain.asp?RPage=1&RightP=List> .

ments in the missile field. Pakistan contributed to the North Korean military nuclear program³.

According to some assessments, the Ghauri-1 missile is a complete copy of the North Korean No Dong rocket (range -1300 km; payload 700–1000 kg), while Ghauri-2 and Ghauri -3 are the result of a combination of North Korean and Pakistani designs⁴.

The interconnection between the Pakistani missile program and the North Korean nuclear program is currently categorically denied by the Pakistani officials⁵.

On the whole, Pakistan had been developing its nuclear weapons by great concentration of domestic resources and at the expense of the state budget. Widely known are the words of Z. A. Bhutto that ‘we will eat grass or leaves, even go hungry, but we will get a bomb of our own’.

An important role was played by A. Q. Khan who in 1972–1975 worked in the European uranium consortium ‘URENCO’ and then returned to Pakistan. He headed Project 706 in Kahute (near Islamabad) related to the industrial enrichment of uranium (in 1984 the Project was renamed ‘A. Q. Khan Research Laboratories’).

By 1987 sufficient quantities of enriched uranium were produced to make a nuclear explosive device. In late 1980s, all was in place for a nuclear test (in 1983–1984 China may have provided Pakistan with designs of a nuclear explosive device)⁶.

Unlike India, Pakistan did not possess a large manufacturing base for nuclear program development. The impasse was over-

³ In June 2002 the CIA (USA) issued a report assessing the situation on the Korean peninsula. The report noted the rapid development of the North Korean nuclear program in the second half of 1990 - early 2000 and the role played by cooperation between DPRK and Pakistan. According to it, Pakistan transferred to North Korea technologies related to developing and testing of nuclear weapons (including centrifuge blueprints). In return, it received technologies for building IRBMs. See: Hersh, S., M., ‘The Cold Test: What the Administration knew about Pakistan and the North Korean nuclear program’, *The New Yorker*, New York, 27 January 2003.

⁴ ‘Pakistan and North Korea: Dangerous counter-trades’, *IISS Strategic Comments*, Nov. 2002, vol. 8, issue 9, p. 1; Cirincione J., Wolfsthal J., B., Rajkumar M., *Deadly Arsenals: Nuclear, Biological, and Chemical Threats*, Washington, 2005, pp. 108-109.

⁵ Musharraf, P., op. cit. p. 286.

⁶ Sotnikov, V., I., *The nuclear problem in the Indian-Pakistani relations*, Moscow, 2003, pp. 50-60.

come by illegal trafficking in components and nuclear materials. Later on, the network set up by A. Q. Khan began to export these components and materials to Libya, Iran and North Korea. Top military officers, in particular, generals Mirza Aslam Beg and Jehangir Karamat, chiefs of Army Staff respectively in 1988–1991 and 1996–1998, were privy to the A. Q. Khan activities. It could not have been otherwise given the military's close supervision of the nuclear program⁷.

A thick curtain of secrecy and the absence of any civilian control allowed A. Q. Khan to engage in lucrative trafficking for a long period. The nuclear test of May 1998 complicated Pakistan's position even further.

In accordance with UNSC Resolution 1172 of 6 June 1998, the USA imposed sanctions against Pakistan and restricted many bilateral cooperation programs. The USA stopped the financing of military and technical cooperation, banned sales of dual-purpose products, suspended trade and economic assistance programs.

However, Pakistan proceeded with building up the production of nuclear materials for its warheads and improving its missile delivery systems.

A central element of Pakistan's nuclear goals has been to create an arsenal sufficient to ensure that 'any nuclear attack on Pakistan or its armed forces will be followed by adequate nuclear retaliation capable of inflicting unacceptable damage to the aggressor'⁸.

Due to the classified nature of information on the Pakistani nuclear forces, estimates of numbers of nuclear explosive devices are very scattered and divergent. They are based on estimated amounts of weapon-grade uranium and plutonium. Some American experts believe that Pakistan possesses a stock of fissile materials sufficient to assemble about 30–50 uranium and 3–5 plutonium nuclear explosive devices⁹. According to other sources, the Pakistani nuclear arsenal amounts to 15–60 or more warheads¹⁰.

⁷ Musharraf, P., op. cit. p. 285.

⁸ Statement by Prime Minister Nawaz Sharif, *Dawn*, 5 September 1999.

⁹ Albright, D., India's and Pakistan's Fissile Material and Nuclear Weapons Inventories end of 1999, Washington, 1999, pp. 1-2; Cirincione, J., Wolfsthal, J., B., Rajkumar, M., op. cit., p. 207.

¹⁰ Pikayev, A., A., 'Non-strategic nuclear weapons', *Nuclear proliferation: new technologies, weapons, and agreements*, ed. by Arbatov A., Dvorkin V., Moscow, 2009, p.133.

Table 1. Pakistan’s strategic nuclear forces

Stockpiles of weapon-grade nuclear materials, 2005 (estimate)	
Weapon-grade plutonium (kg) (number of warheads)	36–80 (10–20)
Enriched uranium (kg) (number of warheads)	1100–1400 (50–110)
Nuclear weapons delivery means, 2007	
Aviation (range, km; payload, kg)	21 F-16A (1600; 4500); 11 F-16B (1600; 4500).
Tactical missiles (range, km; payload, kg)	95 Hatf I (70–100; 450–500); ? Abdali/Hatf II (180–200; 450–500); 50 Ghaznavi/Hatf III (90; 500–700); 6 Shaheen/Hatf IV (>450; 750–1000).
Strategic missiles (range, km; payload, kg)	15–20 Ghauri/Hatf V (~1300; 700–1000).

Sources: Cirincione, J., Wolfsthal, J., B., Rajkumar, M., *Deadly Arsenal: Nuclear, Biological, and Chemical Threats*, Washington, 2005, pp. 221–258; *SIPRI Yearbook 2007: Armaments, Disarmament and International Security*, ed. by Bailes A., J., K., New York, 2007, pp. 539–548; *The Military Balance. 2008*, ed. by Hackett, J., London, 2008, pp. 341, 349.

Pakistan adopted a 15-year program for equipping the three main branches of its armed force with nuclear weapons. Islamabad’s nuclear doctrine embraces the principle of the first use of nuclear weapons. Pakistan is not willing to join the NPT as a NNWS and the Comprehensive Nuclear-Test Ban Treaty (CTBT).

At the same time, it announced a unilateral moratorium on nuclear testing, expressed willingness to stop production of fissile materials for military purposes, and indicated its interest in the participation in the working out of a Fissile Material Cut-off Treaty

(FMCT). In addition, possibly for propaganda purposes, Pakistan offered to open its two nuclear sites for IAEA inspections.

Challenges to the nonproliferation regime

Pakistan's nuclear military program is inconsistent with the existing global nuclear non-proliferation regime.

Pakistan has not abandoned plans to develop its nuclear capability and there is the threat of transfers of nuclear materials, technologies or even weapons to other countries or terrorist and extremist organizations.

Regarding the risk of 'vertical proliferation', it should be stressed that Pakistani and foreign data show the absence of a rushed nuclear buildup.

Following the test of the two-stage solid-fuel IRBM Shahin-2 (Khatf-6) missile on 22 February 2008, the Chairman of the Joint Chiefs of Staff General Ehsan ul-Haq stated that for Pakistan, 'the strategy of minimum but credible deterrence plays the main role; it is the guarantee of peace in the region'¹¹.

New projects are started and developed slowly (it is especially observable in comparison with the 1970s–1980s). For example, the construction of a heavy water reactor in Khushab is carried out very slowly. Yet it is this facility that raises most concerns about a possible sharp increase in the number of plutonium explosive devices. Such a reactor working at full capacity (in the course of 220 days) can annually produce over 200 kg of weapon-grade plutonium, which is enough for manufacturing 40 or 50 plutonium warheads¹².

Under current complex political and economical conditions, Pakistan is not able to allocate sufficient resources for the development of its nuclear potential. The figures of the state budget suggest that major military construction is not taking place¹³.

¹¹ Iqbal, T., 'Pakistan tests upgraded Shaheen II', *Pakistan Defence*, 22 February 2007.

¹² Albright, D., Brannan, P., *Commercial Satellite Imagery Suggests Pakistan is Building a Second, Much Larger Plutonium Reactor: Is South Asia Headed for a Dramatic Buildup in Nuclear Arsenals*, Washington, 2006.

¹³ Topychkanov, P., V., 'Pakistan's armed forces: creation, present state and functions', *Ekspert vooruzhenii*, 2008. № 4 (71), pp. 14-15.

The situation is more complicated in respect to 'horizontal proliferation'. In the first place, this subject is associated with the Khan network and possible North Korean or Iranian contacts in the nuclear sphere. It is hard to imagine that Pakistan and North Korea or Iran, which are all under the magnifying glass of the international community, would risk pursuing these activities right now. Such contacts would be extremely undesirable for Pakistan which is striving to repair its reputation after the uncovering of the Khan network.

As for the Khan network, despite the disruption of its major links, some of its elements, especially outside of Pakistani borders, may be still functioning¹⁴. This network was connected to other nuclear 'black markets' some of which are still in existence (these markets, as a rule, spring around states willing to develop their nuclear programs but lacking resources or unwilling/unable to participate in open international cooperation). At different times, these markets emerged in India, Iraq, Iran, Libya or North Korea. Besides, in some cases, other countries were also involved in illegal trafficking in nuclear materials and technologies: Argentina, Brazil, Egypt, Israel, Syria, South African Republic, etc, as well as firms from Australia, Germany, Malaysia, the USA, Switzerland, etc.¹⁵.

It is obvious that the main problem of the horizontal proliferation is not A. Q. Khan but the lack of effective instruments of international control over storage and transportation of nuclear materials.

After the 'Khan network' was uncovered, Pakistan was compelled to introduce certain restrictions in the nuclear sphere. In May 2004, in response to the UNSC appeal to members of the international community to toughen the laws banning the export of WMD and related technologies (UNSCR 1540), Pakistan enacted legislation 'Export Control on Goods, Technologies, Material and Equipment related to Nuclear and Biological Weapons and their Delivery Systems' Offenders face imprisonment for a term up to fourteen years, fine of five million rupees and confiscation of property and assets¹⁶.

It would help if Pakistan and India join the Proliferation Security Initiative (PSI) as well as international nuclear and missile export control arrangements.

¹⁴ 'A. Q. Khan Network still alive: US think tank', *Times of India*, 8 September 2006.

¹⁵ Nuclear Black Markets: *Pakistan, A .Q. Khan and the rise of proliferation networks. A net assessment*, ed. by Fitzpatrick, M., London, 2007, pp. 43-64.

¹⁶ *Dawn*, 15 September 2004.

Other risks associated with the de-facto nuclear status of Pakistan may be summarized in the following way: 1) Possibility of a theft of nuclear weapons or weapon-grade nuclear materials by extremist or terrorist organizations; 2) Possibility of transfers of sensitive information by a Pakistani nuclear specialists to another state, extremist or terrorist organization; 3) Attacks on nuclear facilities by substate entities; 4) Consequences for nuclear sites in the event of a war between Pakistan and India; 5) An unauthorized launch of a nuclear-tipped missile; 6) Political destabilization bringing into power extremists¹⁷. The greater part of these risks does not appear currently highly probable.

As an example, extremist groups have never gained any broad public support in Pakistan (in all Pakistan's history, they never won more than 11 percent of the electoral vote). But even in the event they seize political power, nuclear facilities will still remain under control of the military.

Possibility of unauthorized launch of a nuclear missile is acknowledged both in India and Pakistan. That is the reason why both states not only continue on a regular basis to exchange information on nuclear facilities, according to the 1991 Bilateral Agreement of Non-Attack against Nuclear Installations and Facilities, but also undertake further efforts to reduce possibility of a nuclear conflict.

In February 2007 India and Pakistan signed an Agreement on Reducing the Risk from Accidents Relating to Nuclear Weapons. Its purpose is to allay the threat of nuclear confrontation and put in place reliable systems of nuclear command and control in India and Pakistan. Under the agreement, the parties commit themselves to establishing a reliable system for the across-the-border notification on 'false alarms', 'accidents', and 'inexplicable incidents' which could trigger nuclear retaliation from the neighbor.

In considering the threats related to a terrorist attack on Pakistani nuclear installations or a possible theft of nuclear materials or technologies¹⁸, it should be kept in mind that over recent years Pakistan achieved a significantly higher level of security for its nuclear facilities, which now feature three levels of protection. The first

¹⁷ Ali, Z., *Pakistan's Nuclear Assets and Threats of Terrorism: How Grave is the Danger?*, Washington, 2007, pp. 8-9.

¹⁸ Skosyrev, V., 'Ataka na yadernye hranilishcha bliz Islamabada' [The attack against nuclear storage facilities near Islamabad], *Nezavisimoye voennoe obozrenie*, 2009, № 30 (581), p. 5.

level includes the on-site protection of laboratories and other nuclear industrial or military facilities. The second level is under the supervision of the special-purpose nuclear security group made up of trained servicemen and headed by a 2-star general. This unit is part of the Strategic Plans Division which in its turn is part of the National Command Authority headed by the President – top command authority for strategic forces whose key positions are staffed by the military. This protection level applies to the nuclear facilities with a workforce of around 8–10 thousand people. The third, so to say ‘external’, protection level is provided by the most powerful of Pakistani special services – Inter-Service Intelligence which established Technical Department headed by a brigade-general who is in charge of the surveillance systems on the nuclear sites (e.g. surveillance cameras). Equipment for this department is provided by foreign states, in particular, the USA. Every personnel member employed in the three protection levels is subject to rigorous selection and regular checks.

In the expert view, the nuclear facilities security system put in place under P. Musharraf is fairly reliable. It has considerably reduced the threat of theft or seizure of nuclear weapons, materials or technologies¹⁹.

Most likely in this respect could be a purposeful transfer of a small amount of nuclear materials or some components by an employee from a nuclear facility.

Terrorists’ laying hands on Pakistani nuclear weapons is practically infeasible not only because the weapons are securely protected but also because, according to a tacitly accepted practice both in India and Pakistan, the weapons are stored in a disassembled state – the delivery vehicle separately from the warhead. Besides, nuclear charges are stored separately from the warhead.

Further upgrading these tacit practices would play a positive role.

Much more attention should be devoted to the prevention of an armed conflict between India and Pakistan, and, above all else, the prevention of the use of nuclear weapons. The existing nuclear confrontation in South Asia is marked by high instability. The geographic proximity of the opposing parties and absence of adequate nuclear warning and combat command systems as well as insuffi-

¹⁹ Fitzpatrick, M., *op. cit.*, p. 116.

cient carrier survivability at launch positions create a potential incentive for preemptive strike to disarm the opponent and prevent the nuclear retaliation.

Though during peace time, the forces of both sides remain at reduced combat readiness, in the event of a crisis or hostilities, they may by necessity be put into a state of heightened combat alert (nuclear explosive devices assembled, warheads fitted on missiles, missiles deployed on combat positions). If these moves become known to the other party, it may perceive them as a preparation for the attack. Faced with a fateful dilemma – launch or lose – one of the sides (or as in the case of the Iran-Iraq war – both) may make a fatal decision.

India and Pakistan should be pressed to incorporate the principle of no-first use of nuclear weapons into their respective nuclear doctrines. In this case, in South Asia there would be two states that possess nuclear weapons and are committed to a no-first-use strategy. If they join China which has already embraced this principle, the entire military and strategic regional sub-system (India-China-Pakistan) would become more stable and secure.

Another way to reduce the risk of nuclear conflict could be a reciprocal commitment by the parties not to deploy nuclear weapons in Kashmir, that is, both in the Indian state of Jammu and Kashmir and in the areas of Kashmir controlled by Pakistan. Such agreement would endow the parties with moral obligations which, in the event of a crisis situation, could block or delay taking decisions fraught with serious threats for regional and global security.

The same and even broader objectives can be achieved by an agreement to maintain nuclear-missile forces in a state of reduced readiness (i.e., turn the existing arrangement into the law) and support this arrangement with the appropriate notification procedures related to exercises, tests or operational activities.

Guarantees of these arrangements which in fact amount to the material implementation of a no-first-use arrangement can be provided by the national means of technical control of Russia and the USA and/or the UN permanent observers stationed in the military bases of the two sides. As an encouragement for these measures, Russia and the US, in addition to assistance with control, could supply India and Pakistan with technologies for control systems blocking unauthorized use of nuclear weapons.

**ANNEX. KEY DOCUMENTS OF THE RUSSIAN
FEDERATION ON NATIONAL SECURITY, DEFENSE
AND ARMS CONTROL
(JANUARY-DECEMBER 2009)¹**

Tamara FARNASOVA

1. LEGISLATIVE ACTS

Federal Law no. FZ 299 of 30 December 2008 ‘On the Ratification of the Agreement about the Peace Making Activity of the Collective Security Treaty Organization’

Passed by the SD on 26 December 2008; approved by the FC on 29 December 2008; signed by the President of the Russian Federation on 30 December 2008.

The Agreement was signed on 6 October 2007 in Dushanbe and entered into force for the Russian Federation on 15 January 2009.

Federal Law no. FZ 1 of 9 February 2009 «On the Introduction of Amendments in Article 38 of the Federal Law ‘On Conscription and Military Service’ and in Articles 23 and 28 of the Federal Law ‘On the Status of the Service Men’»

Passed by the SD on 14 January 2009; approved by the FC on 28 January 2009; signed by the President of the Russian Federation on 9 February 2009.

¹ The unofficial translation. For the details of the specific Federal Laws and Governmental Normative Acts mentioned in this Annex, see: *Sobranie zakonodatelstva Rossiiskoy Federatsii*, SZRF [Statute Book of the Russian Federation], Moscow, 2009.

Federal Law no. FZ 2 of 9 February 2009 «On the Introduction of Amendments to the Federal Law ‘On Armaments’»

Passed by the SD on 14 January 2009; approved by the FC on 28 January 2009; signed by the President of the Russian Federation on 9 February 2009.

Federal Law no. FZ 29 of 28 February 2009 ‘On the Ratification of the Protocol on the Mechanism of Rendering Military-Technical Assistance to the States Members of the Collective Security Treaty Organization on the Occasion of Emergence of a Threat of Aggression or of an Act of Aggression’

Passed by the SD on 13 February 2009; approved by the FC on 20 February; signed by the President of the Russian Federation on 28 February 2009.

The Protocol was signed in Dushanbe on 6 October 2007.

Federal Law no. FZ 53 of 9 April 2009 ‘On the Ratification of the Agreement between the Government of the Russian Federation and the Government of Brazil on the Mutual Protection of the Technologies Related to the Cooperation in the Research and Use of Outer Space for Peaceful Purposes’

Passed by the SD on 27 March 2009; approved by the FC on 1 April 2009; signed by the President of the Russian Federation on 9 April 2009.

The Agreement was signed on 14 December 2006.

Federal Law no. 76 of 28 April 2009 «On the Introduction of Amendments to the Federal Law ‘On the Federal Budget for 2009 and the Planned period of 2010 and 2011’»

Passed by the SD on 15 April 2009; approved by the FC on 22 April 2009; signed by the President of the Russian Federation on 28 April 2009.

Expenditures under Chapter «National Defense» amount to 623.447.279.7 thousand roubles in 2009.

Federal Law no. 81 of 7 May 2009 ‘On the Ratification of the Protocol regarding the Introduction of the Changes and Additions in the Agreement of 7 October 2002 on the Legal Status of the Collective Treaty Organization’

Passed by the SD on 24 April 2009; approved by the FC on April 2009; signed by the President of the Russian Federation on 7 May 2009. The Protocol was signed in Dushanbe on 6 October 2007.

Federal Law no. FZ 85 of 7 May 2009 ‘On the Ratification of the Second Protocol on the Introduction of Additions to the Agreement on basic principles of Military-Technical Cooperation between the States Parties to the Collective Security Treaty of 15 May 1992 and of the Second Protocol on the Introduction of Additions to the Protocol on the Procedure of the Control over the Targeted Use of the Defense Products, supplied under the Agreement on the Basic Principles Of the Military-Industrial Cooperation between the States parties to the Collective Security Treaty of 15 May 1992’

Passed by the SD on 24 April 2009; approved by the FC on 29 April 2009; signed by the President of the Russian Federation on 7 May 2009.

The above mentioned documents were signed in Dushanbe on 6 October 2007.

Federal Law no. FZ 320 of 5 October 2009 «On the Introduction of Changes in the Federal Law ‘On the Federal Budget for 2009 and for the Planned Period of 2010 and 2011’»

Passed by the SD on 25 September 2009; approved by the FC on 29 September 2009; signed by the President of the Russian Federation on 5 October 2009.

Federal Law no. FZ 236 of 13 October 2009 ‘On the Ratification of the Agreement between the States Members of the Shanghai Security Organization on the Holding of the Joint military Exercises’

Passed by the SD on 25 September 2009; approved by the FC on 7 October 2009; signed by the President of the Russian Federation on 13 October 2009.

The Agreement was signed in Bishkek on 27 June 2007.

Federal Law no. 237 FZ of 13 October 2009 ‘On the Ratification of the Agreement on the Protection of the Secrete Information in the Framework of the Regional Counterterrorist Structure of the of the Shanghai Security Organization’

Passed by the SD on 25 September 2009; approved by the FC on 7 October; signed by the President of the Russian Federation on 13 October 2009. The Agreement was signed in Tashkent on 17 June 2004.

Federal Law no. 238 FZ of 13 October 2009 'On the Ratification of the Agreement on the Procedure for the Organization of Joint Counterterrorist Exercises of the States Members of the Shanghai Cooperation Organization'

Passed by the SD on 25 September 2009; approved by the FC on 7 October; signed by the President of the Russian Federation on 13 October 2009. The Agreement was signed in Dushanbe on 28 August 2008.

Federal Law no. 252 FZ of 09 November 2009 «On the Introduction of the Changes in the Federal Law 'On Defense'»

Passed by the SD on 23 October 2009; approved by the FC on 30 October; signed by the President of the Russian Federation on 9 November 2009.

Art.10 was supplemented by the following paragraph. For the purposes of the protection of the interests of the RF and its citizen and the maintenance of international peace and security the formations of the Armed Forces of the Russian Federation may be operationally employed outside of the territory of the RF in accordance with generally accepted principles and norms of international law, international treaties and the present Federal Law for the solution of the following tasks: 1. the repulsion of the armed attack on the formations of the Armed Forces of the RF, other troops and organs, deployed outside the territory of the Russian Federation; 2) the repulsion or prevention of the armed attack on other state which addressed to the RF a corresponding request; 3) the protection of the citizen of the RF outside the territory of the RF from the armed attack; 4) the fight against the piracy and the protection of navigation.

Art. 10¹ is supplemented by the provisions on the operational employment of the formations of the Armed Forces of the RF outside the territory of the RF. The President of the Russian Federation decides on the operational employment of the formations of the Armed Forces on the basis of the corresponding ordinance of the Federation Council of the Federal Assembly.

Federal Law no. 306 FZ of 28 November 2009 ‘On the Ratification of the Agreement between the Russian Federation and the European Union on the Participation of the Russian Federation in the Military Operation the Republic of Chad and the Central African Republic’

Passed by the SD on 20 November 2009; approved by the FC on 25 November 2009; signed by the President of the Russian Federation on 28 November 2009.

The ratified Agreement was signed in Brussels on 5 November 2008.

Federal Law no. 308 FZ of 2 December 2009 ‘On the Federal Budget for 2010 and for the planned Period 2011 and 2012’

Passed by the SD on 20 November 2009; approved by the FC on 25 November 2009; signed by the President of the Russian Federation on 2 December 2009.

For full text of the document see: *Sobranie zakonodatelstva Rossiiskoy Federatsii*, SZRF [Statute Book of the Russian Federation], Moscow, 2009, no. 49, (parts I and II).

2. NORMATIVE ACTS

Ordinance no. 1079 of the Government of the Russian Federation of 30 December 2008 ‘On Improving the State Regulation of the External Economic Activity regarding separate Kinds of Goods and Technologies for the Purposes of Ensuring National Security’

The list and content of the changes are laid out in the Supplement attached to this Ordinance.

Ordinance no. 21 of the Government of the Russian Federation of 13 January 2009 ‘On the Presentation to the President of the Russian Federation for the submission for the ratification of the Agreement on the Procedure of the Operational Deployment, Use and Comprehensive maintenance of the Collective Forces of Rapid Deployment for the Central Asian Region of Collective security’

The agreement was signed in Minsk on 23 June 2006.

Protocol to the Agreement between the Russian Federation and United States of America regarding Safe and Reliable Transportation, Storage and Destruction of Weapons and Prevention of the Proliferation of Weapons

The stated Protocol entered into force on 29 December 2008. For the text of this document, see: *Sobranie zakonodatelstva Rossiiskoy Federatsii*, SZRF [Statute Book of the Russian Federation], Moscow, 2009, no. 6.

Ordinance no. 266 of the Government of the Russian Federation of 30 March 2009 ‘On the Introduction of the Changes in the Status on Exports and Imports of Special Nuclear Materials, Equipment, Special Non-nuclear Materials and Corresponding Technologies’

The Ordinance contains a reference to the export of nuclear goods and technologies to the Republic of India, which may be carried out if they are to be used only in the facilities, put under the IAEA safeguards.

Ordinance no. 311 of the Government of the Russian Federation of 8 April 2009 ‘On the Approval of the Rules of Determination of Timelines of the Processing of the Goods Exceeding Two Years in Relation of Armaments and Military Equipment’

The Ordinance covers armaments and military equipment produced on the territory of the Russian Federation and supplied to foreign consumers by the companies involved in international arms transfers.

The text of the Rules is attached to the Ordinance.

Decree no. 537 of the President of the Russian federation of 12 May 2009 ‘On the Strategy of National Security of the Russian Federation till 2020’

The full text of the Strategy is attached. It contains six sections: general provisions; contemporary world and Russia; the current condition and trends; national interests of the Russian Federation and strategic national priorities; measures to ensure national security; institutional, normative, legal and informational foundations of the implementation of the Strategy; major characteristics of the status on national security.

Directive no. 708 of the Government of the Russian Federation of 25 May 2009 ‘On the Signing of the Memorandum on Mutual Assistance between the Government of the Russian Federation and the Government of the Republic of Mali on the Cooperation in the Field of the Fight against Terrorism and Transnational Organized Crime’

Ordinance no. 466 of the Government of the Russian Federation of 11 June 2009 ‘On the Submission to the President of the Russian Federation of the Proposal for the Signing of the Convention on Cooperation against Terrorism’

The Ordinance contains the text of the Convention.

Ordinance no. 467 of the Government of the Russian Federation of 15 June 2009 ‘On the Presentation to the President of the Russian Federation for the Submission for the Ratification of the Agreement on Ensuring Protection of Secret Information within the Framework of the Regional Counterterrorism Structure of the Shanghai Cooperation Organization’

The stated Agreement was signed in Tashkent on 17 June 2004.

Ordinance no. 468 of the Government of the Russian Federation of 15 June 2009 ‘On the Presentation to the President of the Russian Federation for the Submission for the Ratification of the Agreement on the Procedure of the Organization and for Conducting joint Counterterrorism Exercises by the States Parties to the Shanghai Cooperation Organization’

The stated Agreement was signed in Dushanbe on 28 August 2008.

Directive no. 846-p of the Government of the Russian Federation of 22 June 2009 ‘On the Signing of the Agreement between the Government of the Russian Federation and the government of the Federative Republic of Nigeria on Cooperation in the Field of the Use of Atomic Energy for Peaceful Purposes’

Directive no. 912-p of the Government of the Russian Federation of 11 July 2009

The Directive deals with the Russian supplies of low-enriched uranium to the U. S.A. and the determination of the new mechanism

of the price formation of the unit of separation work for the years 2010–2013.

Ordinance no. 573 of the Government of the Russian Federation of 16 July 2009 ‘On the Approval of the Status regarding the import into the Russian Federation and the export from the Russian Federation of Narcotic Means, Psychotropic Substances and Their Procurement, removed from Illegal Trafficking for the Purposes of their Use in expert activities’

The text of the stated Status is attached.

Directive no. 984-p of the Government of the Russian Federation of 16 July 2009 ‘On the Approval of the Agreement between the Governments of the States Parties of the Shanghai Cooperation Organization in the Field of Ensuring of International Informational Security’

The Agreement was signed in Yekaterinburg on 16 June 2009.

Ordinance no. 770 of the Government of the Russian Federation 2 October 2009 ‘On the Presentation to the President of the Russian Federation for the Submission to the Ratification of the Treaty of the States participants of the Community of Independent States on Combating the legalization (Washing) of Criminal Incomes and the Financing of Terrorism’

The mentioned treaty as signed in Dushanbe on 5 October 2007.

Directive no. 1410-p of the Government of the Russian Federation of 22 June 2009 ‘On the Signing of the Agreement between the Government of the Russian Federation and the Government of the Republic of Tajikistan on Cooperation in Combating Illegal Trafficking in Narcotic Means, Psychotropic Substances and Their Abuse’

The document approves the draft of the Agreement tentatively elaborated in cooperation with the Tajikistan and authorizes the Ministry for Foreign Affairs to sign it.

Ordinance no. 949 of the Government of the Russian Federation of 23 November 2009 ‘On the Competent Organ and the Communication Post Provided in the Convention on Early Notifica-

tion of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency'

The state corporation on nuclear energy 'Posatom' was approved by this Ordinance as the Competent Organ and the Communication Post in connection with the implementation by the Russian Federation of its obligations under the 1986 Convention on Early Notification of a Nuclear Accident and the 1986 Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency.

ABOUT THE CONTRIBUTORS

ARBATOV, Alexei – Corresponding Member of the Russian Academy of Sciences, Dr. Sc. (Hist.), Director of the IMEMO Center for International Security

ARBATOVA-ALEXANDROVA, Nadia – Dr. Sc. (Political Sciences), Head of the Department for European Political Studies at the IMEMO

CHUFRIN, Gennady – Corresponding Member of the Russian Academy of Sciences, Dr. Sc. (Hist.), Professor, Councilor of the RAS

DVORKIN Vladimir – Dr. Sc. (Technical Sciences), Principal Researcher at the IMEMO Center for International Security

FARNASOVA, Tamara – Senior Researcher at the Disarmament and Conflict Management Department of the IMEMO Center for International Security

KALIADINE, Alexandre – Dr. Sc. (Hist.), Principal Researcher at the IMEMO Center for International Security

MOSKALENKO, Vladimir – Dr. Sc. (Hist.), Professor, Principal Researcher at the Institute for Oriental Studies of the Russian Academy of Sciences

TOPYCHKANOV, Petr – Cand. Sc. (Hist.), Researcher at the IMEMO Center for International Security.

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