

**International Security
Nonproliferation
Arms Control**

DIGEST OF THE RUSSIAN JOURNAL

YADERNY KONTROL

(NUCLEAR CONTROL)

Volume 7, № 2

Spring 2002

**PUBLISHER: PIR CENTER FOR POLICY STUDIES
IN RUSSIA**

Moscow, 2002

Yaderny Kontrol (Nuclear Control) Digest. Volume 7, No.2. Spring 2002

Contents

<u>Editorial</u>	3
Strange War?	
<u>Hot Topic</u>	4
US-Russian November Summit: An Important but Insufficient Step. By Yury Fedorov and Roland Timerbaev	
<u>Analysis</u>	8
Control of Sub-Strategic Nuclear Weapons: Problems and Prospects. By Yury Fedorov	
<u>Analysis</u>	17
Cycles of NATO Enlargement. By Anatoly Shevtsov and Alexei Izhak	
<u>Commentary</u>	28
International Financial and Technical Assistance to Russia in Strengthening the Nonproliferation Regime. By Valery Syomin	
<u>Commentary</u>	31
The Import of Spent Nuclear Fuel to Russia. By Vladimir Rybachenkov	
<u>Commentary</u>	35
The Time to Enhance Cooperation on Broad Range of Security Issues. By Vladimir Orlov and Roland Timerbaev	
<u>PIR Center News</u>	39
Winter 2001/2002	
<u>Summary</u>	
<i>Yaderny Kontrol Journal</i> , No. 5, 2001	43
<i>Yaderny Kontrol Journal</i> , No. 6, 2001	43
<i>Yaderny Kontrol Journal</i> , No. 1, 2002	45

**DIGEST OF THE RUSSIAN JOURNAL
YADERNY KONTROL
(NUCLEAR CONTROL)**

International Security. Nonproliferation. Arms Control.

Volume 7

N 2 (22)

Spring 2002

Published four times a year since 1996

Contains selected analytical articles from *Yaderny Kontrol*, a journal published in Russian six times a year

Vladimir A. Orlov, Editor-in-Chief
Dmitry Polikanov, Editor
Roland Timerbaev, Senior Advisor
Vladimir Dvorkin, Senior Advisor
Vasily Lata, Advisor
Yury Fedorov, Analyst

Dmitry Kovchegin, Staff Writer
Anton Khlopkov, Correspondent
Elena Polidva, Secretary
Vyacheslav Zaytsev, Accountant
Oleg Kulakov, Layout
Natalya Kharchenko, Distribution

Printed in Russia

Address: Trekhprudny Per., 9, bld.1b

Moscow 103001, Russia

Phone: +7+095-234-0525

Fax: +7+095-234-9558

E-mail: info@pircenter.org

Internet: <http://www.pircenter.org>

Subscriptions worldwide (Russian and English editions): please, send requests to fax +7+095-234-9558 or e-mail: info@pircenter.org. Checks or wire transfers. Express mail delivery.

Circulation:

Russian journal: 2,000 copies

English Digest: 500 copies

Signed for printing

on February 10, 2002

- © PIR Center, 2002. All rights reserved. This publication may not be reproduced, stored in a retrieval system, or transmitted in whole or in part, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without written permission of the Publisher. To request permission, please, contact the PR Department: info@pircenter.org. For educational purposes, permission is given free-of-charge.
- Statements of fact and opinion expressed in the *Yaderny Kontrol Digest* are responsibility of the authors alone and do not imply the endorsement of the editors and the PIR Center
- The editors wish to express special thanks to the Center for Nonproliferation Studies at the Monterey Institute of International Studies and Carnegie Corporation of New York for making this publication possible through its support of the PIR Center for Policy Studies in Russia

Publisher: PIR Center for Policy Studies in Russia
Prof. Yury E. Fedorov, Executive Council Member
Col.-Gen. (ret.) Yevgeny P. Maslin, Executive Council Member
Dr. Vladimir A. Mau, Executive Council Member
Dr. Vladimir A. Orlov, Director, and Executive Council Member
Acad. Yury Ryzhov, Executive Council Member
Amb. Roland M. Timerbaev, Executive Council Chair

Yaderny Kontrol (Nuclear Control) Digest. Volume 7, No.2. Spring 2002

Editorial

STRANGE WAR?

The large-scale war against terrorism is likely to be long, difficult and somehow special. The victory over “Taliban” regime and deployment of international force in Afghanistan make only the top of the iceberg of needed international efforts to combat extremists and fanatics, whose weapon is terror, including massed terror. The true reasons for this war and hence, its meaning, objectives, forms and methods are much more complicated than it may seem from the current media reports.

In fact, the war against terrorism is a civil war of the globalization era. Its battlefields are not only canyons and mountainous terrains of Afghanistan or other regions of the South, but also city jungles of the large urban areas in the North, including Russian cities. It is impossible to gain a victory over terrorism with military methods and policing. One should think how to eradicate the roots of this phenomenon, to bridge the gap between pre-industrial and post-industrial societies values. So far there are no realistic prospects for that. Moreover, this gap is growing. Therefore, the urgent task today is to contain and repel the extremism, to limit its criminal encroachments.

There can be no double standards in the fight against terrorism. There can be no exceptions in this struggle. One cannot combat *Al Qaida* and neglect the activities of Irish, Colombian, Palestinian, Chechen, or other terrorists of any political sort – red, green, or black. There can be no compromises, for the culture of political compromise is incompatible with the culture of political extremism, whose slogan is ‘to win or to die’.

By rendering unequivocal support to the US anti-terrorist campaign, President Vladimir Putin has made a fundamental and difficult choice. He preferred common interests with the United States to differences, whatever important such differences might seem a couple of months ago. But what is more important, Putin has identified Russia’s place on the geopolitical map of the world. This means a retreat from the previous foreign policy concept, which implied the solidarity with all forces fighting against so called “unipolar world”.

Nonetheless, it is still not clear how sustainable this policy will be. Anti-American sentiment is quite strong and deep in some part of the Russian elite. These are deeply rooted ideological myths of the Communist epoch, the nostalgia of some groups, whose high status depended on the confrontation typical of the Cold War. And if such views and interests begin to dominate again the Russian policy, it may be reduced to hopeless and unscrupulous balancing between the extremists and fanatics, on the one hand, and the forces that confront them, on the other. Such tactics would satisfy neither of the warring parties. One can hardly imagine a more dangerous situation.

Finally, the confrontation between terrorism and modern civilization is the confrontation between democracy and new forms of totalitarian rule. This is why it is unacceptable to sacrifice democratic freedoms and human rights for the sake of security and defeat of terrorists.

Hot Topic**US-RUSSIAN NOVEMBER
SUMMIT: AN IMPORTANT BUT
INSUFFICIENT STEP****by Yury Fedorov,
and Roland Timerbaev
PIR Center****[This article was originally published in
Russian in *Yaderny Kontrol*, No. 6, Vol. 7,
November-December, 2001]**© *Yaderny Kontrol*, 2001. All rights reserved
© PIR Center, 2001. Translation into English.
Abridged version

On November 12-14, 2001, Presidents Putin and Bush met in Washington and in Crawford (Texas) to discuss a wide range of bilateral and international issues. The results of the summit were reportedly quite modest, as mass media and many experts concluded. Perhaps, this was partly a disillusion caused by great expectations before the summit – there had been rumors that the parties might come to an agreement on amending the ABM Treaty. However, this did not happen and the outcome of the summit did not attract close attention of international media and international expert community.

Meanwhile, the very fact of holding the summit in such complicated situation in the aftermath of September 11 and the documents signed during the summit, and what is more, its climate indicated the significance of the event. In early 2001, the prospects for US-Russian interaction were gloomy and the confrontation was slightly increasing. The crisis (that might have been caused by the US possible abrogation of the ABM Treaty and Russia's countermeasures) was approaching. Among these countermeasures were the withdrawal from START Treaties, the INF Treaty, and the CFE Treaty.

The US-Russian relationship began to change for the better after the first Bush-Putin summit in Slovenia in summer 2001. One may assume that the leaders might agree that the contradictions, whatever serious, should not lead to a new round of confrontation. Further development of US-Russian relations proves this fact. This relationship followed

two major trends. On the one hand, the parties were seeking solutions to complicated issues. On the other hand, they gave a priority to the areas where their interests coincided, above all to the joint counter-terrorism activities.

The summit approved a number of important documents, including the Joint Statement on a New Relationship between the United States and Russia. 'Our countries are embarked on a new relationship for the 21st century, founded on a commitment to the values of democracy, the free market, and the rule of law. The United States and Russia have overcome the legacy of the Cold War. Neither country regards the other as an enemy or threat.'

The establishment of new relations, of new trust between the two leaders is evidently an important outcome of their already fourth meeting in 2001. But how will this new relationship affect the arms control decisions? Have they facilitated the resolution of some problems, which have been aggravating US-Russian relations in the recent years? These are mainly the issues related to strategic offensive and defensive arms.

As far as the offensive arms are concerned, the Presidents noted in their joint statement the commitment to substantial strategic offensive arms reduction. George Bush declared at the joint press conference in Washington that the United States would reduce the deployed operational strategic nuclear warheads to the level of 1,700-2,200 within the next decade. And this level would meet the US security interests. Vladimir Putin praised the decision of the United States and announced that Russia set forth the radical program of further strategic offensive arms reduction (twice or three times) to the minimal level required to maintain strategic balance in the world.

In other words, two leaders agreed upon basic parameters of further strategic offensive arms reduction. This agreement can only be welcomed. The very fact that the parties speak about less than 2,000 warheads makes us hope that in the future, they may agree upon even more substantial reductions. At present, by December 5, 2001, the parties

can possess three times as many strategic nuclear warheads – 6,000 warheads and 1,600 launchers (in accordance with START I).

However, there are many questions left concerning the process of reduction. There has been no clear agreement on this so far.

President Putin stated that there were several options for strategic offensive arms reduction – to remove the warheads and put them aside (and have the so called upload potential), or to eliminate the warheads. Vladimir Putin backed the idea of developing ‘a reliable and verifiable agreement on further radical reductions in US and Russian nuclear arsenals’¹.

Condoleeza Rice, Presidential National Security Advisor, who participated in the negotiations, informed the journalists that Putin had not brought a draft treaty with him, but had made an extensive case for a detailed agreement that would require substantial further discussion. ‘We are more than willing to talk with the Russians about various levels of codification of such an agreement. We have not said, “treaty”. They have said they are interested in a treaty. But this is an open discussion.’ She added, ‘We have said, both of us, that we are prepared to make this verifiable in some form, perhaps even using some of the verification procedures out of former treaties. But nothing is off the table in the regard of what this actually looks like in the final analysis.’² Thus, one may notice a certain, or even serious progress concerning strategic offensive arms reduction.

As for the strategic defense and the ABM Treaty, the Presidents agreed in their joint statement to continue the consultations on new strategic framework for the changing global security environment. This diplomatic formula reveals the continued differences on the fate of the ABM Treaty, which is threatened by the US NMD plans. President Bush still believes that the ABM Treaty is obsolete, whereas Russia regards it as an important element of strategic stability. The United States is not willing to make some modification of the treaty, which has recently been mentioned by senior Russian officials.

President Putin stated sincerely before leaving Texas that Russia and the United States had different approaches toward the methods of achieving the common goal, i.e. the ABM Treaty issues. He argued that the key objective of his visit to the United States was to build trust between two nations. Putin maintained that if Russia and the United States continued to follow this course, they would find the solution to the problem of the ABM Treaty. President Bush emphasized that ‘We have a difference of opinion, but our differences will not divide us.’

Washington Post characterized the outcome of the summit, as one of the ‘greatest disarmaments in human history’. Its editorial continued, ‘if Mr. Bush and Mr. Putin are really to achieve that breakthrough [...], one more step is essential: a written, verifiable accord that will spell out their commitments on offensive as well as defensive weapons, and their cooperation in preventing the further proliferation of nuclear arms.’ To prove this statement, the newspaper maintains, ‘The recent progress in relations seems to hinge on the personal chemistry between the two presidents.’ But ‘presidents come and go in both countries; a relationship must be built that can survive such changes. Verification matters because it will allow the United States to monitor, over time, what happens to the Russian warheads and the fissile material in them a crucial question while terrorists and rogue governments are aggressively seeking to capture that material. By making formal commitments to Russia, the United States will also be able to assure other key states around the world, such as China, about the size and shape of its nuclear arsenal as well as of any missile defenses. The absence of any such commitments or controls would likely encourage a steady buildup of nuclear weapons by China and possibly other states, just as happened before the beginning of nuclear arms control 30 years ago.’ The article concludes, ‘It is good that Mr. Bush and Mr. Putin are looking each other in the eye. But they do still need to write it down.’³

Washington Post gives the best (at least, on the US part) acknowledgement of the importance of legally binding and verifiable agreements in such sensitive area affecting the fundamental security interests of both states, as arms control and disarmament. But Russia

is also interested in such agreements. Moscow would like to be sure that the United States reduces its offensive arms to the ceilings declared by President Bush and complies properly with the would-be mutually acceptable agreement on the ABM Treaty. Moscow wants no less than the United States to have China and other nations reassured that Russia and the United States implement their commitments. This would be an important step to prevent China and other nations from building up their missile and nuclear arsenals under the pretext of existing uncertainty about the nuclear reductions of two leading nuclear powers. This will also affect India's and Pakistan's positions on deployment and alerting of their nuclear explosive devices, etc.

Why the US administration prefers handshakes to agreements? It may seem that Washington does not want to have any bounds for the future and plans to change its position any time. We would like to hope that this is not true.

However, during the election campaign and after the inauguration of the new administration, the US and foreign media and public began to apprehend that Washington might resort to unilateralism and refuse totally to conclude arms control and disarmament agreements. These concerns were aggravated by the US refusal to complete the ratification of START II and to ratify the CTBT.

Tragic developments of September 11 and the establishment of the anti-terrorist coalition seemingly returned the United States back to the multilateral framework of combating international terrorism. To maintain peace and security, the United States seemingly was ready to continue joint nuclear threat reduction efforts and to seek new arms control agreements. Is it true? Has the Bush administration realized that the collective efforts are the only way to resolve the old and new peace and security issues?

Lawrence J. Korb, who served as Assistant Secretary of Defense during the Reagan administration and now is Vice President of the Council on Foreign Relations, and Alex Tiersky, Research Associate at the same

council, argued in *Arms Control Today*, 'The tragedy of September 11 will shape US security policy for years to come. The question is whether the United States will seize the opportunity, now that almost the entire world has rallied to its cause, to lead a reinvigoration of cooperative security arrangements that could lead to a safer world for all. Or will Washington fall back on what Richard Haass, director of policy planning at the State Department, has called "*à la carte multilateralism*"?'⁴ (that is to take arbitrary multilateral or unilateral actions depending on the situation).

Two days after the attacks in New York and Washington the elder George Bush said, 'Just as Pearl Harbor awakened this country from the notion that we could somehow avoid the call to duty and defend freedom in Europe and Asia in World War II, so too should this most recent surprise attack erase the concept in some quarters that America can somehow go it alone in the fight against terrorism or in anything else for that matter.'⁵

The future will demonstrate how serious the changes in Bush's approach towards international issues are. The Bush-Putin summit raises some hopes, but nothing than hopes. Much will depend on specific deeds.

Will the Russian leadership be ready to reach mutually acceptable and compromise agreements on offensive and defensive arms? Besides, the Russian leaders have to take into account the opinion of some circles, which are quite critical concerning the amendments to the ABM Treaty and endorse other Cold War stereotypes, as far as the strategic arms are concerned.

There is no doubt that the Cold War legacy is slipping away and the system of international relations and bilateral treaties based on mutual nuclear deterrence will also become a thing of the past. The question is whether two administrations will find enough wisdom to make a smooth transition to the new arms control and disarmament framework, so that the good old things may not be destroyed and the *bright future* may arrive step by step to the benefit of the two nations and the world on the whole.

This latter factor should be emphasized. Any agreements should take into account the interests of other states - China, Japan,

Western Europe, or South Asia – and should have a positive impact on them. They should facilitate their accession to the process of nuclear arms reduction. The final goal would be to have the international disarmament process.

What form would the bilateral agreements on strategic offensive and defensive arms take?

As far as the offensive weapons are concerned, the Presidents have already named the parameters. Now it is the time to identify the systems subject to the reduction? Will Russia and the United States preserve MIRVed ICBMs or not? This issue is quite important for both parties. According to their statements, they are ready to agree upon certain verification, which will inevitably take the form of an official document. Moscow and Washington should work out the principles and procedures to ensure transparency and verification of the elimination. Some independent experts presume that this task can be accomplished, despite all difficulties.

The summit results indicate that it will be more difficult to come to a compromise on defensive arms. We are not going to offer any specific remedy, but many interesting and productive ideas are evident. It is obvious that the actual deployment of the limited NMD will take place in the distant future. So, there is enough time (decade or more of tests and development) to find an appropriate solution.

One of the ideas set forth by some independent experts from both states is the following⁶. The ABM Treaty does not outlaw certain tests. If the United States wants to build a new test range, let us say on Alaska, then, according to Article IV, such additional test range may be agreed upon by the parties. As for the tests of the sea-based and air-based missile defense components, they may be conducted at the allowed ground test ranges, i.e. within the framework of the treaty. The experts suggest that the amendment to Article V is made, in order to permit the development, testing and deployment of space sensors instead of ground missile defense radars, but to extend the ban on the development of space-based interceptor missiles. The United States would then agree

not to ask for any other amendments or the abrogation of the treaty. The parties may return to the fate of the treaty later.

This is one of the possible suggestions and we use this example to demonstrate that there is the basis for productive talks. We found it useful to involve skilled nongovernmental experts from Russia and the United States.

One does not have to think that the unilateral arms control and reduction measures are counter-productive or unacceptable. On the contrary, in some cases, when the negotiations stalled, the unilateral initiatives helped to overcome the stagnation and facilitated the agreements. For instance, the unilateral moratorium on nuclear tests (declared by the USSR, the United States and the UK - the only nuclear-weapons at that time - in 1958-1961) enabled the parties to start the test-ban negotiations and to conclude the 1963 Partial Test Ban Treaty.

Today Russia and the United States should think about the unilateral reduction after December 5, 2001, when they complete the commitments under START I (6,000 warheads and 1,600 launchers). During this process the parties would hold negotiations on the verifiable agreement based on the verification components of START I, and on the measures to verify the elimination of nuclear warheads.

The November summit created a certain basis for further progress in strategic offensive arms reduction and in seeking the mutually acceptable solution to the missile defense problem. This opportunity should not be lost.

¹ Official Web site of the Russian President (<http://president.kremlin.ru.html>), 2001, November 13-15, 2001.

² *New York Times*, 2001, November 16.

³ *Washington Post*, 2001, November 16.

⁴ *Arms Control Today*, 2001, Vol. 31, No. 8, October, p. 7.

⁵ *Ibid.*

⁶ Amb. T. Graham, J. Mendelsohn, J. Rhineland, A. Yereskovsky, "Squaring the Circle: Can NMD and Nuclear Arms Control be Reconciled?" *Disarmament Diplomacy*, 2001, July-August, pp. 3-6.

Analysis**CONTROL OF SUB-STRATEGIC
NUCLEAR WEAPONS: PROBLEMS
AND PROSPECTS****by Yury Fedorov,
Deputy Director,
PIR Center**© PIR Center, 2001. All rights reserved
Translation into English. Abridged version**Introduction**

This study attempts to answer a number of questions pertaining to the tactical nuclear weapons. What is the policy of nuclear-weapon states, including Russia, with respect to the sub-strategic nukes? What are the major problems concerning control of such weapons? What are the prospects for such control? What is the role of sub-strategic nuclear weapons in maintaining Russia's military security?

The functions of nuclear weapons and their role in maintaining security depend on the structure and character of global military-political landscape. Much depends on the place of specific state (possessing nukes) in this military-political order. In the recent years the framework of the new system of international relations has been emerging. The end of the tough political and ideological East-West conflict has changed the nature of strategic stability. The interrelated international security challenges (caused by the proliferation of WMD and delivery systems (notably, missiles), local conflicts, and terrorism) become more and more important. Post-Cold War restructuring of the international politics has led to dramatic transformation of strategic planning of the nuclear-weapon states, which affects their attitude towards sub-strategic weapons.

However, the development of the relatively stable and predictable global strategic situation is far from completing. It is not clear, which course China will follow after the fulfillment of its modernization programs intended for the economy and the armed forces. Even nowadays this factor is a significant source of unpredictability for global politics. There are growing tensions in the Islamic world from Indonesia to Algeria.

The developments in these regions can hardly be predicted either – one may only note the increasing wave of destructive trends caused by extremist movements of Islamic fundamentalists. The outbreak of Palestinian terrorism in Israel, the Albanian expansion in the Balkans, the instability in Central Asia and Xinjiang, the war in Chechnya, the terrorist attacks against the United States and Washington's counter-terrorist operation against the *Taliban* movement in Afghanistan – all this marks a new wave of potential wars and conflicts of the first decades of the 21st century.

The international military-political situation may undergo further dramatic changes, whatever improbable today they may seem quite. In the mid-1980s no one regarded the collapse of the Soviet Union and the Warsaw Pact, or the unification of Germany, as more or less probable events. The global unpredictability implies that some scenarios, which threaten vital interests and the very existence of many states, cannot be ruled out. At present, one can hardly assess the probability of such scenarios and their general framework. Hence, in the process of formulating the security policy, one has to base it on the worst-case scenarios and do not rule out the possibility of emergence of various military security threats.

Sub-strategic weapons play a special role in nuclear arsenals. During the Cold War their major mission was the combat use in the so called limited nuclear warfare. In theory, in the new military-political environment they may be employed in large-scale regional conflicts, e.g. between India and Pakistan, or in the Middle East. One cannot preclude that such weapons are not used in the hypothetical war on the Korean Peninsula or in the Taiwan Strait.

However, the most probable conflicts of the future, if the current trends do not radically change, will hardly require the use of nuclear weapons of any kind. At the same time, the aforementioned unpredictability makes the states to preserve some of their nuclear arsenals to ensure national security, if dramatic military-political changes occur. Meanwhile, the overestimation of the nuclear weapons and their treatment as the *absolute*

security means diverts the attention and resources from the modernization of conventional armed forces, development of the protection means against terrorism and information warfare, which seem to be the most probable security challenges in the foreseeable future.

Classification of Nuclear Weapons: Problems and Approaches

It is difficult to devise approaches toward sub-strategic arms reduction and to study the related issues, due to the lack of comprehensive, recognized and strict (in military, legal and technical terms) classification of nuclear weapons. Different criteria are used and they do not always compatible with each other. There are certain contradictions in the international definitions of strategic weapons. This leads to some uncertainty in defining sub-strategic arms. There is no single interpretation of a number of important terms. However, any arms control or arms reduction agreement requires clear definitions of the scope and the subject of the treaty. The corresponding definitions have been developed after long efforts and resolution of complicated legal and technical problems at practically all arms control negotiations. In fact, it was necessary to fit military-technical criteria into the formulas of the international law, so that one weapon system may be distinguished from the other.

The classification of nuclear weapons may be based on their designation, i.e. on a number of military and military-political tasks to be accomplished with the use or threat of nukes. Another pattern implies the classification on the basis of technical characteristics¹. The latter include the specific correlation of effects, the yield, and the range of the launcher.

The possibility of ranging the distribution of nuclear explosion power among different effects enables the country to develop the discriminatory munitions of the fourth and the fifth generation. Among them are:

- neutron weapons, where nuclear power is used to generate a flow of neutrons to destroy the enemy personnel. These weapons may be used in limited wars, mostly against large armor groups;
- nuclear charges that generate powerful electromagnetic pulse and destroy the

electronic devices (C4I systems, computer components of weapon systems, including nuclear weapons). Such munitions may be used at the first stage of the disarming nuclear strike in order to paralyze the enemy's command, control and communication systems and minimize his ability to respond;

- nuclear air bombs and warheads with deep penetration. The power of the explosion is used to enhance the blast and to destroy the fortified underground facilities (silo launchers, command centers, etc.). In the 1990s, some experts in the United States campaigned for the use of such weapons against the WMD production and storage facilities, which belonged to extremist states and movements.

The yield of modern nuclear munitions may vary from several megatons to several hundred tons of TNT equivalent. As a rule, low-yield nuclear warheads are designed for tactical weapons and theater use, whereas powerful warheads are mounted on strategic weapons, especially if the latter are planned to be used in counter-value strikes (to destroy large cities, major economic facilities, etc.).

In practice, the classification of nuclear weapons is normally based on the range of delivery systems. This criteria enables the experts (at least, in theory) to develop a relatively comprehensive, verifiable and single-interpretation typology of such weapons. The combat missions of the nukes correspond somehow with the range of delivery systems.

In the former Soviet Union the strategic nuclear weapons had the range exceeding 1,000 km, whereas all weapons with the smaller range were regarded as tactical. Strategic weapons were subdivided into intermediate-range weapons (1,000-5,500 km) and intercontinental arms (more than 5,500 km)². The Soviet books and official documents also mention operational-tactical weapons. For instance, the 1996 Presidential National Security Address maintains that Russia has strategic, operational-tactical and tactical nuclear weapons³.

There is no clear line between tactical and operational-tactical weapons⁴. One cannot

rule out that this is a result of harsh criticism by the Russian military of the 1987 decision to include SS-23 Spider missile in the list of arms subject to elimination under the INF Treaty. The military emphasized that SS-23 was an operational-tactical missile with the range of 400 km and should not have been eliminated in accordance with the aforementioned treaty. This criticism, however, does not take into account that the range of a missile (with pre-set energy characteristics of the engine) depends on the payload. In some cases the range of the Soviet missile with a *light* warhead was 30% higher than with a *heavy* warhead⁵. In this connection, the fate of SS-23 depended on the payload it had had during the 400-km-long test flight⁶. Therefore, if one accepts the criterion for distinguishing between tactical and operational-tactical missiles that originates logically from the INF Treaty (the range of 500 km), SS-23 was subject to elimination, although it was officially regarded as an operational-tactical system.

The Russian documents of the 1990s sometimes correlate the classification of nukes with the types of conflicts, where such weapons may be used. The 1996 National Security Address emphasizes that strategic weapons play key part in providing global deterrence, whereas operational-tactical and tactical nuclear forces are important to maintain deterrence at the regional and local levels⁷. This formula may be interpreted in a way that at the local level the policy of nuclear deterrence is implemented with tactical weapons, at the regional level – with operational-tactical weapons and at the global level – with strategic weapons.

Such interpretation somehow runs counter to the logic of the 2000 Military Doctrine of the Russian Federation. The latter states that nuclear weapons should not be used in local conflicts, should have mostly limited use in regional conflicts and large-scale use in global conflicts. The local wars, according to the doctrine, “may be conducted by groups of forces deployed in the conflict zone and reinforced, if necessary, by additional deployments of troops and means from other directions and by partial strategic deployment of armed forces. In local wars the parties will act within the borders of

warring states and will pursue limited military-political goals.”⁸

The document continues that a regional war may result from the escalation of the local war and may be involve two or more states (groups of states) of one region, by national and coalition armed forces with the “use of conventional and nuclear weapons”. It also maintains that “in the regional war the parties will pursue important military-political goals”⁹. The Military Doctrine says nothing about *global war* or *global deterrence*. The term “large-scale war” is used instead. The document notes, “The large-scale war with the use of conventional weapons only will be characterized by a high probability of transformation into a nuclear war with devastating impact on the civilization and existence of mankind. In large-scale war the parties will pursue radical military-political tasks.”¹⁰

Thus, the Military Doctrine does not make any direct parallels between the different categories of nuclear weapons and the scale of armed conflicts and wars. Probably, this is accounted for by the fact that it is quite difficult nowadays to distinguish between TNW and operational-tactical weapons. To a large extent, nuclear weapons with relatively low yield designated for limited use in local and regional wars are nuclear air bombs and air-launched missiles carried by tactical bombers or fighter-bombers. The latter may be used in combat operations at the range of several dozen to several hundred kilometers (even more than 500 km).

The United States and some other Western countries divide nuclear weapons into strategic, theater and battlefield arms, sometimes referred to as tactical. The major criterion for this classification is the range of the delivery systems. For instance, the United States used to divide ballistic missiles into tactical (short-range) and strategic (long-range) – the threshold was 800 km. Strategic missiles, on their part, were subdivided into medium-range systems (800-2,400 km), intermediate-range (2,400-6,400 km) and intercontinental systems (more than 6,400 km)¹¹.

China uses its own classification of nuclear missiles.

Table 1. Classification of missiles in China

Short-range	Medium-range	Long-range	Intercontinental
Less than 1,000 km	1,000-3,000 km	3,000-8,000 km	More than 8,000 km

Source: SIPRI Yearbook 2001. *Armaments, Disarmament and International Security*. SIPRI, Oxford University Press, 2001, p. 476.

International agreements dealing with nuclear weapons normally use the characteristics of delivery systems to distinguish between

strategic and tactical arms. For instance, START I provides that the following systems are subject to elimination or limitation:

Table 2. Weapons subject to elimination or limitation under START I

Weapon system	Range
Heavy bombers	More than 8,000 km
Heavy bombers equipped to carry nuclear cruise missiles and air-launched ballistic missiles	Range of air-launched cruise and ballistic missiles exceeds 600 km
ICBM launchers	Range of ICBMs exceeds 5,500 km
SLBM launchers	Range of SLBMs exceeds 600 km

Source: *Arms Control Guide*. M., PIR Center, 2001, pp. 12-13.

Besides, in one of the annexes to the treaty the parties committed politically to limit the number of SLCMs with the range exceeding 600 km. This figure (or more precisely, ranges) resulted from a more general criterion. The United States and the Soviet Union agreed to refer to some arms as strategic, if they could be used to make strikes from certain geographical zones – from the territories of the parties or from the areas beyond the coverage of national air defense systems and coastal defense.

If one takes START I, the sub-strategic (i.e. not strategic) weapons are all nuclear systems that contain a nuclear warhead mounted on the launchers with the following ranges:

- bombers (fighter-bombers) with the range not exceeding 8,000 km and/or equipped for air bombs and/or air-launched ballistic and cruise missiles with the range not exceeding 600 km;
- air-launched ballistic and cruise missiles with the range not exceeding 600 km;

- SLBMs with the range not exceeding 600 km;
- Land-based ballistic missiles with the range not exceeding 5,500 km.

START I could not give clear terms of reference concerning the SLCMs with the range exceeding 600 km. The Soviet Union insisted on regarding these weapons as strategic, for such SLCMs as Tomahawk (2,500 km) might hit the targets on the large part of the Russian territory. Washington was against including the SLCMs into START I and START II and argued that the naval command strongly opposed the idea of giving the foreign inspections any access to the warships. As a result, the USSR and the USA undertook a political and non-verifiable commitment to limit the number of SLCMs. This commitment was stated in a separate annex to START I.

The range of the launcher also served as a criterion at the negotiations on the 1987 INF Treaty.

Table 3. Classification of missiles under the INF Treaty

Medium- (intermediate-) range	Short-range
5,500-1,000 km	500-1,000 km

Source: *Arms Control Guide*. M., PIR Center, 2001, p. 46.

Thus, as far as land-based nuclear ballistic missiles are concerned, there is a relatively harmonious classification based on the range of launchers:

- strategic arms with the range exceeding 5,500 km, normally ICBMs;
- intermediate-range forces – missiles with the range of 1,000-5,500 km;
- shorter-range systems – missiles with the range of 500-1,000 km (approximately similar to Russian operational-tactical weapons);

- tactical weapons (short-range) – missiles with range not exceeding 500 km.

The aforementioned logic implies that the land-based cruise missiles may be subdivided into:

- tactical with the range not exceeding 500 km;
- shorter- and medium-range missiles with 500-1,000 km and 1,000-5,500 respectively.

Nowadays there are no land-based or sea-based intercontinental missiles, though there were some attempts to develop such systems. In 1954, the Soviet Union started to develop two intercontinental cruise missiles – Burya (8,000-8,500 km) and Buran (9,150 km). However, the work stopped in 1960 and in 1957 respectively¹².

Meanwhile, the classification parameters of START I and the INF Treaty (as far as strategic and sub-strategic weapons are concerned) run counter to the US-Russian demarcation agreements on missile defense systems. According to the 1997 New York agreements, missile defense components (interceptor missiles, radars, etc.) should not be able to counter strategic ballistic missiles. The agreements state that:

- the velocity of the ballistic target-missile does not exceed 5 km/sec over any part of its flight trajectory;
- the range of the ballistic target-missile does not exceed 3,500 km¹³.

In other words, it occurs that strategic ballistic missiles are those with the range exceeding 3,500 km and not 5,500 km, as it may seem from START I and START II. Thus, the range of delivery systems cannot be an *absolute* criterion for dividing strategic and sub-strategic nuclear weapons. The situation is aggravated by the fact that the aforementioned specific demarcation parameters were agreed upon at the US-Soviet and then US-Russian negotiations and, hence, reflected the specifics of their military-political relationship (the aforementioned criteria concerning national territory and areas beyond the coverage of air defense and coastal systems).

At the same time, some European states may refer to some of the Russian medium-range

systems (Tu-22M Backfire and Su-24 Fencer bombers) as to strategic arms. During the debate and talks on intermediate-range and shorter-range missiles in the 1980s, the USSR repeatedly raised the issue of US medium-range systems – Pershing II and BGM-109G land-based cruise missiles deployed in Europe. The Soviet experts argued that such weapons were strategic for the USSR, since they could destroy some vital targets in many European regions of the country. It is even more difficult to distinguish between the sea-based strategic and sub-strategic weapons, for normally the cruise missiles and sea-based aircraft are attached to mobile launching sites (aircraft carriers, submarines, etc.). As they move, the weapons can hit different parts of enemy's territory even if the latter are situated far from the seaside.

Thus, the known classifications of nuclear weapons into strategic, tactical, operational-tactical, battlefield, theater are quite relative. Moreover, a weapon system (such as tactical bombers) may refer to theater and battlefield weapons. Finally, the strategic arms may well be used for *non-strategic* purposes. For instance, missiles with the range exceeding 5,500 km may be used to destroy the targets at lower distance.

Under these circumstances, it would be useful to have a classification of nuclear weapons containing sub-strategic (mostly for limited nuclear warfare) and strategic arms (to deter aggression of the potential enemy with the threat of waging total nuclear warfare). Precisely, strategic weapons serve to:

- destroy strategic weapons of the enemy at their bases and to destroy the command and control systems in pre-emptive strike;
- destroy urban and industrial centers of the enemy during retaliatory and launch-on-warning strikes.

Sub-strategic weapons may be used to accomplish a broader range of combat tasks. In general, these are:

- the destruction of enemy army masses, command points, communication points, airstrips, transportation nodes, missile launchers and other arms and critical military infrastructure, as well as civilian facilities near the front line and beyond;

- the air defense missions – the destruction of attack aircraft groups of the enemy;
- the destruction of aircraft carrier groups and other large naval units and submarines of the enemy.

Such classification demonstrates the link between the type of nuclear weapons and the missions that should be accomplished with the threat or use of such weapons. However, such classification does not enable us to formulate some clear legal or technical parameters for distinguishing between different types of nuclear weapons. Despite the aforementioned difficulties, this study will refer to sub-strategic weapons as those not subject to START I. This approach is good for academic research, but cannot be used at the negotiations. If such talks on TNW (sub-strategic weapons) commence, it will take lots of time to agree on the formulas and definitions of the scope of future treaties.

Sub-Strategic Nuclear Weapons During the Cold War

One of the major issues facing the analysts of the current military-political situation is whether the role and mission of nuclear weapons has changed after the end of the Cold War. The debate in Russia indicates that nuclear weapons, including sub-strategic arms, make an efficient compensation for weak conventional armed forces (just as it was in the past). Such approach replicates (at least, superficially) some elements of the NATO strategy of the times of tough military confrontation in Europe. NATO was aware of substantial superiority of the Soviet conventional forces in Europe and the USSR's readiness to conduct large-scale offensive on the continent. So, NATO realized that sub-strategic weapons should be used to deter or to repel the Soviet aggression.

Initially, US nuclear weapons actually compensated for the Soviet conventional superiority at the first stage of the Cold War until the Soviet Union developed its own nuclear arsenal. The same mission was typical of US tactical weapons deployed in South Korea and in Taiwan in the 1950s and 1960s. Bearing in mind that the Soviet Union deployed its own sub-strategic nuclear weapons to be used at the European theater

of war, a conventional armed conflict in Europe would quickly have escalated into a limited nuclear warfare, where the parties would have resorted to sub-strategic nuclear arms. Therefore, NATO nuclear arsenal in Europe was not meant for neutralizing Soviet conventional superiority, but for conducting successful limited nuclear warfare and, hence, for deterring against the Soviet aggression. Meanwhile, one has to note that the criteria of *victory* in limited nuclear war and of *limited* nuclear war are still not clear.

Moreover, there was another important factor. The use of sub-strategic (notably, US) nuclear weapons deployed in Europe against the Soviet invasion would have enhanced the credibility of US nuclear assurances to its European allies. Such assurances implied that the United States was ready to run the risk of total nuclear exchange with the USSR if an armed conflict in Europe crossed a certain threshold, whose characteristics, if defined in military planning, were top secret.

In other words, the US and British nuclear weapons deployed in Europe had a dual mission:

- to deter against the possible Soviet aggression by the threat of *limited* nuclear warfare (which the USSR could have lost);
- to provide for automatic, or nearly automatic escalation of the conflict in Europe into a total nuclear war between the United States and the Soviet Union.

The latter function of the US sub-strategic nuclear forces in Europe during the Cold War was more significant than the former. For Central European states any *limited* nuclear war with the use of tactical and operational-tactical weapons would be as devastating as a total nuclear exchange of strikes for the USSR and the USA. Therefore, the only security assurance they saw was not the capability to repel or deter against the Soviet aggression with threat or use of sub-strategic nuclear arms, but automatic and chaotic escalation of the nuclear conflict. In this respect, US arms deployed in Europe were regarded as a security link between Europe and the United States. The meaning of this formula was, in fact, to ensure automatic nuclear escalation. These ideas

were reflected in the NATO basic documents, including the Strategic Concept adopted in the last months of the Cold War. The concept stated, "Nuclear forces based in Europe and committed to NATO provide an essential political and military link between the European and the North American members of the Alliance."¹⁴

Meanwhile, it still not clear how the two aforementioned missions of NATO sub-strategic nuclear forces correlated during the Cold War, how NATO planned to use (*controllable* use) such systems in the limited nuclear warfare in Europe, what the military and political parameters of nuclear *threshold* were, how long the *limited* phase of nuclear warfare in Europe would have lasted, what the conditions for escalation to a higher level of nuclear confrontation were, etc. A famous US expert David Yost wrote, "Throughout the history of the Alliance, US nuclear forces have been seen as supremely important political instruments; their fundamental purpose has been deterrence and war-prevention. However, several important questions about extended deterrence and limited nuclear options were never fully answered during the Cold War. These include the extent to which using theater nuclear forces would imply linkage or 'coupling' to US intercontinental forces, and how escalation to higher levels of nuclear violence could be controlled."¹⁵

Military-political plans of the United States provided for Washington's adherence to its commitments to the allies (NATO, Japan, South Korea), including nuclear assurances. On the other hand, US leadership tried to make the European members of NATO strengthen their conventional forces in order to prolong the conventional phase of the conflict, to contain the offensive of the Warsaw Pact with non-nuclear weapons, to make the limited nuclear warfare the most painful possible for the Soviet Union and to seek political solution, rather than promote nuclear escalation to strategic level. The evidence by many well-informed US experts indicates that the United States was not interested in chaotic and automatic escalation, but was more willing to have a phased escalation of war in Europe with a relatively long phase of non-nuclear conflict.

"Tactical nuclear weapons would not have led to a decisive outcome on the battlefield, but their use would have broken the taboo against nuclear weapons. At some point, one side would begin to lose the tactical nuclear war. With a large strategic nuclear force in reserve, the losing side would have a strong incentive to escalate the war and use strategic forces in an attempt to regain the military initiative. [...] If the Soviets knew that the outcome would be catastrophic, the theory went, they would never start a conventional war. Of course, if it did start, either NATO's bluff would be called, or the war would lead to the destruction of Europe. [...] The United States put so much pressure on Europe to improve its conventional forces and reduce reliance on tactical nuclear weapons", wrote Ian Lodal¹⁶.

At the same time, US sub-strategic nuclear weapons could have been used to deter against the aggression by neutralizing the enemy's superiority in conventional force, if the enemy did not possess nuclear weapons or had a small, more symbolic arsenal. Such approach was typical of Washington's strategy in the Far East. The major mission of the US tactical nuclear forces in South Korea until their withdrawal in 1991 was to deter against the North Korean aggression. The combat power of the US TNW neutralized Pyongyang's superiority in conventional arms. However, the possibility of escalation of a limited nuclear conflict on the Korean Peninsula to a total nuclear war could have emerged, if China or the USSR had got involved (this was mostly unlikely). US nuclear weapons deployed on Taiwan in the 1950s and early 1960s had the similar tasks¹⁷.

According to unofficial estimates, by the late 1980s the US Armed Forces had about 9,000-10,000 sub-strategic nuclear warheads, 1,300 of which were 155mm artillery projectiles. As for the ground-launched TNW, there were about 850 warheads for Lance short-range missiles. Washington also possessed about 900 B-57 gravity bombs. The rest included air bombs, warheads attributed to cruise missiles and Pershing I missiles deployed in Europe¹⁸. By that time the United States decommissioned and dismantled nuclear mines and warheads for Nike Hercules air

defense missiles and for obsolete land-based Sergeant and air-launched Walleye missiles.

The Soviet plans concerning the use of sub-strategic nuclear weapons during the Cold War are still confidential and are not available for the researchers. The reasons for that may be the Soviet tradition of over-secrecy, or perhaps, the discrepancy between these war plans and the foreign policy rhetoric of the Soviet leadership (including the no-first use of nuclear weapons).

Western civilian analysts and military experts concluded that until the late 1970s and early 1980s the Soviet tactical nuclear weapons were deployed only on the Soviet territory¹⁹. In other words, their deployment on the territory of Warsaw Pact countries would go in parallel (or with certain delay) with the deployment of new highly effective SS-20 (Saber) medium-range missiles²⁰.

There were several reasons for that. Firstly, before the SS-20 missile crisis, the Soviet military leaders planned to conduct a long conventional war in Europe. During such war the tactical nukes could be moved to the combat zone for further use, whereas nuclear missions at the early stage of the conflict, if necessary, could be performed by strategic forces or medium-range missiles deployed in the Western regions of the USSR. Secondly, tactical and operational-tactical weapons, above all the attack aircraft, could be deployed on the territory of Warsaw Pact member states immediately before the war. Western observers assumed that after Nikita Khrushchev's resignation in 1964 (Khrushchev overestimated the role of nuclear weapons) the Soviet military plans were slightly corrected. According to US analysts, when NATO formulated the flexible response strategy in 1967, this was one of the reasons for changing the Soviet military strategy. The USSR recognized the possibility of conducting hostilities between superpowers with conventional forces at the early stage of the conflict. Besides, the USSR recognized the possibility of protracted non-nuclear conflict, although such turn of events was undesirable²¹.

If the Soviet sub-strategic nuclear weapons were deployed in Central Europe only in the late 1970s, this (together with SS-20

deployments) would mean the changes in the Soviet plans of war with NATO. The conflict should have started from the massive pre-emptive strike against a wide range of military and military-economic targets in Europe. US analysts noted this trend and maintained that the USSR was ready to prevent the threat of enemy's nuclear strike with the massive nuclear strike at the entire theater of war against air, nuclear, army units and command and control systems. The Soviet Supreme Command conducted the exercise to practice such strikes. Nuclear weapons were to be delivered by the tactical aviation, artillery, missiles and some naval forces, as well as by the SMF and the strategic aviation²².

Russian specialists also partly confirmed this fact. Alexander Shikorad points out that by the mid-1980s the Soviet Armed Forces possessed "practically all types of tactical nuclear munitions, which did not yield to US systems and sometimes were even superior. The USSR was ready to conduct a limited nuclear war, though there was no any official statement on this issue."²³

Alexei Arbatov, a prominent Russian expert and politician, agreed and noted that "[...] Soviet [no-first use - **Auth.**] commitment was merely a propagandistic step and did not affect the operational plans of the General Staff, the combat training of the forces and their strength, the structure and disposition of operational-tactical and tactical nuclear forces of the Soviet Union, which amounted to 20,000 warheads. The first use of these weapons was also planned."²⁴

According to Shikorad, the Soviet sub-strategic arsenal contained SS-12M (Scaleboard) missiles with the range of 900 km; SS-1c (Scud B) missiles with the range of about 300 km; and Oka missiles. Soviet army divisions were armed with FROG-7 rockets (65 km) and SS-21 (Scarab) rockets (120 km). As for the Soviet Navy, practically all types of cruise missiles (starting from P-6 and P-35), torpedoes, mines and antisubmarine warfare systems could carry tactical nuclear munitions. He believes that small-size artillery projectiles emerged only in the 1970s - 240mm mines for Tulpan self-propelled mortar, 203mm shells for Pion self-propelled

gun and 152mm shells for Akatsia self-propelled howitzer and Giatsint gun. The minimal size for the nuclear munition was 150x500 mm²⁵. The core of the Soviet sub-strategic air force, according to some Western analysts, were the Backfire bomber and the Fencer fighter-bomber. The former can carry two nuclear munitions, including AS-4 Kitchen missiles, and its range is about 4,000 km. The latter can carry two nuclear bombs and has the range of about 1,300 km²⁶. However, Western experts presume that practically all combat aircraft can theoretically be armed with nuclear weapons. There were also some nuclear warheads for air defense systems.

One may assume that sub-strategic nuclear weapons played an important part in Soviet military planning in the Far East (above all against China). They could be regarded as an important deterrent against the Chinese conventional aggression (bearing in mind China's considerable superiority in the strength of the army). Nonetheless, one has to take into account the Chinese nuclear arsenal, which was capable of making the retaliatory strike against the Soviet facilities in the Far East and Siberia in the 1970s. In theory, such strike could have been prevented with the massed pre-emptive attack against Chinese nuclear facilities. In other words, even in this case the possibility of limited and localized use of TNW seemed quite low.

In other words, during the Cold War the Soviet Union and the United States developed huge arsenals of sub-strategic nuclear weapons. They were regarded as the weapons for limited wars (limited from the point of geography and the consequences of such nuclear strikes). The evolution of characteristics of nuclear munitions proves this – they diminished in size and yield, became more selective and accurate. The parties assumed that low-yield, more *environmentally friendly* and accurate munitions were more suitable for practical use in limited nuclear wars. Sub-strategic weapons continued to play their compensatory role (against large conventional forces) but only with respect to non-nuclear weapon enemies.

Despite tough political and military conflict between the democratic and totalitarian systems, the world avoided the limited nuclear wars. The reason for that was probably the fear of uncontrolled escalation of such war to the level of total exchange of nuclear strikes. Moreover, TNW were not used in Indochina or in Afghanistan, although the losers were actually nuclear-weapon states. Presumably, two superpowers were not only afraid of such escalation of the *central conflict*, but also of local wars.

¹For the purposes of this study the nuclear weapons mean the nuclear warhead and its launcher (missile or aircraft) or a launching pad (artillery piece).

²V. Vasiliev, S. Golubchikov, V. Novikov, *The Prospects for Countering the Prospective Missile Defense Systems of the Enemy*. M., 2000, p. 304.

³The National Security Address of the President of the Russian Federation to the Federal Assembly. M., 1996, p. 24.

⁴According to the classification of Soviet-built or designed missile weapons mentioned in the book by M. Pervov, *Missile Weapons of the SMF* (M., 1999), the tactical missiles had the range of 300 km and the operational-tactical missiles had the range of 600-1,000 km. The missiles with the range exceeding 1,000 km were considered to be medium-range weapons. Some other definitions (e.g. *Military Encyclopedia*, M., 1983) do not give any quantitative parameters enabling us to distinguish between tactical and operational-tactical weapons.

⁵For instance, the Soviet SS-9 or Scarp missile commissioned in 1967 had the range of 15,200 km with the 3.9-ton warhead and 10,200 km with the 5.8-ton warhead. SS-7 or Sadler had 13,000 and 10,500 km with 1.4-ton and 2.1-ton warheads respectively. See M. Pervov, *Missile Weapons of the SMF*. M., 1999, pp. 176,179.

⁶One of the sources indicates that the attempt to launch Oka missile for 407 km failed due to the problems with the steering system. However, this does not mean that Oka was not able to overcome the limit of 400 km, since the range of the missile depends on the energy parameters of the engine and on the payload. The question is how far Oka would go with a perfect steering system. See Alexander Shikorad, "The Small Bomb for the Small War". *Nezavisimoye Voennoye Obozreniye*, March 6, 1998, p. 6.

⁷The National Security Address of the President of the Russian Federation to the Federal Assembly. M., 1996, p. 24

⁸Military Doctrine of the Russian Federation. *Nezavisimaya Gazeta*, April 22, 2000, p. 6.

⁹Ibid.

¹⁰Ibid.

¹¹V. Vasiliev, S. Golubchikov, V. Novikov, op. cit., p. 303.

¹²M. Pervov, op. cit., pp. 177, 178.

¹³Standing Consultative Commission. First Agreed Statement Relating to The Treaty Between the United States of America and the Union of the Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972. September 26, 1997.

¹⁴North Atlantic Council. "Strategic Concept", November 7, 1991, par. 56

¹⁵David S. Yost "The US and Nuclear Deterrence in Europe". *Adelphi Papers* 326, IISS, 1999, p.11

¹⁶Jan Lodal, "The Price of Dominance". Council on Foreign Relations, 2001, pp. 23-24

¹⁷Richard Fieldhause. «China's Mixed Signals on Nuclear War». *The Bulletin of Atomic Scientists*, Vol. 47, No 4, 1991, p. 44

¹⁸«Nuclear Notebook». *The Bulletin of the Atomic Scientists*, December 1991, Vol. 47, No 10.

¹⁹T. Cochran, W. Arkin, R. Norris, J. Sands, *Nuclear Weapons of the USSR*. M., 1992, pp. 20, 28-29.

²⁰Some reports indicate that in 1959, the USSR attempted to deploy in the DDR some SS-3 missiles with the range of 1,200 km. After commissioning SS-4 missiles with longer range, SS-4 were removed from the DDR in later 1959. See: M. Pervov, op. cit., p. 51

²¹T. Cochran, W. Arkin, R. Norris, J. Sands, op. cit., p. 13

²²*Soviet Military Power. An Assessment of Threat*. Washington, 1988, p. 73

²³Alexander Shikorad, op. cit., p. 6

²⁴Alexei Arbatov, *Security: Russia's Choice*. M., 1999, p. 362.

²⁵Alexander Shikorad, op. cit.

²⁶T. Cochran, W. Arkin, R. Norris, J. Sands, op. cit., pp. 284-285; 292-293

Analysis

CYCLES OF NATO ENLARGEMENT¹

by Anatoly Shevtsov,
and Alexei Izhak,
Dnepropetrovsk Branch,
National Institute for Strategic
Studies

[This article was originally published in
Russian in *Yaderny Kontrol*, No. 5, Vol. 7,
September-October, 2001]

© *Yaderny Kontrol*, 2001. All rights reserved

© PIR Center, 2001. Translation into English.
Abridged version

In 1999, after the adoption of three new members NATO completed a long cycle of its development, including its enlargement, despite the external and internal resistance. The new period of uncertainty emerged and it mostly replicated the developments of the early 1990s, when the issues of European defense integration, the fate of the US missile defense and the relations with Russia posed some serious challenges to the Alliance. The new paradigm for the Alliance's development has not yet been formed. The concept of giving priority to the Balkans and the Mediterranean has certain grounds. But the activities in this area will hardly help to save the Alliance in the new decade. The eastern dimension is important and, to a certain extent, decisive for the existence of NATO.

The First Cycle of Enlargement

Those who study the history of NATO enlargement inevitably have to confront the idea that the decision on enlargement was the greatest mistake, which led to some other errors. There were many politicians in the West who had ensured NATO's victory in the Cold War, but who opposed the NATO enlargement. In the East, many proponents of the European choice, whose efforts had been decisive for liberal reforms in the former socialist countries, also stood against the process. The reason was quite simple: many regarded the Alliance as an instrument of Russia-West relations. And if it was so, the enlargement to the east was irrational, taking

into account the domination of pro-Western sentiments in Russia. However, the Russia-West relations were mainly the price, but not the reason for NATO enlargement.

The Cold War system of European security was not symmetric. The major mission of the Warsaw Treaty Organization was to confront the West and to keep an eye on Central and Eastern European socialist countries. NATO's mission was not only to deter against the Communist expansion, but to ensure US military-political presence in Europe and to integrate Germany in the strict system of institutions in order to prevent the revival of German expansionism. This was the famous formula – “keep the Americans in, the Russians out, and the Germans down”. When the USSR agreed to the accession of the unified Germany to NATO, Moscow, in fact, blessed the Alliance for surviving after the collapse of the bipolar system. Nonetheless, it was difficult for the Alliance to formulate a new concept of existence in the early 1990s.

US *arbitration* in Western Europe was indirect and based on the Soviet military threat. After the end of the Cold War and the cuts in defense budgets, NATO had to confront some rivals, who were ready to perform its reduced functions. The Western European Union had enough experience in verifying German military programs. The European Union with its single currency and common security and defense policy could seemingly replace NATO. The UN and the OSCE also had seemingly good chances to resolve the European security problems after the collapse of the Warsaw Pact.

Meanwhile, the most serious post-Cold War problem for NATO was the lack of clear vision in the United States – Washington had no coherent strategy with respect to Europe. On the one hand, NATO's mission was completed. On the other hand, the dismantlement of NATO would mean the destruction of the most efficient mechanism of US involvement in European affairs and European involvement in US crisis management activities (e.g. the war against Iraq). In other words, the United States had to find the genuine meaning of their presence in Europe in the new strategic environment.

The formulation of new strategic tasks for further NATO's development in the last decade was accelerated by the following factors:

- the increasing role of Germany in Central and Eastern Europe, especially in the zone of Hungary, the Czech Republic and Poland;
- the emergence of the Eurocorps independent of NATO;
- the inability of the UN, the OSCE and the EU to stop the war in the Balkans.

Under these circumstances, the United States managed to shape a new clear strategy by the 1994 Brussels summit – to influence the decisions and policy of the European Governments and hence, to support the efficiency and viability of NATO².

To prevent the degrading of NATO in the conditions of no-large-scale external threat and the emerging European defense integration, several mechanisms were used: combined joint task force (CJTF), Partnership for Peace (PFP) and the enlargement (initially as an option in principle). In 1995, after the completion of appropriate studies, the adoption of new Central and Eastern European democracies became the matter of time.

The axis of new US-European transatlantic agreement was the following: the United States got the assistance of Europe in preserving NATO's integrated structures, the Europeans obtained the US assistance in European defense integration (mostly via the CJTF). It is noteworthy that the decision to preserve NATO as an efficient and active organization was taken before formulating the new military missions of the Alliance, which would give ground for the maintenance of the integrated military structures. There was no time for such formulating – the processes of the early 1990s in Europe made NATO face a tough dilemma: to survive and to enlarge, or to degrade.

There were several reasons for NATO enlargement. It was necessary to rule out the German attempts to seek new (alternative to transatlantic) mechanisms to ensure its interests in the east and to prevent the establishment of new international military

bodies in Europe, beside NATO. The second reason is less related to the enlargement, unlike the first one. The problem of Eurocorps was solved by making it subordinate to the WEU (administrative) and NATO (operational). The independent military operations by European nations should have been conducted within the CJTF concept. However, this was not enough.

The EU, the WEU and NATO have different system of membership. The security assurances under the Washington Treaty and the modified Brussels Treaty would have posed the problem of *back door* if the WEU had enlarged faster than NATO. If three CEE states had joined the WEU, they would have got the security guarantees of the European members of the Alliance and hence, indirectly of the United States. This issue was a little exaggerated³, but since the European security integration became an internal affair for NATO, the Alliance had to be more geographically diverse⁴. NATO could not stop the shaping of the European security and defense identity, but it could incorporate ESDI with internal transformations and enlargement. Under these circumstances, Hungary, Poland and the Czech Republic found themselves in the focus of NATO enlargement, for the Alliance had to solve the new problems concerning German interests and the desire to preserve the Alliance as the only European organization with the integrated military structure.

Moreover, NATO's decision on enlargement was related to its transformation into the key element of European security. Four decades of the Cold War made the Alliance a capable tool, whose legal status, however, prevented it from becoming a key European security organization. The only unlimited right of NATO was the right to collective self-defense against the external aggression⁵, which left little field for maneuver. As for all other enforcement actions beyond the self-defense, NATO depended on the UN Security Council decisions (under Article 7 of the Washington Treaty and Article 103 of the UN Charter). The recent precedents can obviously provide for a different interpretation, but formally the Alliance has to comply with the provisions of the aforementioned documents.

During the Cold War there was no problem of legitimacy of NATO's actions. The permanent use of the veto right by the United States and the Soviet Union blocked the activities of the UN Security Council with respect to European security. In fact, the USSR and the USA took principal decisions and implemented them through the Warsaw Pact or NATO. After the collapse of the bipolar system, the UN Security Council could have played a greater role in European security. Some hopes were rested on the institutionalization of the CSCE⁶. The possibility of establishing the European Security Council was even discussed. For some time, NATO leaders might think about the NATO's subordination to the UN and the OSCE. But the inefficiency of these organizations in Bosnia-Herzegovina made NATO undertake a more active role. It was clear that the new security system required the automatic implementation of the agreed decisions. NATO began to transform into the central European security institution and the North Atlantic Council began to make the European Security Council.

To ensure the legitimacy of new NATO's role, the Alliance had to follow two major tracks: to enhance the NATO-centric model of European security and to have a few success stories for the North Atlantic Council, as far as the solution to European security problems was concerned. In order to enhance the NATO-centric model, the Alliance had to enlarge and enlarge openly, to make the enlargement a certain process. If NATO had declared a single act of enlargement (even if it had been broader than later), as it was proposed by France, this would have meant the division of new spheres of influence and the geography of the transatlantic community would have been limited. The PFP without the opportunity of NATO membership would not solve the problem: many states, which strived to join the European integration, would have regarded PFP as a politically correct refusal to integrate them and would have made them seek other geopolitical alternatives.

Moreover, the openness of the process and the refusal to set any limits for enlargement would help the Alliance to overcome

Russia's opposition to these plans (since the principle decision on the adoption of new members and on the new status of the North Atlantic Council had been taken independently of Russian factor). It was impossible to neglect Russia and the only way to involve Moscow in constructive cooperation without granting it a veto right on European security issues, would be not to leave any strategic alternatives to such cooperation.

While the newly independent states were in the *de facto* zone of Russia's influence, Russia remained to be self-sufficient and could consolidate the resources of these states to block NATO's new role. If Russia were left without dominating influence on post-Soviet states, it would have to think twice (for military and economic reasons) before opposing NATO. Thus, the third motivation for NATO's enlargement was to ensure NATO's central role in the European security system.

The fourth reason was not directly connected with European security problems. It was the matter of contradicting interests within NATO and business rivalry among the military-industrial lobbies of the leading nations. Each new NATO member state had to spend a substantial part of its budget on modernization of its armed forces and re-arming them with the Western equipment. These costs were quite high and the pressure of the internal lobby within the leading nations was quite significant⁷.

The aforementioned motives complemented each other and made NATO focus on Hungary, Poland, and the Czech Republic. The enlargement of the Alliance was caused by the relations within the transatlantic community. It had internal reasons and was not targeted against anybody. The value of NATO enlargement for the West was greater than the price they had to pay for this. So, the process was inevitable.

The Kosovo Crisis

Ten days after the adoption of new members NATO launched a military operation against Yugoslavia. These two developments on the eve of the Washington summit drew the line under the first wave of enlargement and the

negotiations on the new Strategic Concept of the Alliance.

Poland, Hungary, and the Czech Republic entered a completely different organization than it was in the early 1990s. NATO and new members had to make a lengthy way towards each other: NATO sought the reasons for existence (beside collective self-defense), new members were seeking collective self-defense. The new situation forced the Alliance to be capable of not only protecting the territory of its members, but intervening the local conflicts. Otherwise, NATO would have lost its significance. To perform new tasks, NATO had to ensure the legitimacy of its actions beyond the territory of the Alliance. Thus, NATO had to claim for the primary role in maintaining collective security in Europe and to have some success stories in the sleeve. The former was the reason for enlargement, the latter was the motivation to intervene in the Balkans.

NATO's operation against Yugoslavia was or should have become the typical mission of the new Alliance. It complied with the Strategic Concept and the activities of NATO were not irrational at all. The Alliance comprised leading Western democracies inclined to limit the national sovereignty, so long before the humanitarian disaster in Kosovo the Alliance called for the wide territorial autonomy of Kosovo as an administrative unit instead of calling for the large ethnic autonomy of the Albanian population in Yugoslavia. The administrative autonomy option did not mean much for the Albanians and could not ease the tensions.

NATO also insisted on leading the peacekeeping operation and ignored Yugoslavia's readiness to accept the UN-led peace operation. NATO had no competitors in peace enforcement - the UN was not capable of posing effective ultimatums and conducting appropriate operations. But when the hostilities stop and there are conditions for establishing the mission, it is a different task - the task of peacekeeping, and it is the time for UN to step in.

NATO demanded from Yugoslavia to create a conducive climate for the peace support mission and this was a well-grounded demand. However, the claims for NATO-led

peace support operation were redundant, since Yugoslavia was ready to host the UN-led mission. If the idea of intervention was to achieve the earliest possible settlement in a specific situation, NATO should better repeated the experience of Bosnia and Herzegovina – to enforce the warring parties to stop the hostilities and to agree to the UN peacekeeping mission with a NATO military component. The Alliance wanted more – to make the bulk of the force and to lead it⁸, so the Bosnian scenario was evidently rejected not because of its low efficiency. Perhaps, there were some other underlying political motives for such decision.

The escalation of the Kosovo crisis coincided in time with the development of the new Strategic Concept of the Alliance. The debate on the concept was closed, but certain comments made it clear that NATO was seeking a new security identity in Europe and greater independence in this area. There were two options. Firstly, it was possible to interpret the right to individual and collective self-defense in such a manner, as to enable the Alliance to protect its territory, interests and values. The second option was to make the interventions legitimate by themselves if the international law was violated (especially the humanitarian law) and to act without the authorization of the UN Security Council. These two options were not norms at that time and required successful precedents to be established as norms.

The attempts to define the hypothetical NATO's military actions in Kosovo in summer 1998 as an act of self-defense (undertaken by the US Secretary of State and Secretary of Defense) were not appreciated in Europe. But the idea of humanitarian intervention was endorsed by practically all members of the Alliance.

The crucial moment in testing the system occurred in fall 1998, when NATO made an ultimatum to Yugoslavia and demanded for the deployment of the OSCE mission, for opening the airspace for NATO non-combat aircraft and for commencing the negotiations with the separatists. This decision was also made to test Russia's readiness to accept the secondary role in Europe. Despite the

rhetoric, Moscow did not make any significant act, did not leave the Contact Group for former Yugoslavia and preserved constructive relations with the West. The Alliance interpreted this as an approval of its new role. NATO demonstrated the power of its decision-making mechanisms, the ability to implement the decisions and the ability to coordinate the efforts of other European institutions.

The ultimatum, however, was not enough. The final settlement was not reached and the situation might go wrong again. NATO could not step back and give the initiative to other security institutions. The new ultimatum urged Yugoslavia to withdraw its forces and to agree to the deployment of the NATO contingent. The risk was justified. If the settlement had been achieved by late April 1999 and the NATO units together with other forces, including Russia, had been deployed in Kosovo, the celebration of the 50th anniversary of the Alliance (and it would be difficult for Russia to refuse to participate in it) would have become the final point of the establishment of the new European security system. The latter would have been led by NATO and the North Atlantic Council would have been recognized as the key body taking decisions on war and peace in Europe. But NATO's military machine suddenly had to overcome the resistance of the small Balkan state and the trajectory of its movement changed.

Was the Kosovo operation NATO's success story? As far as the military objectives were concerned, it was. But the unfinished war during the celebration, conflict with Russia and the mental link between the enlargement and the conflicts were not in the interests of the Alliance. The Alliance's military capability had to face some problems. Its ability to conduct the operations beyond the Euro-Atlantic area was insufficient, due to the huge gap between the military potential of the United States and its European allies. Air strikes as the means to prevent the humanitarian disaster had a limited effect. The question was – what to do if the air strikes turned into the humanitarian crime and the problem was not solved? The very nature of the Western democracies implied that NATO's external involvement depended

on the rationality of the conflict. If the warring parties ignored the air strikes, the military intervention would exacerbate the humanitarian crisis and the NATO states had to sacrifice the lives of their soldiers.

Thus, the situation of mid-1999 forced NATO to review its policy. The protracted air campaign with many irritating mistakes; celebrations overshadowed with the war and confrontation with Russia; limited effectiveness of the peace support mission in Kosovo implied that NATO had failed to become the core of the European security, as it had planned before the Washington summit.

New Transition

A year after the first experience of conflict management NATO realized that the concept of its existence should be revisited. It seemed that the recent motto of the organization was “*noblesse oblige*”, but after Kosovo many allies were surprised how far the new Strategic Concept took them from the understandable and reliable collective defense.

The period of strategic uncertainty of the early 1990s ended with the transatlantic deal concerning the new key mission of the Alliance. It took about two years – from December 1991 (the demise of the USSR and the signature of the Maastricht Treaty) until January 1994 (the Brussels summit). The West defined the relationship between Europe, the United States and Russia and selected the appropriate mechanisms. It seemed that there was no need for further effort.

However, the problem of new NATO's role was not resolved by approving the new functions; the solution seemed to be postponed. Everything was quite logical – the reform of the force to make it adequate to the changing nature of conflicts in Europe; the willingness to be more independent of the UN Security Council; the shift from national interests to universal values, etc. But the issue of correlation between the rights and responsibilities of NATO in the new security system was not resolved.

Since the very adoption of its new missions, NATO has failed to define the procedures of their implementation. It was not clear

whether the operations beyond the territory and non-Article V operations were the same thing. Meanwhile, the problem of legitimacy of the new role has emerged. The choice of the early 1990s gave birth to a new issue – what kind of missions should NATO perform beyond its borders – Article V or non-Article V?

The UN Charter, as well as the Washington Treaty, connects the notion of defense with the notion of national territory. The defense of the national territory is the only right to use force without the authorization of the UN Security Council. Neither the UN Charter nor the Washington Treaty provides for the collective self-defense of something beyond the national territory, without the decision of the UN Security Council. However, the Article V missions in beyond the area defined in Article VI of the Washington Treaty are in the focus of the Alliance after the Kosovo crisis.

NATO's Defense Capabilities Initiative maintained that today the most likely threats to Alliance security came from internal conflict in countries on Europe's fringes (regional conflicts, ethnic strife, etc. beyond the territory of the Alliance), or from proliferation of weapons of mass destruction and their delivery systems⁹. This is a matter of Article V missions, but again in the new extraterritorial interpretation. This means that the Alliance is ready to undertake defense activities beyond its territory to protect its interests. And this right of the Alliance is seemingly unalienable and does not require any additional authorization.

The cycle is closed – NATO has declared the willingness to conduct new non-collective defense missions beyond its territory and independently. This was used to broaden the defense concept, but this cannot be a solution to the problem of new role of the Alliance. The dangerous precedents for many less civilized alliances have been created. Besides, the right to intervention for the interests of the NATO member states can hardly be regarded as a constructive idea. One can hardly imagine that the enormous effort to reform the European institutions and NATO were aimed at merely allowing the Alliance to give a broader interpretation to its right to

defense. The defense has once stopped to be a sufficient rationale for NATO's existence and this was the start of the transformation cycle in the early 1990s.

NATO has also to revisit the problems of relationship between the transatlantic and European security institutions. The general scheme is the following: collective defense of the Western Europe is the privilege of NATO and the new missions, if necessary, may involve separate but not separated from NATO European units - CJTF. Two factors have made this pattern obsolete.

After the mergence of the EU and the WEU the incompatible membership of the European nations in the EU and NATO makes the defense of EU members with the help of NATO assets quite difficult. Moreover, the parameters of the CJTF concept were not enough to satisfy the EU ambitions. The Helsinki summit in December 1999 declared EU's intention to establish its own corps capable of sustaining one-year operations and comprising the army, the navy, the air force, and support units¹⁰. The Helsinki decision called into question the efficiency of NATO's mechanisms designated to ensure European defense integration within the Alliance.

Another factor of uncertainty relates to the US decision to develop the NMD system, which has become a stumbling block in US-Russian relations. The defense of the US territory from potential missile strikes from the Middle East cannot be reliable without new radars deployed in Europe. And this inevitably affects the whole complex of US-Russian-European relations. Russia's "no" does not only reduce the general level of US security, but also de-couples the United States with Europe (since the latter does not want to be involved in the new East-West confrontation). As a result, the US-Russian relations (like in the early 1990s) overshadowed the US-European ties.

The new US-Russian negotiations on missile defense and nuclear weapons diminish the importance of NATO's counterproliferation program. The NMD cannot be easily incorporated in NATO's policy - the protection from the limited nuclear strike of the territory of one state runs counter to the

idea of collective security. Besides, the counterproliferation strategy is aimed at theater protection of the allied forces, whereas the United States is obsessed with intercontinental systems.

Thus, NATO's evolution has led the Alliance to an old new transition. Three old problems require a repeated or, at least, additional solution - what is the new role of NATO, how does it correspond with the European defense integration and what Eastern policy should the Alliance pursue?

The Trap of the First Round of Enlargement

When NATO made the first step towards enlargement, it found itself in the trap of approved decisions. Even the lack of positive motives to adopt new members cannot prevent the enlargement, for NATO has to comply with the earlier decisions. Besides, the first round was quite cheap and this raised its attractiveness in NATO's eyes.

The enlargement, as an open process, makes NATO become a key element of European security. As soon as the Alliance fixes the eastern border, the NATO-centric model will collapse, the partnership around NATO (involving *grudging* Russia) will vanish and the Alliance will turn back into the regular military bloc of the Cold War but with an increased membership. If the enlargement stops, the Alliance will have to pay more for the security of new members in the east. The integration of Poland, Hungary and the Czech Republic should cost about \$1.5 billion for 10 years (1998-2008). This low cost does not reflect the efficiency of joining procedures, but the symbolic character of the Western commitments. When NATO calculated the expenditure on the integration of new members, the Alliance assumed that there would be no significant threat coming from the East.

The security assurances to three new members if the realistic threat on the part of Russia (or military bloc headed by Russia) emerges would require much effort, including the stationing of troops and aircraft. As a result, the costs may amount up to \$100 billion (as it was estimated in the early 1990s). Thus, the decisions of the first round imply the next enlargement to the east, or, at least, the prevention of Ukraine's and

Baltic return to the orbit of Russia's influence. NATO cannot stop without ruining the logic of its development in the recent decade.

The Transitional Enlargement

The decision on inviting new members may be taken at the Prague summit in 2002. Bearing in mind the experience of the first wave of enlargement, the second round may complete by 2004. The candidates are Albania, Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia, Slovenia, and Macedonia. They have officially applied for NATO membership and, in theory, have equal chances for accession. However, there are some serious applicants and a very serious candidate for admission – Slovenia. The political intrigue concerns only the adoption of the Baltic states. Other variants can be regarded as the continuation of the first wave rather than the second wave. This is especially true with respect to Slovakia and Slovenia, as well as to Romania. When Slovakia was not accepted in the first round, Hungary became separated from other NATO member states. The territorial integrity of NATO may be restored only by admitting Slovenia and Slovakia. Nonetheless, the territorial integrity is important, but not decisive – the Defense Capabilities Initiative and the PFP can help to bridge the gap, as the experience in the Balkans indicates. To maintain the NATO-centric model of European security, the volume of territorial expansion is not less crucial than NATO's decision of open enlargement.

The real problem may emerge if NATO decides to take three Baltic states. Russia regards their membership in the Alliance as the limitation to Moscow's strategic capabilities and as a direct security threat. The willingness of Estonia, Latvia and Lithuania to join the Alliance makes NATO face a serious dilemma. On the one hand, the history and the size of these countries enable them to be easily incorporated into the Western community and they have no fewer rights than Slovenia or Slovakia. On the other hand, Russian factor may become decisive.

Three enlargement options are often analyzed:

- admission of Lithuania;

- admission of all three nations;
- postponement of admission of all three states and the establishment of the special relationship with them.

The first option is supported by Mr. Brzezinski¹¹. Lithuania, unlike Estonia or Latvia, has no border with main continental body of Russia and its accession to NATO would be more acceptable to Russia. At the same time, Lithuania is a former Soviet republic and this makes a significant historic precedent. If the Russian reaction is well calculated, such scenario may become an efficient strategic move for a relatively low price. The early membership of Lithuania may become an important ground base enabling the NATO to have freedom of maneuver in further decision-making.

The second option implies that the West cannot differentiate its policy towards three Baltic states. NATO has already taken too many promises concerning the openness of the enlargement and the absence of veto right on the part of Russia; so, the invitation of Slovenia should be equal to the invitation of the Baltic states. Perhaps, the accession of Lithuania would be more preferable, but the pressure on the part of Estonia and Latvia (as well as different lobbies within the Western states) would be unbearable for the Alliance, if the latter does not want to ruin the coherence of its Baltic policy.

The third scenario provides for more attention to the needs of Russia. The inevitable and destructive reaction of Russia on the admission of three Baltic nations requires NATO to seek softer forms of engagement. This could be the development of regional military cooperation with NATO and the adoption of special charters making the mutual relations more binding. However, the geographical alliance between Poland and Lithuania and the collection of previous commitments raise the importance of the Baltic dimension of enlargement.

Anyway, if the Baltic enlargement is impossible, NATO may seek some compensation for the inability to overcome the Russian resistance. Hence, the projects in Southeastern Europe will be reinvigorated and the Alliance may pay more attention to Romania.

In the period of transition NATO's internal motivation for the enlargement will be limited. The decisions will be taken proceeding from the specific situation. The North Atlantic Council will check the compliance with the criteria and consider each case separately¹². Slovenia, Slovakia, Lithuania, and Romania may find themselves in the focus of this policy.

The Enlargement of the Second Cycle

The enlargement of the first cycle was determined by the relations within the transatlantic community – between Europe and North America. This was enough to overcome the dividing lines of the Cold War. But the problem of geopolitical division of Europe has not yet been resolved. The line drawn by the USSR after World War II has been eliminated, but the line drawn by the West after World War I still exists. The *Curzon line* and (not the Primakov *red line*) makes the civilization gap. And much will depend on NATO's ability to bridge this gap.

The aggregate motivation for the 2005-2010 enlargement may be greater, than in the early 1990s. However, it will not be focused on specific candidates as before. Thus, the new cycle will have to face some problems.

The most intense factor of the previous cycle of enlargement was the desire to make the European defense integration an internal affair of the Alliance. In the early 1990s, NATO worked out some mechanisms to accomplish this task, proceeding from the fact that all WEU members were NATO member at that time. At present, the EU with incorporated WEU has become a European security organization, whose membership is broader than NATO's. Under these circumstances, the Alliance cannot easily offer itself as an element of collective defense for the EU members. NATO has no remedy for this problem. But it is clear that this issue will cool down NATO's zeal in accommodating new democracies and will require the invitation of some old, traditionally neutral states, such as Sweden, Finland, and Austria.

The problem of open enlargement will also make NATO take some different decisions. On the one hand, the consolidation of Russia's domestic and foreign policy and its

economic growth pose the risk of Russia's threat revival. Hence, the NIS should be kept away from Moscow. On the other hand, the accelerated expansion to the east can leave Russia no choice, but destructive response.

Therefore, in order to maintain the NATO-centric model of the European security architecture after 2005, NATO will have to provide adequate political commitments to the countries situated beyond the *red line*. These are Estonia, Latvia, Lithuania (if by 2005 they are not NATO members), Ukraine, Moldova, and probably, Belarus, as well as the Trans-Caucasian region.

Despite the discrepancy among the countries, in which NATO is interested, they have certain commonalities. If NATO continues to develop its Baltic dimension and admit Sweden and Finland, this will raise the chances of Estonia, Latvia, and Lithuania. The adoption of the latter will increase the interest of the NIS in the Alliance and would help to solve the problem of NATO-centrism.

However, these motives are not enough to eliminate *the red line*. The experience of the previous cycle indicates that the expansion becomes a topical issue for NATO, when Germany starts to have important interests beyond the zone of collective defense. At first sight, Germany must be satisfied with not being the eastern flank of the West, but the recent turmoil in oil markets may change the situation. NATO states may be interested in the Caspian region.

As far as the Caspian oil is concerned, there are two groups of NATO member states, whose interests in the region may be realized in different forms. The NATO rimland is connected with the Caspian Sea via Asia Minor, the Mediterranean and the Atlantic (Turkey, Greece, Italy, Portugal, Spain, France, the UK, the United States, Canada, Iceland, Norway, Denmark, the Netherlands, Belgium, Luxemburg. The second group – NATO heartland – has a ground link via the Northern Black Sea region, Black-Baltic Sea region and the Danube basin – Hungary, Poland, the Czech Republic, and Germany.

The interests of the first group in the Caspian region are more determined by the current geographical status of the organization, than

the interests of the second group. The Turkish transport corridor limits the critical interests with Azerbaijan and Georgia. The Black Sea-Danube and Ukrainian transport corridors (more attractive for the second group) imply additional commitments on the part of NATO with respect to Ukraine, Moldova, Romania, Yugoslavia, and Croatia. Thus, the Caspian interests of NATO have two geographical components: minimal (the Caucasus) and maximal (Ukraine and the Danube basin). If the interest in the eastern dimension grows (e.g. in Germany), the new enlargement to the east may become an imperative for the Alliance.

The structure of the interests of the second cycle copies mostly the structure of the first cycle. However, the changed situation makes it unfocused. The complicated system of geographical motivation, however, has some key points reflecting the intersection of several interests. These are Azerbaijan, Georgia, Ukraine, Moldova, Estonia, and Austria. Besides, it is quite probable that some of the earlier candidates – Slovenia, Slovakia, Lithuania, or Romania – will still wait for the accession after 2005. Belarus and Yugoslavia will also be in the focus of NATO's attention, since it would be difficult to restore the relations with them and to ensure their agreement on NATO's eastern plans.

In general, the motivation for the 2005-2010 enlargement will depend on the German interest in the Caspian projects and the US resoluteness to preserve NATO as a key element of the Euro-Atlantic security.

New Paradigm of the NATO Development: South or East?

The development of NATO in the new strategic environment will depend on a number of political, military and economic factors, but all these factors will be integrated under one motto – the search for the meaning of NATO's existence. During the Cold War such idea was the collective defense against the eastern threat. During the first post-Cold War decade the Alliance tried to find a rationale connected with non-defense functions. It might seem that the Alliance was transforming into another instrument of globalization. Nowadays, the mission has to

be reviewed again. The Alliance returns to the idea of protecting clearly defined national interests from clearly defined challenges.

One of the key areas of NATO's forward presence is the southern border – Turkey, Greece, Italy, and Spain¹³. At present, the Balkans and the Middle East make the major sources of threat to the Alliance and the Mediterranean is an area of utmost concern (the situation is exacerbated with the ongoing confrontation between Greece and Turkey). The modernization of the obsolete defense infrastructure in the southern flank of NATO is also an urgent topic. However, the southern dimension may not be sufficient for the Alliance.

The threats in this area are not always related to military capabilities of specific states. NATO, as a military-political organization, can be inefficient in combating terrorism, drug trafficking and illegal migration. Besides, the policy of individual NATO members towards the Balkans and the Middle East differs. This impedes or even makes it impossible to formulate a general NATO strategy in this area. In any case, such aspect of the Alliance's development as the enlargement has no prospects in the southern flank.

Let us now look at the eastern dimension. Many experts believe that Russia's revival as a Great Power precludes Moscow from being a democracy with a market economy. Many think that Russia will go on with its expansion and threaten the security of Europe. However, the USSR collapsed because the internal capability for extensive development was exhausted. The export of raw materials was insufficient for global ambitions. The centralized state vanished and there are no grounds to believe that its economic basis will re-emerge. The largest piece of the Soviet empire – Russia – is tied with debts and depends on the global prices on raw materials and weapons.

The economic factor is actually the only impediment to Russia's revival as the global superpower. Ten years of post-Soviet development did not deprive the FSU states of natural and human resources, did not eradicate the experience of imperial construction and did not eliminate the

industrial and military infrastructure. If Russia manages to preserve this *status quo* for another ten years, the miracle of its economic revival may take place. The backbone of this process will be the continental transport corridor from Europe to Asia.

If one looks at the geographical spread of economic activities in Eurasia¹⁴, one can see the large markets of the EU, China and India separated by the geoeconomic vacuum – the landmass of the post-Soviet space. Until recently the sea routes have met the limited demands of these loosely connected markets, but China's accession to the WTO may change the situation. The problem of *Silk Road* may become a practical economic issue and may help to revive the land empires. If Russia manages to gain control of these transport routes, it will have a realistic economic basis for its revival.

If Russia obtains such powerful lever, it may try to restore its domination and to get rid of geopolitical mediators in its contacts with Europe using the northern routes and Belarus. This would deny Russia's neighbors of any strategic alternative to rapprochement with the new empire. The developments of the recent decade in the Caucasus make us conclude that Russia's intentions are clear – to prevent the possibility of geopolitical unity between Central Asia and Europe via the Caucasus. If this task is accomplished, Russia may become the continental integrator of Europe and Asia. Russia is ready to do a lot for this purpose, even to wage a war.

NATO's policy cannot be based on resistance to Russia's economic revival. The Alliance, however, may see to it that the positive economic process is not followed with imperial trends. The only possibility for that is to strengthen the GUUAM as a geopolitical alternative to Russia's role in Eurasia. In other words, it may be a matter of NATO's antimonopoly policy in the post-Soviet space. The Alliance's choice is still not clear. The organization may again be occupied with contradictions between Europe and the United States. This time the transatlantic dissent may be fatal, if NATO fails to overcome it and find the unique job to do, whether in the East or in the South.

¹ The article was prepared on the basis of research conducted in 1998-2000 and funded by the EAPC.

² United States Security Strategy for Europe and NATO. Department of Defense, Chapter 1 – America's enduring interests in Europe. Office of International Security Affairs, 1994. The document was published after the 1994 Brussels summit, but its major ideas seemed to be formulated long before.

³ For instance, the Iraq's aggression against Kuwait, which was bound to the United States with collective security commitments, was not regarded as Iraq's attack against the US allies.

⁴ The decision interpreting the European defense integration as an internal affair of the Alliance was taken in 1996 at the Berlin session of the North Atlantic Council, when the names of new candidates had already been known.

⁵ Precisely, practically unlimited – until the UN Security Council takes appropriate measures (Article 51 of the UN Charter).

⁶ After 1994 – OSCE.

⁷ According to the *Houston Chronicle* of April 6, 1998, six major US military contractors spent \$51 million to promote the idea of NATO's expansion in 1996-1997.

⁸ The existing scheme of interaction between NATO and the UN in Kosovo mostly replicates the Bosnia and Herzegovina scenario, but it was not negotiated at Rambouillet. This option was developed later with the participation of Russia and after the start of the NATO operation in Yugoslavia.

⁹ Defence Capabilities Initiative. NAC-S(99)69, 1999, April 25.

¹⁰ In 2000, NATO and EU experts compiled the Helsinki Headline Catalogue and in November 2000, the EU nations agreed on the Helsinki Force Catalogue.

¹¹ Z. Brzezinski, "NATO: The Dilemmas of Expansion". *National Interest*, 1998, Fall.

¹² 106th Congress 1st Session. Senate Resolution 175, expressing the sense of the Senate regarding United States policy toward the North Atlantic Treaty Organization, in light of the Alliance's April 1999 Washington Summit and the conflict in Kosovo. 1999, August 5, paragraph b-2.

¹³ "Foreign Policy for a World of Decision". *RAND Review*, 2000, Summer (www.rand.org).

¹⁴ *Handbook of International Economic Statistics*. CIA, 1998.

Commentary

**INTERNATIONAL FINANCIAL
AND TECHNICAL ASSISTANCE
TO RUSSIA IN STRENGTHENING
THE NONPROLIFERATION
REGIME**

**by Valery Syomin,
Chief Counselor,
Department of Security and
Disarmament Affairs,
Ministry of Foreign Affairs**

[This article was originally published in *Russian in Yaderny Kontrol*, No. 5, Vol. 7, September-October, 2001]

© *Yaderny Kontrol*, 2001. All rights reserved

© PIR Center, 2001. Translation into English.
Abridged version

As far as disarmament and arms control are concerned, Russia's top priorities are to maintain strategic stability, to strengthen international security and peace, and to enhance WMD nonproliferation regime.

This course of supporting WMD nonproliferation, arms reduction and arms control has repeatedly been stated in a number of basic documents, such as the National Security Concept, the Military Doctrine, and some federal laws concerning the ratification of international treaties in the sphere of disarmament.

The international community would benefit from CTBT's entry into force and, hence, we commend the increase in the number of signatories and ratifiers. Russia has ratified the CTBT and urges other nations to do so. Russia has also ratified START II, whose entry into force depends now on the United States. Moscow is willing to continue nuclear disarmament, to move towards START III with lower level of nuclear arsenals – down to 1,500 warheads. But all this will be possible only if the 1972 ABM Treaty remains intact. It is believed that this important treaty affects vital security interests of entire global community.

The Russian Federation has also signed and ratified the CWC and committed to destroy about 40,000 tons of chemical agents and to

demilitarize 24 former CW production facilities.

Russia's special and important contribution to the cause of disarmament and European and global security is Moscow's participation in the CFE Treaty – one of the key elements of maintaining stability and reducing military tension in Europe. Russia has been implementing the CFE's commitments on reduction and limitation of conventional arms. So far Russia has eliminated and reequipped for peaceful uses more than 23,000 heavy weapon systems (tanks, armored vehicles, combat aircraft, and artillery pieces).

Despite political will of the Kremlin, which is indispensable for timely elimination of weapon stockpiles inherited from the former Soviet Union, Russia has to face some serious economic difficulties in this sphere. Global financial crisis has only exacerbated the situation in the area of arms reduction in Russia.

The lack of funding had a particularly negative impact on the pace of disposition of environmentally hazardous types of weapons and their delivery systems, including CW and nuclear arms, nuclear-powered submarines, spent nuclear fuel, and radioactive waste. Long storage of the aforementioned weapons affected their technical condition and further delay with their disposition may have dramatic consequences for the environment.

The implementation of the CWC commitments is one of the present-day priorities for the Russian Federation. Before signing this document and ratifying it, Russia had repeatedly warned the international community that it would not be able to destroy CW stockpiles in time without financial and technical assistance of the world. At that time, the heads of the developed Western nations gave political assurances that such assistance would be rendered.

More than seven years have passed after the signature of the CWC and more than three years have passed since Russia became full-fledged member to the OPCW. What is the amount of aid that Russia has received

during this time? As of June 1, 2001, the total amount of declared aid to Russia was about \$374.6 million, while only \$237.4 million had actually been authorized. Total costs of elimination of Russian CW stockpiles are about \$6 billion, according to different estimates. Therefore, the international assistance accounts for about 6.5% of costs. One has to bear in mind that a certain share of funds appropriated by foreign states is expended by donors on organizational and technical activities pertaining to the implementation of the programs of assistance.

Thus, to destroy CW arsenals in time, Russia has to spend about \$900 million per annum (if Moscow wants to complete the program by 2007), or about \$490 million per annum if the deadline for CW elimination is extended until 2012. Such burden is unbearable for the transition economy.

In this connection, taking into account the insufficient funding of the Russian CW dismantlement program, Moscow addressed the OPCW on November 1, 1999 with a request to extend the deadline for the implementation of the first stage of CW destruction (the term expired in April 2000). The fifth session of the OPCW Conference in May decided to meet Russia's request.

Under these circumstances, the President and the Government undertook urgent measures to streamline the state system of management of CW dismantlement activities. The Russian Munitions Agency was established and designated to be the National Authority for interaction with the OPCW and fulfillment of the CWC. The Agency also serves as a state contractor for development and implementation of the Federal Special Program for CW Dismantlement, Elimination and Conversion of Former CW Production Facilities. The program was also amended to become cheaper.

Moreover, the federal budget for FY2001 provided for six-time increase (in comparison to 2000) in funding for CW dismantlement (up to \$3 billion). Russia complied with the legislation and commenced large-scale activities to construct social and engineering infrastructure of future CW dismantlement facilities in Gorny (Saratovskaya oblast) and

Shchuchye (Kurganskaya oblast) - two primary facilities so far.

Russia was concerned about the US Congress decision to suspend funding for the facility in Shchuchye starting from 2001. Such approach would have had negative impact on Russian plans to carry out the commitments in time and would have affected the decision of other states to assist Russia in chemical disarmament. The Russian Federation hopes that, taking into account positive experience of cooperation, the US Congress will provide appropriate funding in 2002, in accordance with the previously agreed plans.

Russia has repeatedly expressed its gratitude to Germany, Sweden, Finland, the Netherlands, Italy, the EU, and Switzerland for their substantial aid to Russia in this area. Canada, Norway, and the UK have already pledged to join the efforts to assist Russia in CW destruction.

Another priority for Russia is disposition of multipurpose nuclear-powered submarines decommissioned in the North and the Far East. The dismantlement infrastructure should be modernized, safety and security of spent fuel management and management of radioactive waste should be enhanced.

The Soviet Union built more than 250 nuclear-powered submarines for naval defense. Russia had to deal with this legacy and related problems concerning the dismantlement of nuclear-powered vessels, whose service life had expired. The Russian Navy was armed with the first, second and third generation nuclear-powered submarines. Nowadays the first generation submarines have totally been decommissioned, whereas the second generation submarines are partially decommissioned.

As of January 1, 2001, the Russian Navy decommissioned 184 nuclear-powered submarines, 53 of them had been destroyed. 29 out 131 remaining decommissioned submarines are at the dismantlement facilities and 102 vessels are still floating. The age of such submarines is about 25-40 years and they have been waiting for disposition for more than 10 years. One has to bear in mind that a number of existing coastal and floating storage facilities for spent nuclear fuel and radioactive waste have expired

service life and some of them are in the state of emergency. They should be released from their lethal stockpiles and be destroyed with subsequent environmental rehabilitation.

There is no infrastructure for complex disposition of nuclear-powered submarines in the North or in the Far East. There is no capacity for conditioning of solid radioactive waste. Russia lacks technical means for unloading spent nuclear fuel from the reactors of the submarines. The available systems are concentrated on the coast, at the facilities involved mostly in the disposition of strategic nuclear-powered submarines, whose number is far smaller than the amount of decommissioned multipurpose nuclear-powered submarines. The same is true with respect to existing capacity of spent fuel management and submarine dismantlement. Russia has to develop additional production capabilities.

The significant number of decommissioned multipurpose submarines requires immediate unloading of spent nuclear fuel and disposition, in order to avoid the risk of their sinking and to avoid devastating environmental consequences for the submarine bases, shipbuilding yards and at the routes of towage.

According to the decision of the Russian Government, the Minatom was charged with disposition of the nuclear-powered submarines. The Russian budget for FY2000 provided 1.07 billion rubles for submarine disposition, radioactive waste and spent fuel management, including the construction of infrastructure facilities. In 2001 Russia appropriated 1.2 billion rubles, or about 50% of required funding. Full dismantlement of all decommissioned nuclear-powered submarines will cost about \$2 billion.

Under these circumstances, Russia counts on financial and technical aid in solving the problem of comprehensive submarine dismantlement and related environmental rehabilitation activities in the both regions. Russia would like to involve in this process donor countries and international organizations. The United States, Norway, Japan, and the Netherlands render considerable assistance to Russia in this area. The United Kingdom has also pledged to assist Russia in disposing nuclear waste in the Northwestern region of Russia.

Nonetheless, the total amount of donor aid is inadequate in comparison to the tasks. For instance, to dismantle 15 submarines per year and to construct infrastructure facilities (e.g. a storage facility for the long-term storage (up to 70-80 years) of reactor compartments with appropriate transportation infrastructure, storage facilities and containers for spent nuclear fuel, etc.), Russia should spend about 1-1.2 billion rubles per annum on respective program and should obtain about \$70-80 million of aid every year.

If Russia fails to attract foreign aid, the implementation of the program for submarine dismantlement may be deferred to 2020. This will have a negative impact on the Russia's ability to ensure environmentally safe maintenance of nuclear-powered submarines, taking into account their technical condition.

Among other priorities is housing for retired officers, their retraining and social adaptation, conversion and environmental reconstruction of military facilities.

At present, more than 260,000 military need housing and 50,000 have no public housing. This number includes both active personnel and retired officers, who have no permanent residence and have to stay at military stations.

To improve the situation in 2001-2003, Russia needs \$2.27 billion of assistance in the form of grants or preferential loans. This would help to complete the construction of 70,000 apartments for the families of the retired officers (who served on the territory of Russia and beyond its borders - in the Caucasus, Kazakhstan, Central Asia, etc.) and would help some previously retired officers to move out from closed military stations. Obviously, without solving these issues, Russia may fail to comply with all its commitments under the disarmament treaties.

Much attention is paid to foreign assistance to the nuclear weapon complex.

There are some obstacles impeding the process of attracting foreign assistance and its efficient expenditure.

Firstly, one has to note the lack of convergence in priorities of assistance. For instance, the United States funds only elimination of strategic weapons and delivery systems within the CTR Program. Washington does not allocate funds for conversion, retraining of retired officers, or environmental rehabilitation

of former military facilities. Besides, in 2000 the US Congress decided to suspend financing for the CW dismantlement facility in Shchuchye, for the CW allegedly presented no threat to US national security.

Secondly, there is difference in the national legislation. In some cases donors insist on incorporating of some provisions, which run counter to Russia legislation, into the international agreements on assistance (as it was during negotiations on assistance in CW dismantlement with the Netherlands and Finland). Sometimes these provisions may even contradict the international law (such projects, as US-Russian-Norwegian agreement on military and environmental cooperation in the Arctic Zone, or Multilateral Nuclear and Environment Program in the Russian Federation).

Thirdly, in some cases the Russian legislation lacks adequate norms concerning foreign aid. In May 1998 the Russian Federation adopted the law "On Grants to the Russian Federation, and Amendments to Certain Legal Acts of the Russian Federation on Taxation, and on Establishing Privileges for Payments to State Extra-Budgetary Funds in Connection with Rendering Assistance to the Russian Federation". This law enables Moscow mainly to solve all problems.

Fourthly, Russia cannot always agree to certain conditions of assistance, especially when the latter is stipulated with the intensity of Russia's interaction with third nations in this area. Russia's cooperation with all countries is performed in full compliance with the international nonproliferation regime.

Our experience demonstrates that foreign aid to Russia is not adequate in comparison to the scale of tasks. More results may be achieved if the international financial community joins these efforts.

It may be the matter of providing Russia with preferential long-term large loans (sometimes grants) of the international financial institutions (such as the IMF, the World Bank, the EBRD, etc. Russia may also obtain funds from the special programs of state-run and private foundations, attract private and corporate investors. Moscow seeks support of the international community in this sphere. Russia follows with interest the activities of the newly established Nunn-Turner private foundation – the Nuclear Threat Initiative.

Commentary

THE IMPORT OF SPENT NUCLEAR FUEL TO RUSSIA

**Vladimir Rybachenkov,
Counselor,
Department for Security and
Disarmament Affairs,
Ministry of Foreign Affairs**

[This article was originally published in Russian in *Yaderny Kontrol*, No. 4, Vol. 7, July-August, 2001]

© *Yaderny Kontrol*, 2001. All rights reserved

© PIR Center, 2001. Translation into English.
Abridged version

On July 10, 2001 President Putin signed the Federal Law "On Making Amendments to the Federal Law 'On Nuclear Energy Uses'", the Federal Law "On Making Amendments to Article 50 of the RSFSR Law 'On Environmental Protection'", and the Federal Law "On Specialized Environmental Programs for Rehabilitation of Radiation-Polluted Territories".

The presidential decree also provided for the establishment of the special commission on the issues pertaining to the import of irradiated foreign fuel assemblies to the Russian Federation. The commission is headed by Academician and Nobel Prize Winner Zhores Alferov. Vladimir Putin submitted to the Duma another bill stating that spent fuel import to the Russian Federation might be authorized by the aforementioned commission and might take place only if positive decision was taken.

This put an end to a complex and contradictory process of devising and debating the set of appropriate documents. The discussion lasted for more than two years and involved both agencies and ministries concerned and mass media.

The old Russian legislation permitted the import of spent nuclear fuel to Russia for reprocessing, but ministerial norms and regulations insisted on mandatory return of radioactive waste resulting from reprocessing.

The adoption of new laws enables Russia to import spent nuclear fuel for reprocessing and long-term storage and, under certain conditions, to leave waste after the reprocessing.

The key law is “*On Making Amendments to Article 50...*” that provides for import of irradiated foreign fuel assemblies to Russia under certain conditions: ‘Import of irradiated fuel assemblies from the foreign states to the Russian Federation for interim technological storage and/or reprocessing is allowed, if the appropriate project has passed the state environmental review and other state examinations envisaged by the legislation of the Russian Federation, if the implementation of the appropriate project results in reduction of the general risk of radiation and enhances environmental safety.’

The procedure of spent fuel import and return of reprocessing waste shall be determined by the Russian Government, which has to rely on fundamental principles of nuclear nonproliferation, environmental protection and Russia’s environmental interests. The priority should be given to the right to return the radioactive reprocessing waste to the state of origin of nuclear material, or to ensure such return.

The law “*On Making Amendments to the Federal Law ‘On Nuclear Energy Uses’*” specifies some terms (irradiated fuel assembly, interim technological storage) and maintains that import and export of nuclear fuel is carried out in conformity with civil law (i.e. corresponding contracts). This is one of the steps to solve the problem of leasing of such fuel. This will facilitate to expand the presence of Russian nuclear fuel producers on the foreign market and will add ‘interim storage’ to the list of allowed services pertaining to spent nuclear fuel management.

The law “*On Specialized Environmental Programs...*” regulates the expenditure of funds gained from import of foreign spent fuel. All money, except for the necessary costs, will be distributed in the federal budget in the following manner: 25% will go to the regions – destinations of spent fuel

import; 75% will be spent on the implementation of specialized environmental programs. The Russian Government is in charge of elaborating such programs and setting the funding priorities.

In the course of debate, some Russian and Western politicians and public figures argued that Russia might become a nuclear dumping site.

It seems that such allegations are groundless, for the term “radioactive waste” should not be substituted for “spent nuclear fuel”. The latter is not waste, since it contains a large amount of *unburned* fissile material (uranium – up to 95%; plutonium – about 1% of total mass of *fresh* nuclear fuel), which may further be used.

One may look at the following example: if 20,000 tons of foreign spent fuel are reprocessed in Russia, as expected, the amount of separated *fresh* uranium will be enough to make 19,500 tons of uranium fuel assemblies for the NPPs.

As far as separated plutonium is concerned, it may be used to produce MOX fuel for light-water reactors, as well as fast reactors that will play a leading role in the nuclear energy sector of the second half of the 21st century, when crude uranium reserves may be exhausted.

It is noteworthy that the international convention on safe spent fuel management and safe management of radioactive waste (entered into force in June 2001) distinguishes between spent nuclear fuel and radioactive waste. The convention emphasizes the importance of international cooperation in enhancing safety of spent fuel management on the basis of bilateral and multilateral agreements, as well as the significance of rendering services in the area of spent fuel management to the countries that do not have such capability.

As far as practical implementation of new laws is concerned, Russia has modern and well-tested technologies for storage and reprocessing of spent nuclear fuel, which meet the international standards of nuclear

and environmental safety. The wet spent fuel storage facility at the *Mining Chemical Combine* (Krasnoyarsk-26) has been operational for more than 10 years and may contain up to 6,000 tons (now it is full by 45%). Another modern dry storage facility should be built there and contain 33,000 tons. This construction may be funded with revenues from foreign spent fuel import.

The imported spent fuel will be stored for 25-40 years. Most of the products of fission will naturally decay, some part of the fuel may be sent back and the rest should be reprocessed. The products of reprocessing may be used in nuclear fuel cycle.

Russian experts assume that the storage for 25-40 years is optimal, for in the second half of the 21st century our nuclear energy may need regenerated products. It is not reasonable to fabricate them now and to store them, since the prolongation of the term of spent fuel storage facilitates its further reprocessing (regeneration).

RT-1 plant at NPO *Mayak* (Chelyabinsk) has successfully been reprocessing spent fuel of the first generation Soviet reactors (VVER-440) for more than 20 years. The fuel comes from Russia and Eastern Europe.

According to the Minatom's plans, by 2025 *RT-2* plant should become operational in Krasnoyarsk-26. It will reprocess spent fuel of modern reactors. Some waste resulting from reprocessing will be transmuted (transformation of long half-life radioactive elements into short half-life substances), some waste will be mineralized and buried. The share of buried waste will not exceed 10% of initial amount of spent fuel.

Feasibility studies and marketing research carried out by the Minatom have proved the possibility of importing up to 20,000 tons of foreign spent fuel in the next 10-20 years. The revenues may amount to no less than \$20 billion.

These calculations are based on current world prices of spent fuel management: reprocessing with return of radioactive waste - \$600-1,000 per kilo (\$800 at average); long-

term spent fuel storage - \$300-600 per kilo (there is no market yet, data based on evaluations); reprocessing without return of radioactive waste and plutonium - \$1,200-2,000 per kilo (\$1,600 at average).

Full costs of management of 20,000 tons of foreign spent fuel (storage for up to 40 years, construction and maintenance of storage facilities and *RT-2* plant, disposition and burying of waste) may amount to \$10 billion, the largest share of which will be expended only 20-30 years after importing the fuel and obtaining funds from foreign suppliers.

Regional budgets may receive up to \$3.3 billion, whereas about \$7.2 billion will be spent to solve federal and regional environmental and socioeconomic problems. The significance of these financial gains may be understood, if compared to budgetary allocations for the aforementioned missions. The Federal Program "*Nuclear and Radiation Safety in Russia*" plans to obtain 30 times less, than \$7 billion, in the next six years. It would be enough to say that the United States spends \$6 billion per annum for the same purposes.

Russia has to face complex tasks in this area. According to some Western estimates, only three Russian giants fabricating nuclear material (Chelyabinsk-65, Tomsk-7, and Krasnoyarsk-26) account for more than 95% of global radioactive waste contaminating surface and underground water systems.

Rehabilitation is needed for a number of other Russian nuclear facilities, such as the *Kurchatov* Institute situated nearly in the downtown of Moscow and possessing research reactors and plants, as well as the storage facilities for radioactive waste and spent fuel.

Another sensitive issue for the public is the problem of safe transportation of spent fuel through the Russian territory.

The statistics demonstrate that since 1979 the transportation of spent fuel of VVER-440 reactors by railroad to *RT-1* plant has been carried out without any accidents. During this time more than 900 container loads have

been transported, some containers were shipped from abroad (Finland, Bulgaria, Hungary, and Slovakia). Since 1985 the storage facility in Krasnoyarsk-26 has received more than 3,000 irradiated fuel assemblies of VVER-1000 reactors (about 700 container loads) situated in Russia and Ukraine. No accidents resulting in radioactive contamination have occurred.

As far as financial abuses are concerned, the issue has partly been resolved by the aforementioned presidential decree. The specialized commission will probably have broad powers, including oversight of the use of revenues. Moreover, one has to bear in mind that Russia has practical experience of such oversight – the HEU-LEU deal.

During 1995-2000 Russia received about \$2 billion from the United States for its uranium. The money was used to enhance nuclear safety of nuclear energy sector, to dismantle nuclear-powered submarines, to perform conversion of nuclear weapon complex enterprises, to develop applied and fundamental science. It is noteworthy that numerous financial inspections, including those carried out by the Board of Auditors of the Russian Federation, have not revealed any abuse of these funds.

Thus, foreign spent fuel import to Russia meets Russia's national interests, for it will help to resolve the old problem of procuring realistic and adequate funding for national programs of rehabilitation of radiation-polluted territories. Figuratively, by importing one container of foreign spent fuel, Russia will be able to dispose of 10 containers of its own radioactive waste.

At the same time, there are certain problems concerning the implementation of this project and they should not be underestimated.

Taking into account the scale and the long term of this mission, Russian scientists and engineers have to face a set of problems pertaining to additional measures to ensure nuclear and environmental safety. Particular attention should also be paid to systematic explanatory activities, promotion of public

awareness of the issue, including Russian environmental organizations.

In conclusion, it must be important to consider the last but not the least important matter.

In early June 2001 the US Department of State made a statement concerning the Duma's approval of the legislation regulating spent fuel import to Russia. To the following question, 'What is the US view of Russia's plan to import nuclear waste? Would we allow Japanese and Korean waste, over which we have some control, to be sent to Russia?', the spokesman of the Department of State answered,

'US law and our bilateral agreements provide that the US must give its consent to any retransfer of such material. For Russia to import irradiated fuel containing US origin nuclear material would require a Peaceful Nuclear Cooperation Agreement with the United States, something it does not now have.'

The United States links its decision not only with demand to ensure sufficient level of nuclear and radiation safety, but also with the 'nature of Russia's nuclear cooperation with third parties' (probably, Washington means Iran).

On June 9, 2001 the Russian MFA made a statement pointing out that 'import of foreign spent nuclear fuel to Russia would be a significant contribution to the strengthening of global nuclear nonproliferation regime, for this would facilitate withdrawal from international trafficking some fissile materials that may be used to develop nuclear weapons [...] Russia's declared intentions meet the nonproliferation interests of the United States and entire world community.'

Russia also hoped that 'Washington will analyze the situation and come to the conclusion that Russian plans in this area should be endorsed.'

Commentary**THE TIME TO ENHANCE
COOPERATION ON BROAD
RANGE OF SECURITY ISSUES****by Vladimir Orlov,
and Roland Timerbaev,
PIR Center****[This article was originally published in
Russian in *Yaderny Kontrol*, No. 5, Vol. 7,
September-October, 2001]**© *Yaderny Kontrol*, 2001. All rights reserved© PIR Center, 2001. Translation into English.
Abridged version

The establishment of a broad military-political antiterrorist coalition adds qualitatively new elements to the international relations and enables (moreover, makes it an imperative) Russia and the United States to seek the solutions to the problems of maintaining stability and security that continue to exacerbate the bilateral relations, despite over a decade of post-Cold War development. Swift coordination of efforts to counter international terrorism gives new opportunities to eradicate the deadlock in the area of strategic arms. And it would be an unforgivable mistake to miss this unique chance.

The parties should take into account the following things. In the last three decades, since the commencement of bilateral negotiations on strategic weapons, Russia and the United States have fairly been seeing the strategic stability, as a balance of closely intertwined strategic offensive and defensive arms. The US military-political establishment had initially developed the concept, and since 1965-1966 the United States had tried to convince the Soviet leadership. But the latter began to take it seriously only in 1970. Thus, by 1972 the parties approved the SALT I agreements, including the ABM Treaty, SALT I Treaty, the Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War, and the Hot Line Agreement.

In 1983, the US position changed when President Reagan laid down the Strategic Defense Initiative. The idea of the missile-proof shield was transformed in 1989, when President Bush converted the SDI into the

Global Defense of Limited Strikes. However, even the development of a limited system might have affected the strategic balance of power, for such system might have neutralized the certain number of ICBMs of the opposite party.

However, until the late 1990s the parties have been maintaining the interlink paradigm. Although the Clinton administration started to plan the deployment of limited NMD, the ABM Treaty was still referred to as a cornerstone of strategic stability in all major bilateral documents. Even the early statements by George W. Bush (when he ran for presidency) spoke about going beyond the ABM Treaty's framework and the importance of a new strategic framework, but emphasized the commitment to the concept of strategic nuclear arms reduction to the lowest possible level. Hence, the aforementioned statements recognized the linkage between strategic defensive and offensive arms.

At the same time, President Bush has stated that he is determined to avoid prolonged treaty negotiations and endorsed the idea of unilateral initiatives on the offensive arms reduction. Vladimir Putin has emphasized the continuing importance of treaty-based legally-binding and verifiable measures, although he has indicated Russia's willingness to pursue some reductions either 'together or in parallel' down to 1,500 warheads or lower.

In order to assist the US and Russian Governments in developing the new strategic framework suitable for the post-Cold War environment and meeting the requirements of true partnership, two non-governmental organizations - the Carnegie Endowment for International Peace (USA)¹ and the PIR Center for Policy Studies (Russia) assisted by a group of US-Russian experts - have attempted to set forth some recommendations for the authorities.

The following suggestions to address these issues were developed during a January-July series of workshops in Moscow, London, Washington and Moscow attended by more than 80 Russian and US government officials and nongovernmental experts. These suggestions draw on the dialogue that unfolded during the workshops, but they are not a consensus set of recommendations.

The participants agreed that the United States and Russia should work at the development of the new strategic framework that the two Presidents discussed during their summits. However, they pointed out that the parties should try to preserve the components of the current system that may ensure stability in the process of transition to the new strategic framework. Under these circumstances, there is a need for a phased approach. The structure of the phases may proceed from the following.

Firstly, although new nuclear reductions need not rely on an immediate negotiating process, they should be coordinated and discussed in advance between the two countries and, if possible, jointly announced by the two presidents. This would provide confidence to the international community that the new reductions complement positive relations between the two countries. Coordinated unilateral nuclear reductions of this type should be backed up within a reasonable time by a legally binding agreement, even if in an abbreviated form.

Secondly, the two countries should establish an on-going, serious and structured dialogue to develop a new framework for the strategic relationship. This dialogue should take place with senior, but expert level leadership, possibly including both official and unofficial representation on both sides. Topics might include:

- fate of existing strategic reduction agreements and targets for START III;
- nuclear doctrine and policy of both countries, including development, modernization, and employment of weapons.

Thirdly, the starting point for the transition to the new framework is today, when the strategic stability relationship is regulated by formal arms control agreements. The end point is in the future, when strategic nuclear deterrence and arms control may have some residual importance to the relationship, but the emphasis will be much more strongly placed on *cooperation* in strategic matters. Such cooperation may include joint work on missile defenses, on management and control of nuclear weapons, and on broad efforts to prevent the proliferation of weapons of mass destruction. This end point will be captured in the new framework for strategic cooperation. However, the way stations to achieving that framework will also be important, for they will

determine whether the process will be successful. The following phases in the transition might be considered:

Phase 1:

- A presidential joint statement that the strategic offensive forces and missile defense systems should not threaten the strategic forces of the other country. It could also state that the two countries will work together to move toward a non-threatening relationship in phases.
- Coordinated unilateral reductions in strategic nuclear forces that would accelerate the negotiated strategic arms reduction (START) process. Although President Bush has not yet decided on US force levels, these reductions could go as low as 1,500 warheads or even lower, as President Putin has suggested.
- Accelerated efforts to address worrisome practices that remain in place since the Cold War, such as deployment of strategic nuclear weapons on hair-trigger alert. Early success could be achieved in deactivation of strategic systems and in construction of a joint early warning center; additional steps could be considered to further enhance early warning cooperation and reduce launch readiness.
- Cooperation on missile defenses that begins to build confidence for both countries that defenses do not threaten their strategic offensive forces. Such cooperation, beginning with the joint statement mentioned above, might continue in this first phase with joint consideration of the threat. It might include discussion of theater missile defense technology, as President Putin has suggested to NATO. It also might include joint consideration of the individual technologies being proposed.
- Early consideration of how the ABM Treaty could be adapted to continue assuring both sides that their strategic offensive forces are not threatened. Because the defense system to be deployed is not yet determined, comprehensive discussions of the future of the ABM Treaty would not yet be possible, but the parties may consider some amendments to allow certain activities. Besides, the treaty's potential use as a tool to build mutual confidence in the missile defense deployment process could be considered at this juncture.

Some experts assumed that many of the elements of Phase 1 could be accomplished by late 2002.

Phase 2:

- Agreement on legally binding measures to reinforce and assure smooth implementation of the unilateral reductions begun in Phase 1. In the early stages of the transition process, important changes in the strategic relationship that are undertaken unilaterally should be backed up soon after by a legally binding document. This need not be a complicated negotiation. The legally binding document might be an adaptation of an existing treaty (e.g. a simplified START I Verification Protocol) or a new agreement, which also could be simplified in its approach (e.g. an *abbreviated* START III Treaty).
- Establishment of a joint defense-military planning mechanism, to provide a window into the thinking and programs of each side. Such a venue could focus on expanding the role of joint defense-military planning, and broad exchanges on the threat, technologies and architectures. Offensive and defensive technologies should both be considered in this venue.
- Continued use of the high-level venue to resolve long-standing concerns in the strategic relationship. Issues to be addressed might include upload potential or reversibility, status of non-strategic nuclear weapons, proliferation of weapons of mass destruction, threats that certain systems (e.g. precision-guided munitions or sea-launched cruise missiles) pose to national forces, and continuing concerns about *wars by accident*. These issues might be addressed through enhancements to transparency and confidence-building measures (for forces continuing in operation), through ceasing operations and eliminating weapons, or through policy enhancements (e.g. improved export control laws).
- Launch of a joint project on missile defense technology. This might involve a project to consider the specifics of how an existing technology might be usefully deployed (e.g. deployment of the S-300 as part of a NATO theater defense system). Alternatively, it might involve joint development work on a technology that was determined to be promising during the joint discussions of Phase 1.

- Determination of adaptation process for the ABM Treaty. As missile defense technologies prove themselves and as deployment decisions are made, decisions could be made about the future of the ABM Treaty. One option is that the Treaty would be usefully adapted to continue to provide confidence to the two sides that missile defenses are not threatening to strategic offensive forces. Another is that the two sides would decide that a different type of document is needed, which might be a comprehensive agreement to cooperate on deploying missile defenses rather than a treaty preventing deployment. A third option is that the two would decide to conduct programs in parallel, with transparency between the programs.

According to some participants, many of the elements of Phase 2 could be accomplished within the two years following the completion of Phase 1 (by late 2004). Several, however, would continue into Phase 3.

Phase 3:

- Further reductions in strategic nuclear forces to numbers below 1,000 in each country. This process should include agreed transparency into the elimination of both strategic and non-strategic warheads and delivery systems, although it might not require a legal-binding agreement at this point.
- Incorporation of other countries that have tested nuclear weapons into the reduction process². These countries might be engaged in discussions during Phase 1 and 2, but actual reductions in their forces would only begin once the United States and Russia had completed significant reductions.
- Continued routinization of joint defense-military planning. This might include joint weapon acquisitions and extensive interaction of military industries in Russia and NATO countries.
- Large-scale joint project or projects to deploy missile defenses in theaters or at national levels. By this time, differences over the ABM Treaty should be resolved.

Phase 3 is likely to take an additional four to eight years beyond the completion of Phase 2 (i.e. by late 2008-2012).

Transparency and confidence-building measures should be used to provide on-going windows into the activities of the two countries

during the transition period, and is important at each phase of it. Considerable transparency already exists through the arms control verification and monitoring process and through additional programs, such as Cooperative Threat Reduction, that give the United States access to the Russian nuclear complex. The special non-reciprocal access to Russian nuclear facilities that the USA currently enjoys as a result of its CTR assistance program will have to be balanced at some point by *compensatory reciprocity* of some kind at US nuclear facilities. One option might be to permit Russian companies to bid on weapon elimination work at US nuclear sites (as is currently the case with US companies at Russian sites).

Developing additional transparency measures as the overall relationship improves will be possible, and will be helpful in resolving long-standing issues such as the deployment status of Russian non-strategic nuclear weapons or US sea-launched cruise missiles. Eventually, however, formal transparency will be less necessary as mutual access and joint cooperation expand.

Although the experts have failed to come to compromise on some petty issues (this was not the case anyway), the major value of the aforementioned proposals is that they are based on the principle of ensuring bilateral strategic cooperation and the importance of *phased* transition to the new framework. The recommendations were submitted to the senior officials of the two countries and one may assume that they were considered (albeit there was no direct response). We are sure that the current situation and the recent new opportunities for the constructive dialogue make the aforementioned proposals even more topical.

At the Bush-Putin summit in Genoa in July 2001, the parties made a joint statement naming strategic offensive and defensive arms as *interrelated issues*. A certain progress became evident during the Bush-Putin meeting in Shanghai on October 21. President Bush argued that the United States would reduce its nuclear force to the level sufficient for preserving peace, taking into account the reality of the 21st century³. In November, during the Washington-Crawford summit, Presidents Bush and Putin reaffirmed their commitment to the interdependence of strategic offensive and defensive arms.

The reaction of the Congress on the US NMD plans is mixed. Democrats, who won the majority in the Senate, and Republicans have launched a dramatic debate on NMD deployment. Nonetheless, after September 11, Democrats decided to defer the differences at this stage and agreed to the administration's request for funding for the development of missile defenses.

Vladimir Putin on his part said, 'I assume that we have an understanding that we may come to an agreement [on missile defense - Ed.], bearing in mind US and Russian national interests and taking into account the need to strengthen international stability in this important area.' According to his assessments, 'we [Russia and the United States - Ed.] have some progress, as far as missile defense is concerned.' Meanwhile, Vladimir Putin noted that Russia 'regards this [the ABM Treaty - Ed.] as the most important element of stability in the world.'⁴

After the US-Russian summit in November, we hope that the aspirations for reasonable and mutually acceptable cooperation in maintaining stability in the world will prevail. Such stability should be based on the linkage between strategic offensive and defensive arms and on steady and irreversible reduction in nuclear arsenals. Nowadays, the parties have a *real* opportunity to make a right choice.

¹ On the part of the CEIP, the project was coordinated by Rose Gottemoeller, Alexander Pikayev, and Jon Wolfsthal.

² Some Russian participants of the project, including the authors of this article, insisted on involving other nuclear weapon states (even non-recognized) in disarmament. The wording 'that have tested nuclear weapons' was included upon request of the US participants, for whom the Israeli factor was quite sensitive. However, there is evidence that Israel has conducted sub-critical tests. It is also suspected of conducting an atmospheric nuclear explosion in 1979 in the southern part of the Indian Ocean in collaboration with South Africa. The Russian experts assume that Israel should be involved in nuclear disarmament. As far as we understand, the US participants believe the same.

³ According to the *Washington Post* of October 22, some US military would like to preserve the US arsenal at the level of 2,200-2,500 warheads.

⁴ *ITAR-TASS*, 2001, October 21.

PIR Center News

Winter 2001/2002

2001, November 1. Major-General Vladimir Dvorkin became PIR Senior Advisor.

Vladimir Dvorkin is one of the authors of all major documents related to the Strategic Nuclear Forces and the Strategic Missile Forces. For many years he has been participating as an expert in preparing SALT II, the INF Treaty, START I and START II. He made a significant contribution to formulating Soviet and Russia's position at the negotiations on strategic offensive arms control and reduction.

Major-General Vladimir Dvorkin is well-known in Russia and abroad. He is an Honored Worker of Science and Technology of the Russian Federation, Doctor of Science, Professor, Full Member of the Russian Academy of Missile and Artillery Sciences, the Academy of the Military Sciences, the Russian Engineering Academy, the International Engineering Academy, and the Academy of Astronautics.

He was born on January 12, 1936 in Leningrad. Graduated from the High Military Naval College in 1958 and until 1962 worked at the State Central Naval Testing Site. Vladimir Dvorkin took part in the first Soviet tests of nuclear-powered ballistic missile submarines and in the first underwater test launches.

In 1962-2001, Gen. Dvorkin worked in the 4th Central Research Institute of the Russian Defense Ministry, which he headed since 1993. Gen. Dvorkin has more than 350 publications. He defended his doctoral thesis in 1974.

2001, November 16. The PIR Center, the Center for Nonproliferation Studies of the Monterey Institute of International Studies and the Research Center for Nonproliferation Problems (Ukraine) held the seminar "*The Future of the Ukrainian Space and Missile Industry: Prospects for International Cooperation*" in Kyiv.

The opening address to the participants was made by Clay Moltz, Director of the NIS Program of the CNS. The participants were

also welcomed by Volodymyr Chumak, Director of the Ukrainian Research Center for Nonproliferation Problems, Vasily Lata, PIR Advisor, and Dr. Gary Samore, ex-Director for Nonproliferation Policy of the US National Security Council, now Senior Fellow of the International Institute for Strategic Studies (London).

There were four panels at the seminar:

- The Ukrainian Space and Missile Industry: Current Status (chaired by Vasily Lata)
- Ukrainian Export Controls in the Missile Sector (chaired by Volodymyr Chumak)
- Ukraine and International Space Cooperation (chaired by Yury Karpenko, Research Center for Nonproliferation Problems)
- Perspectives on the Future and Emerging Issues (chaired by Victor Mizin).

In the course of the seminar the experts discussed the current status of missile and space industry, missile export controls in Ukraine and the prospects for international cooperation with Ukraine in this area.

As for the Russian-Ukrainian cooperation, the participants agreed that, despite the shortcomings and difficulties, the cooperation between two countries will develop and the respective governments should pay more attention to this sector.

Among other participants of the seminar were representatives of the governmental and non-governmental organizations of the United States, the UK, Ukraine and Russia, including Mykola Mytrakhov, President of the Information and Analytical Center Space-Inform at the National Space Agency of Ukraine, Volodymyr Bandura, Deputy Head of Directorate, MFA of Ukraine, Gennady Khromov, Senior Expert of *Glavkosmos*, Ian Kenyon, Visiting Senior Research Fellow, Mountbatten Centre for International Studies University of Southampton, Vladimir Titov and Alexei Gavrillov, Moscow office of *Boeing* corporation, Marsalina Tsyrenzhapova, PIR Project Coordinator, and others.

2001, November 16. The PIR Center held the press conference "*The Texas Summit: Results and Prospects*" in the Press Development Institute.

The keynote speakers were Prof. Yury Fedorov, Deputy Director of the PIR Center; Amb. (ret.) Roland Timerbaev, PIR Executive Council Chair; and Maj.-Gen. Vladimir Dvorkin, PIR Senior Scientific Advisor.

The conference was attended by representatives of the Russian and foreign media, including *Interfax*, *ITAR-TASS*, *National Information Service Strana.ru*, *the Federal News Service*, *Kyodo*, *Nikkei*, *Mainichi*, *Guaming Zhebao*, *Xinhua*, *Wen Wenbao*, *Juleisradio*, *the Radio Liberty*, *Christian Science Monitor*, *Financial Times*, *Moscow Times*, as well as the officials of the press services (MOD and the Federal Agency for Governmental Communications and Information), the VNIITE, the Center for War and Peace Journalism, the European Commission, the embassies of Belarus, Hungary, Germany, Spain, Lithuania, Norway, Peru, Poland, Romania, Slovakia, Ukraine.

In the course of the press conference, the PIR Center's experts gave their assessment of the summit results and evaluated the prospects for US-Russian cooperation in the area of strategic stability, notably as far as the strategic offensive arms reductions are concerned. Other matters of particular importance were the modification of the ABM Treaty and the international combat against terrorism.

According to Yury Fedorov, 'The Texas summit is significant, despite the fact that there was no any breakthrough in concluding the agreements. The summit has anyway contributed to the development of those brand new trends in the bilateral relations, which emerged during the summits in Ljubljana, Genoa, and Shanghai. Obviously, some urgent problems related to the ABM and START Treaties do exist. However, the importance of the contradictions is abating, whereas as the interests of the parties start to confer and are emphasized.'

Vladimir Dvorkin maintained that 'there should be no legal vacuum relating to the ABM-START issues, since mankind has lived long with the sound system of agreements. In this connection, during the transition period the parties should try to maintain the legal basis for their relationship.'

Amb. (ret.) Roland Timerbaev said, 'There is a perfect understanding between the parties upon the urgent necessity to proceed with the dialogue, in order to achieve mutually accepted agreements upon offensive, as well as defensive arms. Judging by the current reports, the parties begin to realize the importance of proper codification of all the agreements and the significance of verification.'

2001, November 27. The PIR Center held the meeting with the newly appointed Deputy Administrator for Defense Nuclear Nonproliferation of the National Nuclear Security Administration Linton Brooks accompanied by the officials of the US DOE and the US Embassy in Moscow.

Among the participants of the meeting were representatives of the Russian NGOs - the PIR Center, the Center for Arms Control, Energy and Environmental Studies at the MPhTI, the Center for War and Peace Journalism, the representatives of the Kurchatov Institute, the IMEMO, the RISI, the Carnegie Moscow Center, the Center for Nonproliferation Studies of the Monterey Institute of International Studies.

In the course of the meeting the parties discussed the prospects for US-Russian cooperation in the area of nonproliferation, including the CTR Program and the MPC&A Program. The participants exchanged their views on the problem of US accession to the CTBT, the significance of developing legally binding arms control agreements, the need for US-Russian joint efforts with respect to the proliferation challenges coming from South Asia.

2001, November 26-29. The panel of experts of the task force to introduce innovative nuclear reactors and fuel cycles met in Trieste (Italy). The meeting was organized by the IAEA within the INPRO project.

Among the participants were the representatives of the IAEA, the EU Commission, experts from Russia, the United States, the UK, Canada, India, Belgium, China, Spain, and Argentina. In the course of the meeting the participants discussed the requirements to infrastructure required to implement the innovative concepts in the

area of nuclear energy. The results of the discussion will make an integral part of the report to be drafted upon realization of the current phase of the INPRO project.

PIR Junior Research Associate Dmitry Kovchegin attended the meeting.

2001, November 29-30. The working group on nonproliferation and export controls of the PFP Consortium and the SIPRI held a seminar in Stockholm on *"The 11 September attack on the United States: What implications for nonproliferation and export control?"*.

Among the participants of the meeting were representatives of the Russian and Ukrainian NGOs, as well as officials of the Foreign Ministries of Hungary, Poland, Romania, and Sweden.

The following issues were discussed at the conference:

- Prevention of CW and BW proliferation;
- Nonproliferation issues in Central Asia;
- The role of Wassenaar Arrangements in regulating export of arms and sensitive dual-use items to the conflict zones and regions of concern;
- Nonproliferation education.

PIR Educational Program Coordinator Anton Khlopkov took part in the conference.

The next meeting of the working group will be held in February 2001 in Russia.

On June 15-19, the PFP Consortium will hold the 4th annual conference in Paris, which will bring together the representatives of all working groups of the Consortium.

2001, December 4. The Carnegie Corporation of New York held the meeting on US-Russian relations.

Vartan Gregorian, President of the Carnegie Corporation, made an opening address to the participants and discussed the opportunities that had emerged in the course of US-Russian rapprochement of the recent months. He also dwelled on the problems, which may face the leaders of both states in the near future during the implementation of the bilateral strategic partnership plans. The role of NATO, the role of China, the dialogue on Iran and Iraq, the struggle against international terrorism, prevention of WMD

proliferation, cooperation in space – these are some topics that were covered during the meeting.

Among the participants of the meeting were Ashton B. Carter, Professor of the JFK School of Government of the Harvard University, Timothy Colton, Director of the Davis Center for Russian Studies of the Harvard University, Susan Eisenhower, President of the Eisenhower Institute, Andrew Kuchins, Director of the Russia-Eurasia Program of the CEIP, Robert Legvold, Professor of the Harriman Institute of the Columbia University, Michael Mandelbaum, Professor of the Paul Nitze School of the John Hopkins University, Jack Matlock, former US Ambassador to the Soviet Union, Charles William Maynes, President of the Eurasia Foundation, Dimitri K. Simes, President of the Nixon Center, Oksana Antonenko, Research Fellow of the IISS, Thomas Blanton, Executive Director of the National Security Archive of the George Washington University, Vladimir Orlov, Director of the PIR Center, leaders of the Carnegie Corporation of New York, etc.

The meeting was held in the off-record mode.

2001, December 6-7. The PIR Center and the UK non-governmental organization *Saferworld* hold the international seminar *"National and International Norms, Principles and Measures for Controlling Small Arms Proliferation: View from Russia"*.

The seminar brought together more than 70 leading Russian and foreign experts representing the governmental agencies and non-governmental sector of about 14 states. The Russian position was presented by the officials of the Russian Foreign Ministry, the Russian Defense Ministry, the Russian Ministry of the Interior, the State Duma, *Rosoboronexport*, the Office of the Chief Military Prosecutor, the Committee for Military-Technical Cooperation, as well as in the presentations by the representatives of the defense industry dealing with small arms and light weapons.

In his welcome address to the participants of the seminar, Deputy Foreign Minister Georgy Mamedov noted, 'The international seminar on control of small arms and light weapons is a significant event for Moscow. We believe that this is a certain tribute to Russia's role, as a major producer and exporter of arms, in

developing global and regional measures to curb the uncontrollable proliferation of small arms and light weapons in the world. At the same time, the seminar organized by the PIR Center and the British non-governmental organization *Safeworld* is an important step to intensify the efforts of the Russian civil society in resolving the problems of small arms proliferation.'

Yury Fedorov, Deputy Director of the PIR Center, pointed out the advisability of complex approach towards the small arms-related issues, since small arms and light weapons 'contribute to the escalation of conflicts, crime and general instability in different regions of the world. The challenges caused by the small arms and light weapons (in the conditions of instability at the southern borders of Russia and Europe) reflect the need for coordination of international efforts and enhancing cooperation in order to establish efficient controls of small arms proliferation.'

Paul Eavis, Director of *Safeworld*, concluded, 'The Russian Federation is a key player in every aspect of international politics. Russia is also however, one of the major producers and exporters of small arms and light weapons in the world. It is therefore of the utmost importance that the Russian Federation contributes to international cooperation by way of exercising responsible export policy and strict controls itself.'

In the course of the two-day seminar the participants discussed the major problems that Russia has to face in the area of curbing illicit small arms trafficking and the ways to implement the decisions of the UN Conference on Small Arms and Light Weapons, as well as the practical steps to apply the international experience and to expand cooperation in this sphere (Western Europe, the Balkans, the CIS). Among other issues we intend to cover the matters of enhancing the control of illicit small arms trafficking and ensuring the stockpile security in Russia in general and in some of its regions (above all, the North Caucasus). One of the practical outcomes of the forum was the building of partnership between the expert community and the arms manufacturers and dealers from different states.

Alexander Lagutkin, a representative of the Russian Union of Industrialists and Entrepreneurs, stressed the importance of tightening national control over small arms production and trade. He believes that 'Russia

has a unique system of marking, which allows to identify the *nationality* of the weapon under any circumstances. Russia is ready to share these principles with other states, without insisting on the introduction of any global system of marking. In our country, where all arms producers are state-owned entities, there is a strict system of accounting and control at the enterprises.'

Yury Kryvonos, Senior FSC Officer in the Conflict Prevention Center of the OSCE Secretariat, emphasized, 'It is not necessary to prove that the problem of uncontrolled spread and destabilizing accumulation of SALW can not be resolved by means of the ban or limitation as it was done with regard to anti-personnel land mines, conventional arms and weapons of mass destruction. The only way out could be a demonstration by all members of the international community their political will, readiness and aspiration to combat this dangerous phenomenon. Such activities will also occur at the multilateral (regional and global) level, in the form of information exchanges, best practice guides, conflict-related activities, assistance in establishment and increasing effectiveness of national export control systems, improving coordination in law enforcement, exchange of experience in the sphere of the regulation of the activities of international brokers in SALW are some of them.'

According to Konstantin Reitor, Deputy Section Head at the Office of the Chief Military Prosecutor, 'The lack of order concerning the receipt and transfer of weapons to the CIS states creates the pre-requisites for their theft by the Russian military in agreement with the local leaders of the paramilitary groups. The intergovernmental agreements should provide for the possibility of checking the offences at the pre-investigation phase. Even the transfers of weapons to the official representatives of the Caucasian states do not rule out the possibility of their diversion into illicit trafficking. Sometimes the arms are transferred to regional authorities, who are under low control of the center. Many weapons are procured by the combatants in the conflict zones.'

Summary

**Yaderny Kontrol (Nuclear Control)
Journal of the
PIR Center for Policy Studies
Volume 7, No. 5,
September-October, 2001**

Sergei Zagidullin in his interview *“The Russian Nuclear Complex and the State Duma: Problems and Prospects”* argues, ‘The State Duma should further enhance the legislation, so that gray zones of vague responsibility sharing between federal and regional authorities may be eliminated. Although the Law *“On Nuclear Energy Uses”* emphasizes the priority of the federal authorities, as far as nuclear issues are concerned, it has some ambiguous provisions concerning the role of regional and municipal authorities in the area of nuclear energy development. We have already witnessed the outburst of populist rhetoric pertaining to the import of irradiated nuclear fuel to Russia. Meanwhile, I would like to note that the single-mandate members of the parliament may ensure a sustainable feedback with the regional audiences, identify the concerns and reduce social and psychological tensions concerning nuclear energy and the nuclear factor. It is high time we stepped over the post-Chernobyl antinuclear syndrome and enter a new level of nuclear safety and security and respect for the public opinion.’

Igor Rybalchenko in his commentary *“Chemical Weapons Nonproliferation: International Inter-Lab Qualification Experiment”* maintains, ‘The Chemical Weapons Convention provides for the establishment of the strict verification mechanism, in order to prevent the illegal development, production, storage and use of this type of WMD. The inspection and verification measures provided for in the annex to the CWC include the analysis of samples collected on the inspected site, in order to ensure the existence or the absence of illegal activities pertaining to the highly toxic chemical agents.

‘Taking into account the limited capabilities of the OPCW in the area of on-site inspection analysis, the Technical Secretariat increases

its efforts to develop the network of accredited national analytical laboratories, where the samples should be delivered. Since 1996, the OPCW has been conducting the International Inter-Lab Qualification Experiment involving 37 leading analytical laboratories of the states parties to the Convention.’

Fidel Castro Diaz-Balart in his chapter *“The Cuban Nuclear Path”* maintains, ‘As in the case with many other developing nations, the territory of Cuba is small, lack coal reserves, has no significant hydraulic resources or potential and depends on oil imports to cover about 70% of its total energy consumption. In such circumstances, could anyone question the convenience or even the need of assimilating nuclear energy?’

‘The fact that this purpose is adopted by a country with few resources, which strives for development in difficult geopolitical and economic conditions, has generated growing attention to the program from different observers, as well as specialized organizations of the international community and institutions of academic, technical and scientific character. The principal objective of the Cuban nuclear energy program is the Juragua Nuclear Power Plant and it is upon this plant where most attention is focused.’

The issue also contains the *Information* section with files from nuclear and missile dossiers, the information about the State Duma and arms control.

Summary

**Yaderny Kontrol (Nuclear Control)
Journal of the
PIR Center for Policy Studies
Volume 7, No. 6,
November-December, 2001**

Dr. Alexander Fedorov in his article *“Terrorism and International Information Security”* concludes, ‘It is clear that only wide international cooperation can yield some fruit. The 56th session of the UN General Assembly has already noted this with respect to megaterrorism. Only international cooperation may help mankind

to solve the complicated problems emerging in the information age and to ensure the real international information security. The international information space should be a weapon-free zone, so that humanity may be free of new wars and megaterrorist acts.'

Dr. Nadezhda Arbatova in her analysis "NATO Enlargement: How to Pass Russia by?" maintains, 'The position of the Alliance has not changed much after September 11, despite superficially favorable attitude to Russia. The changes are formal. Earlier NATO ignored Russia's position on the enlargement; nowadays it seeks the ways to pass Russia by quietly and safely.'

'The developments of September 11 forced Russia to make an unequivocal choice. And Russia agreed to support the United States morally, politically and practically - exchange of intelligence information, participation in rescue and humanitarian operations. Surprisingly to many political analysts, President Putin did more than it was expected from him in Russia and in the West and noted that Russia's involvement could be broader under certain circumstances. Such circumstances would be the allied relations between Russia and the United States and its European partners. Such relations would provide for equal participation in military operations against the Talibs and security assurances to Russia on the part of the anti-terrorist coalition. The threat of international terrorism obliges the West to make a correct decision.'

Vasily Lata and Vladimir Maltzev in their commentary "Military Activities in Space and International Legal Regulations" argue that 'One may conclude that the arms race in outer space cannot enhance anybody's security. The development of weapon systems on the basis of space technologies may result in the increasing number of parties involved in armed conflicts and in the increasing scale of conflicts, for outer space multiplies the military capability of the armed forces. The states with substantial space capabilities will have significant strategic advantages. This will force other states to develop and deploy (without control) such military systems. The chain reaction will occur.'

'These problems may be resolved in the course of constructive and fruitful cooperation of the entire global community under the UN aegis. In the near future, the lack of efficient measures to curb the proliferation of military space systems, notably attack space systems, may cause the similar challenge as the threat of nuclear proliferation.'

Prof. Yury Fedorov and Amb. Roland Timerbaev in their article "US-Russian November Summit: An Important but Insufficient Step" state, 'On November 12-14, 2001, Presidents Putin and Bush met in Washington and in Crawford (Texas) to discuss a wide range of bilateral and international issues. The results of the summit were reportedly quite modest, as the mass media and many experts concluded. Perhaps, this was partly a disillusion caused by great expectations before the summit - there had been rumors that the parties might come to an agreement on the prospects for amending the ABM Treaty. However, this did not happen and the outcome of the summit did not attract close attention of the media and the expert community.'

'However, the November summit created a certain basis for further progress in strategic offensive arms reduction and in seeking the mutually acceptable solution to the missile defense problem. This opportunity should not be lost.'

Timothy Thomas in his analysis "Like Adding Wings to a Tiger: Chinese Information War Theory and Practice" says, 'During the past five years, numerous Chinese military and civilian scholars published significant articles or longer works on information war (IW) and related issues (networking, information theory, simulations, etc.). An analysis of their works yields several interesting results. The Chinese feel a compelling need to develop a specific Chinese IW theory. This theory must be in accordance with Chinese culture, the economic and military situation in the country, the perceived threat, and Chinese military philosophy and terminology. Chinese IW theory is strongly influenced by Chinese military art. China is quickly integrating IW theory into its People's War

concept, for example, a development ignored in the West but one with far-reaching strategic and operational implications. Chinese military science dictates that IW be divided into sub-elements very different from those studied in the United States.

'This article will highlight key aspects of the Chinese specific approach to IW. It will begin by discussing how the information age has affected China's attitude toward warfare and the specific Chinese historical factors affecting this interpretation. Next, Chinese IW definitions will be discussed, and the training courses and organizational structures to teach IW will be investigated. Finally, an examination will be made of China's interpretation of IW activities during the fight for Kosovo, and the most recent training exercises in its military regions that try to turn theory into reality.'

Yury Nazarkin in his article "START I" maintained, 'On December 5, 2001, after seven years of treaty's entry into force, the parties complete the arms reduction to the level of 6,000 warheads and 1,600 launchers. After that the treaty will be effective for another eight years, if not replaced earlier by the next agreement on strategic arms limitation or reduction, not extended or denounced. The parties will comply with the limitations of the treaty in the next seven years and will continue verification.

'START I is the only international treaty, whose implementation leads to actual reduction in strategic offensive arms. In the last ten years it played and continues to play an important part in strengthening strategic stability and international security.'

Summary

Yaderny Kontrol (Nuclear Control) Journal of the PIR Center for Policy Studies Volume 8, No. 1, January-February, 2002

Yury Fedorov in his article "Russia-US Relations: Prospects for Partnership" state, 'that relations between Russia and the United States underwent radical changes in 2001. If at the beginning of the year that has expired a long confrontation between them seemed inevitable, by the end of the same year some were seriously speaking about a strategic partnership. However, the prospects for such a partnership and first of all the one in the sphere of security remain meanwhile blurred. Evolution of the Russia-U.S. relations is basically the result of the ongoing but yet far from accomplished adaptation of foreign policy courses of both states to realities of new global military and political situation and first of all to the correlation of forces coming into being in the world.

'So, all told, summarizes the author, prospects for the Russia-US partnership in future years will depend upon to what extent political and military *elites* of both countries will be able to overcome suspicion in mutual relations and not to create new problems, which cause distrust. It seems that in this respect Russian political, military and academic establishments have to walk a long way.'

Michail Shubin, Head of Department of Regional, Staff and Social Policies of Minatom, in his interview "Cooperation between Ministry of Atomic Energy (Minatom) and Regions is in Common Interests" argues that 'creation of normal conditions of functioning of technological structure of our branch of industry should become the objective of regional policy of Minatom. For example, he asks us to us suppose that a Federal nuclear center is located on a certain territory. Its task is to be engaged in science, experiments, produce goods to satisfy the needs of the country. It should not be charged with a task of solving all other problems. It should be us who should do that. We should create

conditions under which the population can have a necessary social and economic level of living, when people do not need to resolve any other problems, but provide for their own basic needs.'

Dmitry Kovchegin in "INPRO: A New Approach to Nuclear Energy of the Future" states that 'Mohamed ElBaradei, IAEA Director General, noted in his introductory statement opening Agency's Board of Governors meeting, that the nuclear energy has to resolve a difficult dilemma: on the one hand, the experts are of the opinion that resting totally on natural sources does not guarantee a sustainable functioning of the energy sector and the current share of nuclear power must therefore be stabilized with the aim of possible future extension. On the other hand, some governments and public opinion are very skeptical with regard to the future role of nuclear energy and that results in its smaller share in the near future.

'The IAEA Director General considers that the solution lies in developing new innovative reactors and fuel cycle designs that exhibit enhanced safety features, proliferation resistance, and economic competitiveness, as well as could be adaptive to a wide range of applications and requirements of a final user.

'According to the opinion of Victor Murogov, the IAEA Deputy Director-General, if nuclear energy has to increase its role, then it simply cannot do only what it has been doing up to now and be waiting until factors beyond its control, such as organic fuel prices or environment protection laws, will change in its favor. To reach a result differing from current short- and mid-term projections, something should be done in nuclear community in order to find new technological solutions. The real challenge is to look into the future and determine what innovations, what new lines of direction, based on the available experience, can be most beneficial for the *increase* in nuclear energy share on the *growing* market.'

Tatyana Parkhalina in her analysis "Russia-NATO Relations: Change of Strategy or Tactical Maneuvre?" says that 'new threats to security do affect the European continent to

the full extent. It is impossible to imagine the system of the European security without Russia, well, properly speaking, nobody really tries to imagine it without the latter. It is also impossible to imagine the system without the existing international institutions, such as NATO, EC, OSCE and the Council of Europe.

'NATO, obviously, has to reconsider the practice when, in the framework of the Joint Permanent Council, Russia is kind of made face the fact of an already adopted decision. Russia should necessarily be involved in the political decision-making process, which influences the situation on the European continent in the sphere of security, and at the same time taking concerns of our country into account. The Russian side should necessarily get rid of the syndrome of a power, which has suffered a defeat in the Cold War, and learn to accept the new realities without hysteria, clearly formulate its concerns and apprehensions connected with the development of the situation in Europe in the sphere of security and resolve the problems in a spirit of cooperation.'

Vladimir Dvorkin in "The State of and Prospects for Development of Rocket Arms in the Third World Countries in the Period up to 2015" argues that 'at present more than 20 countries in the Middle and Near East, Asia, Africa and the Asia-Pacific region have tactical and theater tactical weapons equipped with conventional and, probably, chemical (Israel, most probably, with nuclear) charges with ranges from 80 to 700 Km. The work is in progress to improve them to increase the maximum range and accuracy of ballistic missiles and to develop their new combat configurations, higher survivability and reliability of missile systems.

'The above-mentioned data are based on the information taken from openly available sources. Performance data of the missile arms and armaments, taken from those sources, have been checked and verified in accordance with commonly accepted formulae of calculations of ballistic trajectories taking into consideration structural specific features, the most probable types of fuel, throw weights and ranges.'

Vitalii Fedchenko in the commentary "Kudankulam and the future of Indo-Russian nuclear cooperation" maintains that 'at the end of 2001 Prime Minister of India Atal Behari Vajpayee paid a visit to Russia. A great number of bilateral papers, embracing the most various spheres of cooperation, were signed during the visit.

'An agreement on the construction of the *Kudankulam* nuclear power plant (NPP), which was signed in the course of the Indian Prime Minister's visit, is the most significant energy project. Russia and India have been carrying out negotiations on the construction of this power plant for some 20 years and it looks like that this time they came to a final agreement. Two documents were at once signed regarding this NPP in the course of the visit. One of them, the General Agreement on the NPP *Kudankulam* Construction (power generators 1 and 2) was signed on November 6 between the closed joint-stock society *Atomstroieksport* and the Atom Energy Commission of India. This document fixed volumes of goods and services to be delivered by the Russian side, mutual obligations of the parties and the timetable of the construction.

'The Memorandum on Basic Principles of Cooperation in the Construction of the *Kudankulam* NPP came to become another document on nuclear energy signed during the visit. Probably, it is this document that fixes the agreement on the construction of two more power generators for the *Kudankulam* NPP. Ilya Klebanov, Deputy Prime Minister of the Government, told the reporters on November 6 that such an agreement had been reached in the negotiations during the visit.'

Nick MacLellan in the review "Pacific Region in the Nuclear Age: History, Problems and Prospects" emphasizes that 'from the very beginning of the nuclear age the people, inhabiting islands in the Pacific Ocean, had to suffer from a heavy burden of nuclear tests carried out in that region by France, Great Britain and the United States. In search of *white spots* in the bi-polar geography the Western countries came across regions in the Pacific, *not yet occupied*, which became the nuclear test zone during the *Cold War* years. More than 315 atmospheric and underground

explosions on 10 test-sites in deserts of Australia and on the islands in the Central and South Pacific had been carried out during the period from 1946 up to 1996. The nuclear powers did not practically care about both, either health and well being of the population of neighboring islands, or working conditions of civil and military personnel of the test-sites. The South Pacific Nuclear-Free Zone Treaty (Rarotonga Treaty) was signed in 1985. The document became a dramatic manifestation of protest of the local population against the nuclear tests.

'Lately heads of the island states all the more often are addressing the issues of security and disarmament in the framework of regional fora, which unite also Australia, New Zealand and some French, British and US-dependent territories. The Pacific Islands Forum has become the principal political organization of 16 independent nations. They hold annual meetings of heads of government at which they discuss international problems, in particular, issues of disarmament and proliferation of nuclear and chemical weapons.'

Vitalii Yakovlev in his article "First steps to reduce theater nuclear weapons in Russia" maintains that 'the United States and Russia announced for the first time their intent to destroy nuclear warheads and not only their vehicles as it had been foreseen in all the treaties on reduction and limitation of nuclear armaments.

'All in all Russia has met the obligations taken on her own unilateral initiative. Nuclear charges for non-strategic sea-launch systems and naval air force (one third of the total number) were eliminated in 1995. Nuclear warheads for anti-aircraft rockets, as well as nuclear aerobombs for front-line (theater) air force (half of the total number) were eliminated in 1996. All nuclear mines were eliminated in 1998. All nuclear charges for tactical rockets and nuclear artillery shells were eliminated in 2000-2001.'

The issue also contains the *Library* section, the *Information* section with files from nuclear, missile and CW dossiers, the information about the State Duma and arms control.

RUSSIAN SECURITY

Non multum, sed multa

Executive Intelligence Biweekly Review on Russia and the NIS

**EXCLUSIVE
INFORMATION
ANALYSIS & EXPRESS COMMENT**

ON WHAT YOU WANT TO KNOW TODAY ABOUT RUSSIA'S SECURITY
POLITICS AND CANNOT FIND ANYWHERE ELSE BUT ...
IN THE "SECURITY ISSUES"

PUBLISHED BY THE PIR CENTER

IN COOPERATION WITH THE MOST KNOWLEDGEABLE RUSSIAN POLITICAL
SCIENTISTS

AND

OUR **RELIABLE** SOURCES IN THE KEY RUSSIAN EXECUTIVE BODIES

- National & International Security
- Domestic Politics. *Kremlinology*
- Russia's Foreign Policy. Diplomacy. "Near Abroad": CIS/NIS
- Defense. Nuclear Planning & Nuclear Security. Arms Trade. Armed Forces.
- Finance and Economic Security

FOREIGN DIPLOMATS IN MOSCOW USE OUR INFORMATION AS BASIS FOR
THEIR URGENT CABLES TO THEIR CAPITALS

PRESIDENTS OF THE KEY RUSSIAN BANKS, HEADS OF RUSSIAN &
INTERNATIONAL CONSULTING AND INVESTMENT COMPANIES READ US
FIRST IN THE MORNING TO HAVE RELIABLE PICTURE FROM *INSIDE*
RUSSIAN POWER CORRIDORS

In the most recent issues:

- Private Property and the Nuclear Sector: Interests of the State and the Businesses Coincide
- New US-Russian Relationship: Putin's Visit to the United States and New Political Reality
- Russia's Minority Arms Market: Commercial Projects or Geopolitical Reserves?
- Russia and the *Rogue* States: Military-Technical Cooperation
- Options for the development of the Russian-Ukrainian strategic dialogue
- Terrorist Acts in the US and Dilemmas for Russian Leaders
- and much more.

Twice a month! By e-mail – you will receive it one hour BEFORE it is published in
Moscow. Or by express mail. You may reach us by phone (+7 095) 234-0525,
by fax (+7 095) 234-9558, or by e-mail: info@pircenter.org