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Editorial**RUSSIA'S DIFFICULTIES
IN FINDING A CURE
FOR "CATASTROPHIC"
TERRORISM—IS THERE
A VACCINE AGAINST WMD
TERRORISM?**

The tragic string of large-scale terrorist attacks in the Russian Federation, from the bombings of apartment buildings in Moscow and Volgograd to the bloody drama in Beslan, has posed the problem of how to provide for the security of the nation's citizens more sharply than ever. At the same time, the inability of the security agencies and the entire law enforcement system to counteract these new threats, particularly international terrorism, has been demonstrated yet again. There are many reasons for the current situation. The frequent and not well-grounded reconfigurations of government institutions, including those handling security, and the loss of the most qualified professionals deserve particular mention. Therefore, there is no reason to assume that the decisions regarding a change in the system of legislative and executive powers that were recently announced will noticeably increase the effectiveness of the struggle against terrorism.

Recent Ministry of Defense statements regarding its determination to undertake preemptive attacks on terrorist bases outside Russian territory are similarly unlikely to improve the effectiveness of this effort. The need to observe international law is not the only problem here. In extraordinary circumstances, when there is a direct and explicit threat of a terrorist attack, it is not always possible to adequately evaluate the legal situation. International law is very important, but the ability of the armed forces to carry out such offensives is no less important.

From a military point of view, their advisability and effectiveness depend on available military assets, which must include precision-guided munitions of varying range that are integrated with a wide spectrum of space, air, radio-technical, and other reconnaissance measures through combat control and communications systems. This entire complex of forces, systems and equipment must function in real time, without any delay in the linkage between reconnaissance and weapons, since terrorist bases are mobile and can quickly relocate.

The U.S. Armed Forces are capable of carrying out operations using this sort of system, while Israel carries them out on a local scale when liquidating extremist leaders. Nothing is known about the capacity of the Russian Armed Forces to undertake this sort of mission. The liquidation of the former president of Chechnya, Dzhokhar Dudayev, is not indicative. The attempt to destroy the terrorist group in Georgia's Pankisi Gorge that ended in failure due to a significant delay between the receipt of reconnaissance information and the airborne attack, serves as a clear confirmation of this fact.

Even if the technical capability to undertake high-precision attacks using instantaneous data from all reconnaissance sources existed, their realization would require the existence of a single authority in the Armed Forces in charge of such operations. The Unified Command of Special Operations Forces could serve in this role, if given operational control over reconnais-

sance, combat control and communications, and weapons platforms carrying various classes of precision munitions.

The absence of this or similar structures to consolidate various military assets, along with the lack of analogous command units needed to conduct military actions (including anti-terrorist activities), is one of the most critical deficiencies in the current structure of Russia's armed forces. As was the case in the USSR, Russia today only creates such structures when combat operations begin, which has always led to a prolonged loss of control and unjustified losses of personnel, armaments and military equipment as well as a large delay in perfecting combat interactions and rational methods to relocate troops. These structures should be created in peacetime and integrated in combat training, a fact that was realized by the armed forces of all developed nations long ago. Until recently our General Staff was busy with planning and operational control, as it was unwilling to delegate functions and authorities to other bodies. As a result, Russia does not have generals and high-level officers capable of leading unified commands in military engagements like the war in Iraq.

Given this situation, the decision to create a true operational command in the Ministry of Defense and to radically change the functions of the Russian Armed Forces General Staff, which is to become a strategic planning body, could be seen as quite positive, but only if a unified command of quick reaction forces, special operations forces, and other relevant structures is created at the same time. Otherwise there is a danger of losing operational command over troops for a prolonged period.

However, even if the Russian Armed Forces were capable of carrying out effective anti-terrorist operations, this would still not be enough to oppose the entire spectrum of threats posed by terrorist

organizations today and in the immediate future. The daily, often hidden, fight against these organizations is primarily conducted by the FSB and Ministry of Internal Affairs (MVD). To date, these are the agencies that have been chiefly dealing with "catastrophic" terrorism. But there is already sufficient data indicating that terrorists are striving to master radiation, chemical, and bacteriological weapons. There is no need to re-emphasize here the catastrophic consequences that would result from the terrorist use of a weapon of mass destruction or dangerous chemicals or radioactive materials – of which industrial facilities in any large modern city have a surplus – that can have similarly damaging effects. Therefore, the special services must be ready not only to investigate acts of terror, but also to effectively forestall and prevent such attacks. This includes cooperating with the Armed Forces in undertaking measured, precisely targeted preemptive attacks.

The creation of an effective system to counteract new threats, including terrorism and proliferation of weapons of mass destruction, undoubtedly requires significant effort and material expenditures. The incapacities of the existing system, however, can be explained to a considerable degree not by the absence of general and declarative measures, but by the lack of detailed, well-considered conceptual (doctrinal) strategies and programs to provide for national security given the greatly changed threats we currently face.

In justifying and designing these sorts of concepts, doctrinal statements and programs, modern states never rely only on materials provided by government agencies, which for natural reasons are conservative and geared towards self-preservation. Independent authoritative commissions and groups are always brought together for such tasks. The German government commission on security and

reform of the Bundeswehr (German army) headed by former President Richard Weizsacker, the U.S. presidential Commission on an All-Volunteer Force led by former Secretary of Defense Thomas Gates, and the Blue Ribbon Commission on Defense headed by former Deputy Secretary of Defense David Packard serve as examples. Distinctive features of such high-level commissions are the independence of all commission members from government bodies; the inclusion of authoritative and well-known politicians, scientists, businessmen, jurists, economists, and military and other specialists, including Nobel prize winners; the wide scope of their authority, allowing them to use any information sources; and openness. Such commissions work over an extended period and present the results of their work for extensive discussion.

In Russia, unfortunately, this practice does not exist. Therefore, in dealing with national security problems we should make use of the experience of developed democracies, taking into account Russian circumstances, such as the difficulty of selecting experienced, high ranking and authoritative individuals who are independent of government bodies and parties. In our current situation, presidential or government commissions could use non-governmental organizations as a basis. Russia has NGOs that have proven their adherence to principle and high professional level.

These commissions must produce detailed, well-founded strategies, judgments, and programs that allow us to counteract increasing security challenges more effectively for the foreseeable future.

Hot Topic**SECURITY OF NUCLEAR
ARSENALS IN THE RUSSIAN
FEDERATION****By Yevgeny Maslin**

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Abridged version

The year 2005 will mark the 60th anniversary of the first nuclear weapon test. On July 16, 1945, in the Nevada desert near Alamogordo, New Mexico, a nuclear device exploded, and already on August 6 the Americans dropped an atomic bomb from a B-29 aircraft on the Japanese city of Hiroshima; on August 9, another was dropped on Nagasaki.

The use of nuclear weapons by U.S. government and military leaders at that time was not so much for military, as for political aims: the desire to demonstrate the power of the new weapon and use it as a basis for power politics, based on the belief that the U.S. nuclear weapon monopoly would last a long time. However, in November 1947 the Soviet government announced that there were no longer any atomic bomb secrets. And on August 29, 1949, the USSR tested its first nuclear bomb, and on August 12, 1953—a thermonuclear weapon.

From the first test to the present, nuclear weapons have progressed a great deal. They have sharply increased in quantity, their power has increased at the same time as overall size and weight decreased, while the sphere of their possible application has grown to include everything from the military activities of ground forces to inflight warhead destruction.

According to official information, Russia, the United States, the United Kingdom, France, China, India, Pakistan, and Israel have nuclear weapons. The latter, however, have not declared themselves nuclear weapons states. According to expert estimates, the “nuclear five” alone possess nearly 30,000 nuclear warheads.

**GENERAL TRENDS IN NUCLEAR
ARSENAL SECURITY**

The presence of nuclear weapons in a number of states is a reality of the contemporary world. In the final analysis, the degree to which these states understand the potential danger to humankind, in the final analysis, determines the level to which they provide for the safety and security of their national nuclear arsenals.

By safety, in the broadest sense, we mean, in the broadest sense, the realization of proper operating conditions and accident prevention or amelioration, thanks to which people and the environment are protected from harmful exposures exceeding acceptable levels. Experience demonstrates that it is impossible to achieve absolute safety in any realm. A certain risk is inherent in each type of activity, determined by the degree of damage that may arise from the activity.

The main danger during an accident or through the unsanctioned use of nuclear weapons is radiation exposure of people and the environment, as well as the powerful destructive effect of an explosion and the thermal radiation caused when there is a nuclear chain reaction.

The perfection of national systems for nuclear arsenal security requires the identification of potential threats to nuclear weapons security that we may expect in the future and the development of effective measures against them. In my opinion, these threats can be divided into two basic groups:

- First, technogenic threats, inherent to nuclear weapons themselves, like most technically complex and highly technological systems created by humans;
- Second, possible external threats to nuclear arsenal security, caused by aggressive human acts against the nuclear weapons.

One should note that today’s nuclear states are generally prepared to counter existing and possible future technogenic threats to their arsenals’ security. These preparations are regularized, and based on these countries’ 50 years of experience handling nuclear weapons.

Even with a nuclear test ban, the results of non-nuclear experiments, computer simulations and mathematical calculations make it possible to confirm the safety of nuclear weapons with some confidence. It must be emphasized, however, that this confidence is mainly based on the fact that all current

nuclear weapon models were subjected to nuclear tests in their day. For this reason, U.S. plans to create new types of small-scale nuclear devices while the country's leaders have announced a nuclear test moratorium cause concern. In my opinion, in the course of realizing these plans the United States inevitably will encounter the need to solve not only a technical, but also a political problem: whether to have in its arsenal weapons that have not passed nuclear tests (including safety tests), or to decide to renew nuclear tests.

It is quite clear that neither choice will contribute to the further development and strengthening of the Comprehensive Nuclear Test Ban Treaty and the nuclear nonproliferation regime. Moreover, the U.S. implementation of plans to create new types of small-scale nuclear weapons will once again stimulate the desire of threshold and other countries to have their own nuclear weapons.

Of course, the creation of a powerful arsenal of nuclear armaments requires colossal financial means and enormous human resources. But the expenditure needed to produce a small inventory of nuclear munitions is attainable. According to some findings, the creation of six to eight plutonium-based nuclear weapons would require an investment of a bit over \$200 million and a yearly expenditure of approximately \$90 million per year for the following decade. This level of expenditure is not only feasible for developed, economically powerful countries such as Japan and Germany, but also for states with considerably smaller levels of national income.

Setting aside the tension that the advent of new countries possessing nuclear weapons would cause at the global and regional levels, I would like to consider just one problem: the need that these countries realize the full weight of their responsibility to the global community for the safety and security of the nuclear arsenals that they are striving to create. Given current nuclear nonproliferation measures, the creation of national weapons that would meet the contemporary safety criteria of those in nuclear weapons states—that developed these safety measures as a result of many years of experience handling nuclear weapons—is extremely problematic, and with a ban on nuclear testing, practically impossible. Who will guarantee that nuclear munitions created under these limitations will not, in the

long run, be transformed from “national security guarantees” into “powder kegs”?

Certain countries are, in my opinion, are looking at the issue of creating national nuclear weapons superficially, without a proper understanding of the burden they bring. They do not consider the fact that after obtaining nuclear munitions, almost regardless of the number, ensuring those weapons' safety and security for an indefinite period will require colossal expenditures of fiscal, material, and personnel resources.

When working with representatives of countries striving to obtain nuclear weapons, promoters of the nonproliferation regime should demonstrate more broadly the technical side of potential threats they can expect when operating nuclear arsenals.

As for potential threats related to the human factor, I would like to note that, unfortunately, the assertions many analysts made in the late 1980s and early 1990s—that the world today is less stable and more conflict-ridden than under bipolarity—have come to pass. The world has adapted to post-Cold War conditions, but the new global threats do not leave us more secure. Among these threats, one can single out:

- The tendency of certain countries to undertake unilateral military action when tackling foreign policy problems, retreating from international legal norms and ignoring the interests and security of their allies;
- The unprecedented expansion of the geography of terrorist manifestations, the tendency toward an increase in the scale of the consequences of terrorist acts, and the clear trend toward deeper coordination between international extremist organizations. I will give just one example: from 1992 through 2000 there were 2,054 terrorist acts, as a result of which 2,047 people were killed or injured. In the past few years, since September 11, 2001, there have been 661 acts of terrorism, causing injury to 13,335 people. In addition, there are clear indications that terrorism may become a catalyst for international conflict;
- The scarcity of international legal instruments and the imperfection of international military mechanisms capable of effectively opposing terrorism, as well as the presence of disagreements regarding and lack of coordination regarding of the

tactics to be used against to combat terrorism;

- The breach of weapons of mass destruction nonproliferation treaties, agreements and regimes.

We now see a clear shifting of terrorist activities from Asia to Europe, the region most saturated with nuclear arsenals. The series of explosions in Spain, the threat of terrorist acts in France, the aggravation of interethnic tension and increased frequency of clashes on former Yugoslav territory—this is an incomplete list, but it already makes it clear that we must coordinate our actions and make a joint effort to increase the safety and security of European nuclear arsenals. And here I include Russian nuclear weapons as well.

In the light of this problem, I would like to voice my opinion regarding the advisability of the continued deployment of U.S. nuclear weapons in Europe. Given the existing and potential security threats, it would be more defensible and logical to keep nuclear munitions on its own territory, fully utilizing all of the capabilities of the national nuclear weapons security system.

Now I will look at the Russian nuclear arsenal security system in greater detail. SECURITY OF THE RUSSIAN NUCLEAR ARSENAL

Maintaining the security of nuclear weapons, during their creation, storage, and dismantlement, requires continuous monitoring and coordination, as well as special measures.

For this purpose the Russian Federation created a system to maintain nuclear weapon security that functions fairly successfully:

- Government control of security measures;
- Regulation of procedures and activities during all stages of the life cycle of nuclear weapons;
- Supervision and control of the security of nuclear weapons during their creation, storage, and destruction;
- International legal work to provide for nuclear weapon security.

Government Control

Organizationally, the state system for the provision of nuclear weapon security is based on the Russian Federation's ministries,

services, agencies, offices, and organizations that build, store, dismantle, and supervise nuclear weapon security, and protect them from nuclear terrorism. The system covers all levels of government involved in the provision of nuclear weapon security.

This structure includes:

- The president and government of the Russian Federation;
- The federal organs of executive power that are involved in state regulation and management in the sphere of nuclear weapons security;
- The Federal Nuclear Supervisory Service and the departments responsible for state control and monitoring of nuclear weapons security;
- Organizations that build nuclear weapons;
- Organizations that use nuclear weapons;
- Organizations and special guard units that store and provide physical protection for nuclear weapons, as well as those that provide warning of and fight fires at nuclear arsenals;
- Organizations and services that prevent the unsanctioned use of nuclear weapons;
- Organizations and services involved in the prevention of nuclear terrorism;
- Organizations and emergency rescue services tasked with managing the consequences of accidents involving nuclear weapons.

The basic principle of the state system for nuclear weapon security is the personal responsibility of officials for the security of nuclear weapons within their purview.

Improvement of this system must take into account the changes in Russia's strategic position, its military and political circumstances, and the state of the Russian economy, as well as the large-scale decommissioning of nuclear armaments and the need to maintain the nuclear nonproliferation regime. At present, the following problems are of special urgency:

- Providing for the security of certain types of nuclear munitions;
- Preventing the unsanctioned use of nuclear weapons;

- Retaining and developing the scientific and technical knowledge and the production and testing facilities needed to secure the nuclear arsenal, including under a nuclear test ban;
- Implementing treaty obligations related to strategic arms reductions, and providing for the secure dismantlement of decommissioned nuclear munitions;
- Opposing nuclear terrorism, and perfecting the nuclear arsenal physical protection system;
- Providing for the social welfare of personnel who work in nuclear weapons complex facilities.

Based on the above needs, the basic areas of Russian activity in securing its nuclear arsenals are:

- Scientific research and practical work on the reduction of the dangers of nuclear weapons as complex technical systems;
- The introduction of organizational and technical measures that prevent situations where a nuclear weapon emergency might arise;
- The prevention of unsanctioned access to nuclear weapons;
- The preparation of assets for action in the case of emergencies involving nuclear weapons.

Regulation

Ensuring the safety and security of nuclear weapons is quite complex, and includes statutory measures, organizational, engineering, medical, and other measures at all stages of their life cycle, as well as the overcoming of the consequences of possible emergencies involving them.

The quality of nuclear weapons security in large part depends on the effectiveness of legal regulation in this sphere on the part of legislative and executive bodies.

At the present time Russia has a system of normative legal documents at all levels that have been adopted, are currently active, and continue to be refined in view of current realities: from the federal (laws, fundamentals, and concepts) to the departmental, covering nuclear weapon safety and security

throughout its life cycle: construction, storage at nuclear arsenals, and destruction.

An example of the improvement of legal regulation in the sphere in question is the framework document the "Fundamentals of State Policy in the Field of Nuclear and Radiation Safety of the Russian Federation for the Period Up to 2010 and Beyond," signed by the Russian President in December 2003. This document determines the aims, priority directions, basic principles and tasks of state policy in the area of maintaining nuclear and radiation safety, including defense facilities.

The state policy priorities are:

- The improvement of state management and coordination of work in the area of nuclear and radiation safety;
- The improvement of state regulation in the field of the use of atomic energy;
- The improvement of systems and means used for the physical protection of nuclear energy facilities, including an increase in their ability to counter sabotage and terrorist activities;
- An increase in the effectiveness of international cooperation in the area of nuclear safety.

In order to perfect state management of nuclear and radiation safety, Russia plans to strengthen the role of the state in managing the use of atomic energy, deepening the cooperation of federal, regional, and local government bodies, and identifying the authority and responsibilities of officials in each institution.

To improve government regulation of atomic energy, Russia plans to formulate and adopt federal laws on nuclear and radiation safety, on the creation, operation, transport, security and dismantlement of nuclear weapons, and also to increase the effectiveness of licensing activities and security appraisals in this sphere.

In order to improve the physical protection of nuclear facilities, Russia plans to develop statutory measures, research design threats to concrete facilities, conduct vulnerability analyses, and adopt adequate measures for their physical protection.

To increase the effectiveness of international cooperation in the field of nuclear security, Russia intends to implement international

treaties, agreements, and conventions of to which Russia is a member, enlarge the number of agreements dealing with nuclear security, and improve the mechanisms for assigning (obtaining) international aid and other forms and methods of international cooperation.

Supervision and Control

The strict regulation of measures and work undertaken at all stages of the life cycle of nuclear weapons is a critical part of ensuring their security.

Construction, Storage and Transport

The life cycle of nuclear weapons can be differentiated into the stages of construction, storage at nuclear arsenals, and dismantlement.

The current nuclear weapon construction system is based on the requirements of government and department standards, statutes, and rules that reflect many years of experience from theoretical, practical, and experimental work. Detailed and thorough analyses of the adequacy of technical and organizational solutions used during the construction of weapons models are done by conducting expert security appraisals. Experts analyze the construction of the weapons, documentation (including the completeness of labor safety rules), check production equipment, tools, installations, hoisting machinery, and mechanisms that ensure the safety of all work performed. A weapon is only delivered to the troops after a successful appraisal.

The storage of nuclear weapons at nuclear arsenals involves a complex of organizational and technical measures and work directed toward maintaining the weapons safely and in good repair. All work is carried out in the presence of officials authorized for this purpose, strictly regulated by documents, and carried out by specially selected, trained, and certified personnel who are monitored by the officials. At each stage, and every moment, there is a person who has been appointed personally responsible for the safety and technical state of each individual weapon, and all necessary measures for the protection and observance of the secrecy system are taken.

The delivery of weapons to nuclear arsenals is one of the most critical and complex stages. This is due to the fact that trans-

portation is the most dangerous and fast-moving task, involving a large quantity of technical equipment and personnel. All transport of nuclear weapons must observe the following basic principles:

- A maximumMinimizing time limit en route;
- The minimum number of transfers from one means of transport to another;
- The selection of a route that avoids regions in a state of emergency or other extreme situations, and, where possible, large industrial centers;
- The use of specially developed railcars and trucks, as well as the use of safety devices and technical protection equipment;
- The use of modern monitoring equipment to supervise all forms of transport during the entire trip.

The longest stage in the life of a nuclear weapon is storage at a nuclear arsenal. Nuclear arsenals are located in restricted zones—areas where storage facilities, engineering buildings, guardhouses, and security buildings are located. The dimensions of the restricted zone are defined by the composition of the arsenal, its location, and topography. There are special security procedures in the restricted zone.

The administrative and technical measures during storage include:

- The acceptance of weapons and putting them into storage;
- The organization of control and accounting;
- The organization of protection and defense;
- The organization of safety and security.

For each building, regulation loading standards are established on the basis of security requirements. Access to the arsenal and its building is limited and those few allowed access, who can only enter with written permission. In addition, each building storing nuclear weapons must have the designated minimum number of personnel.

Physical Protection

Physical protection is one of the main components of ensuring the security of nuclear weapons at nuclear arsenals.

The nuclear arsenal physical protection system is the totality of organizational measures, technical and engineering means, and the actions of guard units who protect against diversion or theft. Organizational measures include plans to equip nuclear arsenals with physical protection systems, as well as the distribution of authority between officials responsible for physical protection.

The basic tasks of physical protection are:

- Warning of unsanctioned access to nuclear weapons;
- The timely detection of unsanctioned actions;
- The suppression of unsanctioned actions;
- The detention (or delay) of an intrusion by a perpetrator;
- The detention (or elimination) of persons or terrorist groups penetrating (attacking) a nuclear weapons storage facility.

The physical protection of nuclear arsenals is organized and carried out in accordance with the rules, statutes, requirements, and guidance that determine the functions of federal executive bodies and military administrative organizations, the authority and responsibility of officials, and the standard requirements for technical equipment.

The provision of physical protection at nuclear arsenals is ensured by the correct application of technical equipment, by the high combat training of guard units, by other forces assigned to cooperate with the guards, by the periodic analyses of physical protection system vulnerabilities, and by the integration of all forces and equipment.

Physical protection includes both technical equipment and physical barriers.

Technical equipment includes perimeter and facility detection equipment, closed-circuit television, equipment to monitor and control access, warning and response equipment, equipment to detect nuclear materials, explosives, or metal objects being moved on physical persons or vehicles, fire alarms and automatic fire extinguishers, and special communications equipment and back-up provisions.

Physical barriers include engineered barriers, anti-ramming devices, highly-protected depositories and shielding containers.

The action of guard units is an important component of the physical protection system. These are the integrated actions of sentries

and mobile units, as well as of the other forces assigned to cooperate with the guards in order to detain or eliminate those violating the security regime.

The cohesion and coordination of guard unit actions is established by the periodic refinement of plans for the protection and defense of nuclear arsenals, taking into account the probability of a terrorist attack. These plans provide for an integrated response with forces and reinforcements from the military districts (garrisons) as well as divisions of the Ministry of Internal Affairs. Training and instruction on guard response to a surprise terrorist attack are conducted on a regular basis.

At present, the improvement of nuclear weapons storage security requires the unification of the separate elements of physical protection into one multifunctional complex with an overall control center. This mission is being undertaken by an integrated complex of facility physical security means and systems, which has been tasked with finding solutions to the following needs:

- The continuous, twenty-four hour monitoring of conditions (including fire-prevention, radiation and climatic) where nuclear weapons are located (depositories and adjacent territories) as well as other sites under its control;
- The continuous, twenty-four hour monitoring of the access of personnel and vehicles to the facilities under guard (depository, territory), and the timely disclosure of attempts to gain unsanctioned access to nuclear weapons or the transport of forbidden material or items;
- The detection and localization of sites where there are ongoing unsanctioned actions, and the operational analysis of the situation;
- Rapid decision-making;
- The organization of countermeasures and curtailment of the unsanctioned action by guard forces and active means of defense.

Personnel Loyalty

The country's current socio-economic and political situation means that attention to personnel loyalty is a critical factor in providing security.

The selection of draftees to serve at nuclear arsenals is becoming more stringent. This

selection is made from among young people who are irreproachable in every respect, and who have the appropriate education and are psychologically stable. When personnel are selected to work directly with nuclear weapons storage, technical means are used to determine the likelihood that candidates will drink alcohol, take narcotics, or engage in illegal activities.

In order to provide effective social support to nuclear weapons complex specialists, and also the continuity of personnel in this complex, presidential edict 1563 of August 23, 2000, *On Pressing Measures for the Social Support of Soldiers and Civilian Personnel in the Russian Federation Nuclear Weapons Complex*, was signed and brought into force.

Analysis has indicated that the social support measures provided by the edict provide a strong motivation for personnel serving at nuclear arsenals. The realization of these measures has contributed to the retention of qualified personnel, increased the staffing of arsenals by the most prepared and effective specialists, and made it possible to optimize nuclear arsenal organization.

International Cooperation

Russia's cooperation with foreign states has been of enormous value in ensuring the security of nuclear weapons.

Since ensuring nuclear weapons security is becoming ever more of an international problem, Russia has become ever more integrated into the international legal system regulating nuclear security.

At present, international cooperation to ensure nuclear security has the following aims:

- To maintain peace and stability, and decrease the danger that a nuclear conflict might arise;
- To improve methods to prevent the spread of nuclear weapons and nuclear weapon technologies;
- To reduce and eliminate nuclear weapons on a multilateral basis;
- To increase the security of nuclear weapons and nuclear installations, and protect them from terrorism;

- To provide mutual assistance in the case of a nuclear emergency in order to reduce its consequences to a minimum.

One of the priority directions of international cooperation in the sphere of ensuring nuclear weapon safety and security is the development of international legal norms regulating the use of conventional weapons at sites containing nuclear weapons.

The other most significant recent events were the Group of Eight (G8) summits in Kananaskis, Canada in June 2002 and in Evian, France in June 2003.

One of most important results of these G8 summits in Canada and France were the formation of the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction and the adoption of the G8 Action Plan on the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction.

The Global Partnership activities coincide in many respects with those that have been developed and implemented over the past ten years by various cooperative proliferation threat reduction programs with Russia generally known as the "Nunn-Lugar programs."

The value of the Nunn-Lugar programs is that they influenced U.S. nuclear strategy, which was gradually transformed from a policy of deterrence and mutually assured destruction in its relations with the USSR to a cooperative policy of nonproliferation based on international cooperation with the newly independent states.

The introduction of foreign equipment into the Russian system of handling nuclear weapons made a significant contribution to nuclear arsenal security. This equipment has included emergency rescue equipment, supercontainers, radiation-monitoring systems, polygraphs, equipment to screen personnel for narcotics and alcohol, and computer technology. This equipment was delivered as a result of an agreement between the Russian Ministry of Defense and the U.S. Defense Department on cooperation in nuclear weapons storage security via the provision of material and technical resources, services, and relevant instruction. The following cooperative programs have been realized within the framework of these agreements.

Nuclear Weapons Handling and Storage Equipment Safety Enhancement Center

Program. The Center for Technical Diagnostics and Inspection of Equipment in St. Petersburg was created and continues to be improved.

Nuclear Arsenal Physical Protection Improvement Program. More than 400 sets of technical security equipment, 100 kilometers of cable, 50 mini-tractors, 37 snow ploughs, 100 video monitoring sets, and other equipment have been provided to guard forces; a training base for physical protection system exercises has been set up.

Nuclear Arsenal Emergency Response Capabilities Program. An information analysis center was set up in St. Petersburg to make decisions in the case of a nuclear weapons accident. Five emergency support equipment modules and 45 emergency response vehicles, necessary car and tractor equipment, protective clothing, and dosimeters were provided.

Automated Inventory Control Management System Program, to create an MC&A system to monitor nuclear weapons destined to be dismantled. About 400 sets of relevant computer equipment were provided, modular buildings for the installation of this system at storage facilities are being prepared and constructed, the certification of the equipment and preparations at facilities for its installation are ongoing.

Personnel Reliability Program. A medical laboratory to screen personnel for narcotics and alcohol has been created, and the necessary equipment, including polygraphs, provided.

Guard Force Equipment Program. Sixty electronic Small Arms Training Systems have been provided; the work to install and commission them at nuclear arsenals is ongoing.

The most important result of the realization of these agreements is the capability to ensure the necessary level of nuclear arsenal security under current conditions.

The acknowledgement of Russia as a full-fledged participant in the G8 gives our country the ability to participate as an equal in decisions related to the fight against international terrorism and the proliferation of weapons of mass destruction.

Under the framework of the Global Partnership, representatives of the Russian

Ministry of Defense and the German Ministry of Foreign Affairs signed an agreement in Moscow on October 6, 2003, on cooperation in the sphere of the physical protection of nuclear materials and nuclear weapons destined to be dismantled. The basic areas of cooperation are: the provision of physical protection equipment at nuclear arsenals and the improvement of guard force preparedness and equipment.

In conclusion, the security of nuclear weapons has always been and will continue to be an essential component of national security. Ensuring the security of nuclear arsenals is a complex organizational and technical problem that requires complex solutions. At present we can confidently say that Russia's nuclear arsenals are reliably secured.

Taking into account current global changes, future improvements in nuclear arsenal security should include:

- An increase in the resistance of nuclear arsenals and weapons to accidents and their protection from unsanctioned uses;
- Methods to suppress attempted terrorist activity at nuclear arsenals;
- The further improvement of the existing system of protection and defense, and the implementation of modern physical protection systems at nuclear arsenals.

These are the areas in which the main effort to ensure nuclear arsenal security should be made.

It is possible to say, in conclusion, that the physical possession of nuclear weapons presupposes the presence of a strictly regulated system of construction and operation as well. Even those stages of operation that at first glance appear to be quite simple, such as transportation and storage, require detailed, well-conceived arrangements and significant material and human resources. The smallest deviation from the routine could result in a serious nuclear catastrophe. An analysis of the current global situation allows one to conclude that in order to increase nuclear security, one must decrease the arsenals of nuclear weapons, prevent their proliferation, and maximally protect existing arsenals from terrorism. All of this is possible, given a joint effort by all states to create an all-embracing international security system.

Analysis**THE USE OF UNMANNED
AERIAL VEHICLES IN CLASSICAL
AND TERRORIST WARS**

**By Mikhail Pavlushenko and
Gennady Yevstafiev**

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Abridged version

A fairly rapid change in the paradigm of armed conflict is occurring before our very eyes, leading to the need to reevaluate the equipping of armed forces. A new term has even been developed for 21st century wars: "non-contact war." The integration of well organized reconnaissance capabilities, including satellite capabilities, long-range high-precision weapons, and modern information technologies into a united information-reconnaissance-navigation-strike system allows states with highly advanced military technologies to attain decisive military advantages in military conflicts of varying intensity without incurring large losses. Furthermore, many military specialists and leading arms designers believe that in the foreseeable future high-precision weapons may be able to provide a deterrence capability similar to nuclear weapons.¹

This growing trend was grasped by many countries some time ago, and they are increasingly interested in all varieties of so-called "smart" weapons. In contemporary military science, the term "asymmetric warfare," under which "terrorist conflict" often figures in its various manifestations, is increasingly being used on a par with the above-mentioned term "non-contact war." The basic character of this form of conflict is armed conflict between a state (or coalition of states) armed with weapons based on the newest technologies and terrorist organizations and other groups, and in a number of cases states, such as Iraq, which have relatively weak military technologies and economies. One can agree with the premise that in the majority of conflicts the world will witness the overwhelming military technical superiority of one of the opposing forces.

Nevertheless, both weak and powerful states are intensely accumulating reserves of the most modern weaponry and combat materiel. Among them, cruise missiles and unmanned aerial vehicles (UAVs) are occupying an ever increasing share. This article will examine the latter in detail.

State-of-the-Art UAVs and Their Uses

Experts have yet to clearly classify UAVs and exclude duplicative terminology. Furthermore, as a recent U.S. Government Accountability Office (GAO) report indicates, the difference in the use of cruise missiles and UAVs by many militaries is rapidly being erased; for instance, the United States is arming traditional reconnaissance UAVs with missiles and creating completely new types of UAVs designed to undertake combat strike operations.²

Some experts classify UAVs as follows:³

- According to mass – into microUAVs (weighing less than 5 kg); miniUAVs – (less than 200 kg); and maxiUAVs – (in excess of 1000 kg);
- According to length of time in the air – into vehicles that fly for less than one hour; up to three hours; up to six hours; up to 12 hours; and up to 24 hours.
- According to altitude – into vehicles with an operational ceiling of up to 1 km; up to 3 km; 9-12 km; and up to 20 km.

As for capabilities, one can divide UAVs into strike, reconnaissance-and-strike, electronic warfare, support, multi-purpose, antimissile defense, etc. varieties. UAVs also differ in the distance they can travel, from battlefield vehicles and those designated for tactical use, to those with front-line, continental, and intercontinental applications.

They can be based on land (stationary, on mobile launch platforms, etc.), on the decks of ships, or on various types of aircraft. According to their lift capacity, UAV forces are divided into aerial, aerostatic and missile. Control methods play an important role as well. There are tele- and radio-controlled vehicles, those that fly according to a program, and those that are commanded

by satellite. All of the above creates unique possibilities for the flexible use of UAVs.

At present 41 countries have more than 80 types of UAVs in their arsenals. Mostly they are used for reconnaissance. Over 250 models of UAVs are currently being developed and manufactured in 32 countries. They make up an ever-increasing share of the export of unmanned aerial vehicles.⁴ Military experts believe that the development of miniUAVs is now within the capabilities of practically any country with a more or less developed aircraft industry. These include all of the European countries, as well as India, Pakistan, Iran, Malaysia, and some others.⁵ Only the world leaders in aircraft construction are capable of building maxiUAVs. One should acknowledge that the Americans, who created the unique unmanned aerial vehicle *Global Hawk*, have had the greatest successes in UAV construction.

It is enough to point out that in 2001 this vehicle completed an autonomous flight from California to Australia. All in all, the U.S. Armed Forces have a wide collection of different types of UAVs, which made it possible for them to select specific types for particular combat tasks as early as the war in Vietnam. During the 1991 conflict in the Persian Gulf, the United States conducted reconnaissance of the Iraqi front lines and discovered Iraqi military facilities at a distance of 160 km with the aid of the *Pioneer-1* and *Pointer* UAVs. Although there were only a little over 30 such units in all, they completed more than 480 combat missions. It is indicative that during the entire course of Operation Desert Storm the Iraqis, according to U.S. data, brought down only two UAVs. France used UAVs in the same operation as well. The four French UAVs showed they were very capable in the areas of data collection, surveillance, target designation and adjusting fire.⁶ In 1995, the Americans launched the then-experimental *Predator* UAV from a base in Albania to support their troops in the peacekeeping operations in Bosnia. This multifunctional vehicle has the following parameters: length – 8.5 meters, wingspan – 14.6 meters, payload mass – approximately 210 kg. Its ferry range can be brought up to 5,500 km with a distance from the base airfield of up to 950 km, while it can spend up to 24 hours in the reconnaissance zone.

The superior battle characteristics of *Predator* allow it to be equipped with guided missiles; it was tested in this capacity in Afghanistan for the first time. The experience of using this UAV for reconnaissance in Yugoslavia, Iraq and Afghanistan showed that *Predator* can provide photographs of targets to command in 15 minutes (that is, practically in “real time”), while reconnaissance aircraft provide their first photographs only after 36 hours.⁷

France is now working intensively on UAVs. The French have set themselves an unusual goal – the produce and bring into service “miniature manual UAVs” to strengthen the combat capabilities of motorized infantry. They are not frightened by cost. The development of one miniUAV demonstration model, the *Mirador*, cost \$4 million. The production model is expected to cost no more than \$4,200. This vehicle is only 25 cm long, and its engine allows it to fly for 20 minutes. The second generation will be capable of hovering.⁸ France and Belgium are working together to develop the *Felin* UAV on the basis of *Mirador*. It will be 40 cm long, weigh 1.5 kg, have an operational range of 1,000 m., and a flight duration of up to 20 minutes. According to press reports, *Felin* is undergoing tests for possible use as equipment for infantry! On the other hand, the United States is conducting flight tests of the X-47A UAV with a combat payload of up to 1,800 kg, including guided bombs, *Hellfire* anti-tank guided missiles, and containers with radio-electronic warfare equipment. The United States and the United Kingdom are developing new types of UAVs using “Stealth” technology. Thus, in future military conflicts along with fifth generation F-22 and JSF aircraft there will be new generations of combat UAVs (UCAVs), which could convert many fighter pilots into ground-based personnel at centralized command posts, flying via desktop computers! Within the framework of the *Global Hawk* project, the United States is working on a UAV with a long flight duration as a carrier for TALON (Theater Application-Launch on Notice) guided missiles, which are designed to intercept intermediate-range missiles during boost phase.

Israel has also had great achievements in the development and construction of various types of UAVs. Suffice it to say that

the idea of using UAVs for anti-missile defense was first advanced by Israel.⁹

Russia has great experience in the creation of different types of UAVs. The first Russian military purpose UAV was the unmanned *Yak-9V* aircraft. These vehicles carried out radiation monitoring in the atmosphere during nuclear tests. During the Cold War, the USSR created the strategic unmanned reconnaissance aircraft *Tu-123 (DBR-1)*. After completing a reconnaissance flight the *Tu-123* automatically returned to the starting area and, at a height of 4,000 m, split into two parts that descended on parachutes. This was followed by the *DBR-2*. In the ensuing years Russia developed the *VR-3 Reys* line of unmanned tactical reconnaissance vehicles. The *Reys-D* military UAV the Russian Armed Forces currently employs is two and one-half times more powerful than its predecessors.¹⁰ The later UAVs *Strizh* and *Strizh-2* were based on this vehicle. The latter system is capable of twenty-four hour, all-weather reconnaissance of land-based facilities, including small-size and moving targets, at a distance of 500 km from the front lines. Information is transferred to land-based control posts in real time. The Sukhoi Design Bureau is currently developing the *BAS-62* UAV, which has a number of features that surpass those of the American *Global Hawk*. The vehicle promises to be multifunctional and one of its capabilities – the conduct of inspections to monitor the observance of Open Skies Treaty provisions – may be in global demand.

Russia has also created the *Pchela* and, particularly, the *Pchela-1T*, some of the best mini-UAVs in the world, which were the first Russian reusable UAVs. At present, multipurpose UAVs are being actively designed that can perform the most varied tasks. This leads one to conclude that unmanned aerial vehicles have a great future, especially if designers can successfully decrease their weight while increasing their combat capabilities.

In order to roughly imagine the level of UAVs demanded by the armed forces of some foreign states, it's enough to take note of the opinion of U.S. military specialists who assert that in the near future a brigade consisting of 3,000-5,000 soldiers will use at least 200 tactical UAVs.¹¹

A General Evaluation of the Threat from the Wide-spread Proliferation of Unmanned Aerial Vehicles

As a rule, analysts examine the security threat posed by UAVs together with cruise missiles; it is difficult to object to this approach, given the rapid disappearance of the division between these two sides of the same coin. In August 2002, U.S. Secretary of Defense Donald Rumsfeld sent a classified memorandum to the White House on the increasing threat the United States faces from cruise missiles and UAVs, against which there is no adequate defense. As is well known, the administration of George W. Bush has made the creation and development of antimissile defense its top priority, but has largely concentrated on ballistic missile defense. However, Rumsfeld raised a question about weapons platforms, whose potential to deliver nuclear, biological, and chemical charges, even using the most primitive equipment, is at the very least unpredictable. In his memo the U.S. Secretary of Defense did not present sensational reconnaissance data, but voiced a substantiated warning about potential dangers.¹² It was based on indirect data about the growing interest of "adversaries," that is to say the countries of the "axis of evil," in the purchase of cruise missiles, small gas turbine engines, precision navigational devices, satellite navigation and communications, etc. It confirms that there are already at least 81 countries that possess cruise missiles and UAVs, and the total number of such weapons, according to U.S. intelligence estimates, is over 70,000. According to one administration aide, "We have every reason to believe that terrorists could try to acquire or obtain this capability."¹³ Lt. Gen. Joseph M. Cosumano Jr., head of the Army Space and Missile Defense Command, sounded an alarm regarding the absence of a special Pentagon agency, like the well-known Missile Defense Agency, responsible for coordinating defenses against the new threat. Already in March 2004, the U.S. Government Accountability Office stated that "cruise missiles and UAVs pose a growing threat to U.S. national security interests as accurate, inexpensive delivery systems for conventional, chemical, and biological weapons."

Another report by the GAO, which is a very influential organization in the United States government, states that, "UAVs pose

a longer-term threat as ... delivery systems for chemical and biological weapons and are increasingly sought by nonstate actors (that is, terrorists)... The Acting Deputy Assistant Secretary of State for Nonproliferation (John Bolton) testified in June 2002 that UAVs are potential delivery systems for WMD, and are ideally suited for the delivery of chemical and biological weapons given their ability to disseminate aerosols in appropriate locations at appropriate altitudes. He added that, although the primary concern has been that nation-states would use UAVs to launch WMD attacks, there is potential for terrorist groups to produce or acquire small UAVs and use them for chemical or biological weapons delivery.”¹⁴

It is well known that NATO is greatly concerned by the spread and easy accessibility of the technology and components for creating cruise missiles and UAVs. The organization, as part of its work against the spread of WMD and their means of delivery, monitors the presence of UAVs and cruise missiles in armies throughout the globe. Various Russian departments and specialists are engaged in this as well. UAVs are considered to have good prospects for development for at least the next several decades. In the future, most likely, cruise missiles will become a variety of UAV, and the latter will be developed with concrete missions in mind, and not simply for the delivery of weapons. One of the most promising lines of UAV development is the creation of small and microUAVs equipped with perfected “submunitions” and with reduced price-tags, which alone augurs their spread and the possibility that they may fall into the hands of undesirable elements. On the other hand, the “technological threshold” for launching the construction of UAVs is rapidly being lowered since many countries are producing navigational equipment and vehicle guidance systems thanks to their great accessibility. At the same time, it has become much easier for “nonstate actors” to find an appropriate engine for a UAV. Although the effectiveness of the engines available on the open market that can be used in missiles is low, they can successfully accomplish the missions terrorist organizations set for them. For this reasons terrorists much prefer cruise missiles and UAVs to ballistic missiles. Even the simplest UAV can deliver tens of kilograms of chemical and biological agents a fair dis-

tance and, particularly worrisome, pulverize them more effectively with the aid of fairly primitive dispensers than occurs with a warhead explosion. And that is what terrorists need: to create panic and cause critical economic losses. This is why one frequently hears the example of Iraq’s incomplete work on the transformation of an obsolete fighter plane model into a radio-controlled UAV.

The use of UAVs for the delivery of nuclear weapons or devices based on nuclear technologies, including so-called “dirty bombs,” is considered more problematic, although there is information that several countries have been conducting work in this sphere.

In addition to the special features enumerated above, the prime advantage of many types of UAV is their small size, which makes it possible to move them significant distances with great secrecy, and their capability to be stored in special containers for long periods without incurring any technical damage.

The Use of UAVs in Anti-Terrorist Operations and Law-Enforcement Activities

Some types of UAV are ideally suited for use in operations conducted by special forces and sometimes even by law enforcement engaged in the defusing of unruly crowds in both urban and rural areas.

Information about the use of UAVs in anti-terrorist operations is, for understandable reasons, fairly scant. Nevertheless, there are convincing examples of several operations that were carried out with the aid of UAVs. For instance, in Afghanistan the Americans are actively using the *Predator* UAV and developing various tactical plans for the use of UAVs in military combat. And American intelligence officials are especially proud of a 2002 operation in Yemen in which a *Predator* UAV using special ammunition destroyed an automobile carrying the leaders of the local Al-Qa’eda cell.

Undoubtedly, the systematic use of UAVs in coordination with and coordinated with aviation stands behind the precise Israeli strikes on particular Palestinian leaders.

Russia too has experience using UAVs against terrorist groups and illegal military

formations. These operations chiefly used the *Pchela* UAV. In 1995 a meeting of Chechen field commanders in Vedeno was “pinpointed” with their assistance, and the information obtained was used to help prepare for the assault of this settlement. In the fall of 1999, a unit armed with a *Pchela-1T* UAV was involved in the elimination of terrorists intruding from Chechnya into Dagestan. On the whole positive results were achieved.¹⁵ An analysis of these results indicates that the Russian *Pustelga* UAV has good prospects for its use in counter-terrorist operations in urban areas. Without overstating the capacities of Russian UAVs available at present, one can identify the following useful areas of UAV use, which among other things help to solve the most critical task—the minimization of human losses:

- Search and detection of terrorists;
- Timely transmission of data about terrorists and their actions to anti-terrorist centers;
- Discovery of terrorist routes and bases of resupply.

As is well known, international terrorism is tightly connected to narcotics trafficking and criminal organizations. The use of UAVs for border control, discovery and destruction of drug plantations, and detection and tracking of transport vehicles and couriers involved in moving illegal narcotics should become the rule, and not the exception.

Despite everything noted above, we should not shut our eyes to the problems that exist. First of all, the majority of modern UAVs are a fairly soft target for land-based air defenses. Most of the UAVs that have been lost were destroyed by anti-aircraft artillery fire or individual air defense weapons. Second, the level of technical reliability remains low (many losses occur due to technical breakdowns – often 30-40 percent of them). And third, the shift to guerilla warfare makes the problem of developing UAVs with strike capabilities and multiple applications an urgent issue.

However, these and other problems with UAVs can clearly be solved. What is important is that for the foreseeable future, UAVs have already filled their niche.

Issues Related to Nonproliferation and UAV Development

The introduction of various types of UAVs into our life, and not just those used by the military, is likely to be rapid and extensive. Marketing agencies predict that by 2012 more than 8,000 UAVs of various designations and type will be used in the United States by commercial and municipal services alone. Given the “terrorist potential” of most of these devices and their expected unlimited availability on the open market in the nearest future, security services and export control organizations will be facing a great “headache,” particularly in those countries that produce these devices and their components, including for export. Even now, according to the U.S. GAO, U.S. export control organizations in their current form may not be able to prevent the leakage of either cruise missiles or UAVs, or technologies and components used for their construction, from the country. Moreover, the U.S. GAO notes, the U.S. government very rarely checks end users to confirm the true nature of the use of the goods being exported. As a result, government offices responsible for ensuring that all of these things do not fall into the hands of undesirable elements do not have enough information about how the recipients of the controlled materials protect them in the context of their nonproliferation obligations.¹⁶ For instance, from 1998 to 2002 the Commerce Department conducted verification inspections on just one percent of the 2,500 licenses issued for goods related to missile deals. And the U.S. Department of Defense did not conduct a single inspection related to the over 500 cruise missiles and spare parts it supplied to foreign countries. On the whole, the picture is not especially heartening. It probably does not differ much from the situation in other countries that have rushed to master the rapidly expanding international market for cruise missiles and UAVs. As a consequence, one should expect the unexpected.

It is no accident that Missile Technology Control Regime experts are seriously worried by the unfolding situation and are seeking ways to keep it from spinning out of control. The earlier they succeed in finding solutions that all find acceptable, the safer the global community will be.

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² "Nonproliferation: Improvements Needed for Controls on Exports of Cruise Missile and Unmanned Aerial Vehicle Technology," GAO Report, GAO-04-493T, March 9, 2004, p. 3.

³ Altaf Karimov and Vladimir Ilin, "V Rossii zadumalis nad bespilotnikami" [Russia Considering Unpiloted Vehicles], *Nezavisimoye voyennoye obozreniye*, December 14, 2001.

⁴ "Nonproliferation: Improvements Needed to Better Control Technology Exports for Cruise Missiles and Unmanned Aerial Vehicles," GAO Report, GAO-04-175, January 23, 2004, pp. 11-12.

⁵ Altaf Karimov and Vladimir Ilin, *op. cit.*

⁶ B. Amusin and Ye. Losev, "Letayushchiye roboty" [Flying Robots]. *Armeyskiy sbornik* . 7, 2002, pp. 38-41.

⁷ "Bespilotnyy letatelnyy apparat VVS SShA 'Predeytor'" [The US Air Force 'Predator' Unmanned Flying Vehicle], *Morskoy sbornik*, 7, 1999, pp. 73-74.

⁸ Michael Taverna, "French plan for miniature UAV demonstration, procurement," *Aviation Week and Space Technology*, June 10-17, 2002, p. 63.

⁹ "Ispolzovaniye bespilotnykh letatelnykh apparatov v interesakh PRO" [The Use of Unmanned Aerial Vehicles in the Interests of Anti-Missile Defense], *Zarubezhnoye voyennoye obozreniye*, 12, 2002, p. 27.

¹⁰ Sergey Kobrusev and Aleksandr Drobyshevskiy, "Razvedka bez razvedchikov. Kompleksnaya programma bespilotnykh letatelnykh apparatov probivayet sebe dorogu" [Reconnaissance without intelligence officers: A comprehensive unmanned aerial vehicle program opens itself a road], *Nezavisimoye voyennoye obozreniye*, May 16, 2003.

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¹² Bradley Graham, "Cruise Missile Threat Grows, Rumsfeld Says: Bush Urged to Boost Defense Against Low-Flying Weapon," *Washington Post*, August 18, 2002.

¹³ *Ibid.*

¹⁴ "Nonproliferation: Improvements Needed to Better Control Technology Exports for Cruise Missiles and Unmanned Aerial Vehicles," GAO Report, GAO-04-175, January 23, 2004, pp. 11-12.

¹⁵ A. Manushkin, "Letayushchaya telekamera ishchet boyevikov v Chechne" [A flying television camera searches for fighters in Chechnya], *Krasnaya Zvezda*, October 7, 1999.

¹⁶ "Nonproliferation: Improvements Needed for Controls on Exports of Cruise Missile and Unmanned Aerial Vehicle Technology," GAO Report, GAO-04-493T, March 9, 2004, p. 11.

Analysis

**THE RATIFICATION OF THE
AGREEMENT ON ADAPTATION
OF THE TREATY ON CON-
VENTIONAL FORCES IN
EUROPE: A LONG OVERDUE
NECESSITY**

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Abridged version

Introduction

On July 19, 2004, Russian President Vladimir Putin signed Federal Law No. 64, "On Ratification of the Agreement on Adaptation of the Treaty on Conventional Forces in Europe." Previously, on June 25, 2004, this law was passed by the Federal Duma, and won the approval of the Federation Council on July 7, 2004. Thus, the process of ratification of this Treaty in Russia—which lasted almost two and a half years—had finally reached its conclusion. President Putin first sent the bill to parliament as early as February of 2002. However leftist, nationalist and militarist circles blocked the bill's passage through the Duma. Only once these forces lost the influence they had once held over Russian political life could this Agreement—which indubitably serves Russia's security interests—be ratified.

The ratification of the Agreement on Adaptation of the Treaty on Conventional Forces in Europe (CFE), much like Russia's recent accession to the Proliferation Security Initiative, is one of several important, practical steps that have been taken in recent months towards the implementation of President Putin's pragmatic foreign policy strategy. Furthermore, the situation which has unfolded in connection with the entry into force of the adapted CFE Treaty shows that the process of implementing pragmatic foreign

policy positions continues to meet with difficulties. Russia is not yet ready to fulfill its obligations assumed when Russia signed the Agreement in Istanbul, in November of 1999, and which relate to the agreement reached between the Russian Federation and Georgia, to withdraw Russian military bases and Russian troops from Moldova. NATO member states, in turn, link the ratification of the Agreement on Adaptation of the CFE Treaty with Russia's fulfillment of these obligations. This dead-end in no way serves Russian interests, especially where the accession to NATO of Latvia, Lithuania and Estonia is concerned.

**The problem of conventional arma-
ments in Europe: from the Cold War
to the 21st Century**

The issue of control of conventional armaments in Europe can be traced back to its origins in the first years of the Cold War. The former USSR deployed powerful troop formations in East Germany, Poland, Hungary and Czechoslovakia, as well as its own western military districts, greatly outnumbering NATO's armed forces on the European continent. The distribution of Warsaw Treaty Organization troops and, especially, the concentration of the largest attack formation in East Germany indicated, as was supposed in the West, that the Soviet Union was preparing major attack operations. It was thought that they could only be stopped by the use of tactical nuclear weapons on a massive scale. This would have resulted in the total devastation of the entire central region of the continent.

Attempts by the West to achieve an equalization of the conventional armaments potential in Europe by means of negotiation met with stubborn resistance from Soviet military command. In part, talks on the mutual, balanced reduction of conventional forces in Central Europe, which began in 1973 in Vienna, became bogged down in fruitless discussion. The Soviet military refused to provide its own data as to the number of Soviet troops in the region, whilst at the same time disputing the assessments presented by western countries. The status quo was only to change at the end of the 1980s, when the political leadership of the USSR came to understand that without a resolution to the problem of conventional weapons in Europe, the

d tente that was so vital to the country would be impossible. The result was that talks begun on March 6, 1989, were concluded on November 19, 1990, with the signing of the CFE Treaty in Paris.

The content of this Treaty was dictated by the need to minimize the ability to conduct major offensive operations. Such operations require that the attacking side deploy three or four times as many troops in the vicinity of the line of engagement. In order to eliminate such a possibility, the CFE Treaty's "area of application" was divided into four geographical zones. In each of these, numerical equivalency was established for heavy ground-force armaments limited by the Treaty, belonging to the forces of either NATO member states or the Warsaw Treaty Organization countries (see Appendices 1 and 2). 1 Ceilings for the number of military aircraft and attack helicopters were established for the entire CFE Treaty area of application. The ability to transport forces over large distances in short periods of time made zonal restrictions meaningless for air forces. The CFE Treaty was concluded between countries party to NATO and the Warsaw Pact Organization. Based on membership in the above, two groups of "states parties to the Treaty" were formed. In each of these groups of participating states, quotas for armaments limited by the Treaty were distributed in such a way that the total number of armaments was less than the established ceilings.

The CFE Treaty limited ground-force armaments, whether in regular units or in storage facilities.² The presence of storage facilities allows conventional forces to be rapidly increased in the corresponding locations, as the transference of personnel, especially by air, is significantly faster than the transportation of battle tanks or artillery pieces. Armaments stores, according to the Treaty, could have any location, except for the "flank" (or "border") zone. The only exception made was for the former USSR.³ This gave the country major advantages: it became possible to rapidly concentrate additional troops in flank regions both in the northern and southern parts of the country's European territory. NATO states did not have this ability.

The Treaty, which was signed in November of 1990, did not touch on the issue of limiting military personnel; the relevant negotiations were completed only in

July of 1992, when the Concluding Act of the Negotiation on Personnel Strength of Conventional Armed Forces in Europe was signed in Helsinki. In particular, Russia gained the opportunity to maintain an armed force of 1,450,000 servicemen in the European part of the country. This greatly exceeds both contemporary capacities and the country's own needs. Strictly speaking, this is an issue of secondary significance; it is pointless to maintain regular forces with more armaments than the military personnel are capable of servicing. Conversely, any increase of personnel numbers above the natural limits determined by the amount of armaments present will not lead to an increase in troops' combat capabilities.

Furthermore, after the collapse of the USSR it became necessary to divide the Soviet armaments quota between the newly independent states. This was successfully achieved relatively quickly. On May 15, 1992, the Agreement on the Principles and Procedures for the Implementation of the Treaty on Conventional Armed Forces in Europe and the Protocol on Conventional Armaments and Equipment were signed at a meeting of the leaders of CIS countries in Tashkent. Russia, Ukraine and Belarus were granted permission for armaments to be deployed with regular troops and in storage facilities. In Moldova, Armenia, Azerbaijan and Georgia only regular troops may hold armaments (Appendix 3). Unlike other independent states, the Baltic countries laid no claim to the armaments of the former USSR. Soviet troops located on their territory were a symbol of occupation, which they attempted to be rid of once and for all. These states did not address the issue of acceding to the CFE Treaty, as they were integrated into the USSR by force, and do not consider themselves the legal successors of the Soviet Union.

Until the summer of 1996, the greatest difficulties for the implementation of the CFE Treaty were connected with the problem of the "flank" or "border" zone. The flank zone covered parts of Russia, including the Leningrad and North Caucasus Military Districts (with some exceptions), and Russia maintained noticeably more armaments within the flank zone than was permitted by the Treaty.⁴ From the beginning of 1993 the Russian leadership demanded an increase in the amount of armaments that

Russia was allowed to maintain in the northern and, more importantly, the southern part of the country. This was motivated by the need to retain a powerful formation in the Northern Caucasus; a dangerous situation had arisen there, and armaments were required not in stores, but in regular units. In addition to the established ceilings, the Russian military wanted to keep 400 battle tanks, 2,420 armored combat vehicles and 820 artillery pieces within the flank zone.⁵

Russia proposed several different paths to solving the flank problem: suspension of Article 5 of the CFE Treaty, which covers flank zone limits; re-categorizing the North Caucasus Military District as a rear zone rather than a flank zone; and so on. But any revision of flank zone ceilings was blocked by Norway and Turkey, who saw this as a threat to their security. The situation became especially acute in the second half of 1995, when Moscow put forward an ultimatum, demanding that either the flank zone quota are reviewed, or Russia will unilaterally violate the restrictions. This threatened the entire CFE Treaty.

A compromise solution was found in May of 1996, mainly thanks to the efforts of U.S. diplomacy. Pskov Oblast to the North was removed from the flank zone, together with Volgograd and Astrakhan Oblasts, the eastern part of Rostov Oblast and a narrow corridor in Krasnodar Krai, to the South. This allowed Russia to retain a major formation in the Northern Caucasus. It also became possible, if necessary, to deploy additional forces along the borders with Latvia and Estonia.

The observation of the CFE Treaty played a stabilizing role in Europe. Under international control, almost 60,000 units of armaments were liquidated by the middle of 2001.⁶ The total number of weapons on the continent was more than halved. However, more important than this was the creation of an effective system for exchanging detailed information about armaments limited by the treaty, and for verifying observation of the terms of the treaty, including numerous on-site inspections. In the first ten years since the Treaty came into force, in addition to annual information exchanges, there were approximately 6,000 notifications each year, and more than 3,300 on-site inspections were carried out.⁷ This degree of transparency made it impossible to prepare for major

offensive operations unnoticed, including the concentration of troops in strategic areas, and rendered the military and political situation predictable. It became possible to plan military construction without these plans being dominated by the worst-possible case scenario.

However, the 1990 Treaty reflects the strategic situation prevalent during the Cold War. Cardinal changes in the situation in Europe demand serious revision of the CFE Treaty. The group principle upon which the treaty is structured does not take into consideration that, realistically, Europe today only has one group of states that is united by common military and political interests: the group of NATO member states. Furthermore, the number of troops and the quantity of armaments in the majority of European states is currently far less than the ceilings established by the CFE Treaty in 1990.

In the current situation, it is important for Russia to secure reinforcement, under international law, of the agreement reached in 1996 to review the demarcation of the flank zone, and to establish lower armaments ceilings. The issue here is that the personnel of the armed forces of NATO member states stationed in Europe, and the number of ground-force armaments in their possession amounts to just 70–75 per cent of the ceilings established in 1990, or 60 per cent for air forces.

Nevertheless the main issue, from the point of view of Russia's interests, rests in the fact that the CFE Treaty exerts almost no control over the number of troops of one country in the territory of another. When it was being drafted, neither the USSR nor the USA was interested in restricting their own military presence in allied countries. For this reason, the treaty merely demands that the total number of armaments owned by states of one group in the corresponding zone does not exceed the ceilings established for that group. The NATO alliance thereby received a theoretical opportunity to increase the amount of armaments in regions adjacent to Russian borders. This reinforces concerns in Russian military and political circles regarding the expansion of NATO.

The cessation of military confrontation along the East-West line was accompanied by a regionalization of security problems, and a fragmentation of strategic space.

During the Cold War military actions—given an armed conflict between NATO and the Warsaw Treaty Organization—would have automatically and almost instantaneously spread across most of the European continent, involving troops from both the 1st higher and 2nd higher strategic echelons, and then involving those deployed deep in the rear.

In current conditions, instead of a single, continental theater of military activity, several regions have emerged with strategic importance, each with its own unique characteristics. These strategic zones are almost completely disconnected from one another. Thus, a hypothetical conflict, for example, in the Southern Caucasus, will have no impact on the situation in the Balkans or in the Baltic region. This has meant that a need has arisen to calculate the ratio of conventional armaments within the framework of new regions, rather than old continents.

The adapted CFE Treaty and the balance of Russian and NATO forces

All of these circumstances predetermined the need for modernization of the 1990 CFE Treaty, with the objective of adapting the treaty to the existing military and political situation on the continent. The corresponding talks began in January of 1997, and as they progressed Russian diplomats paid particular attention to the

minimization of the foreign military presence on the territory of new members of the North Atlantic Treaty Organization. By March of 1999, agreement was successfully reached on the main elements of the Agreement on Adaptation of the CFE Treaty, which was signed in November of 1999. This document integrates the basic positions of Russia with respect to governing the military presences of one country within the territory of another country.

The adapted CFE Treaty established national and territorial ceilings for each European state party to the treaty⁸. The former limit all categories of armaments limited by the Treaty and belonging to one country, while the latter limit the number of battle tanks, armored combat vehicles and artillery on that country's territory, whether owned by that country, or another country. Air forces are not limited by the territorial ceilings.⁹ (National and territorial ceilings are listed in Appendix 4.) Correspondingly, the number of armaments held by foreign troops on the territory of any state may not exceed the difference between that country's national and territorial ceilings, which may be increased on a permanent basis only by an insignificant degree.

According to the adapted CFE Treaty, national and territorial ceilings for heavy ground-force armaments may be increased either by no more than 40 battle tanks, 60 armored combat vehicles and 20 pieces of

The difference between territorial and national ceilings for CFE Treaty participating states on the territory of which foreign troops may be deployed.

State	Battle tanks	Armored combat vehicles	Pieces of
artillery			
Belgium	244	516	209
Great Britain	-	12	-
Germany	1,260	3,491	1,152
Luxemburg	143	174	47
Spain	141	459	94
Italy	375	633	244
Netherlands	289	356	166
Norway	-	7	66
Total	2,452	5,607	1,918

artillery, or by 20 per cent. In the latter case, the limit may not be exceeded by more than 150 battle tanks, 250 armored combat vehicles or 100 pieces of artillery. The national ceilings for air forces may not be increased by more than 30 military aircraft and 25 attack helicopters. Such increases are possible only if another state agrees to correspondingly reduce their level of armaments by the equal number of units. Unilateral reductions in the national or territorial level of armaments do not give other states the right to increase their armaments within the Treaty's area of application. In essence, this means that no more than one brigade (standard NATO brigade) of foreign ground force troops can be deployed on a permanent basis to the territory of any state party to the treaty, either as a first deployment or in addition to existing foreign units. More significant increases of these levels require the agreement of all states parties to the Treaty.

For the majority of states parties to the CFE Treaty, national ceilings coincide with territorial ceilings. After the adapted CFE Treaty was ratified by all its participants and came into force, foreign troops could be deployed on the territory of the eight states. The largest number of such troops—more than half—could then be deployed by Germany.

For Russia it is important that in NATO member states bordering the country (except for Norway, whose territory can hold a total of seven armored combat vehicles and 66 pieces of artillery), and who are party to the adapted CFE Treaty, the national and territorial ceilings coincide. This means that the deployment of foreign troops there on a permanent basis in numbers greater than approximately one standard NATO brigade, was possible only if the national level was reduced. Thus, the balance of conventional armaments between Russia and NATO was maintained, which was a strong stabilizing factor in regions adjacent to Russia's borders.

Heated discussions during the drafting of the adapted CFE Treaty were focused on reaching agreement as to the parameters for temporary deployment of foreign troops in the territories of other countries. Russia worked to secure an agreement that not only permanent, but also temporary foreign military presence was limited to minimal levels. To resolve this problem, so-called "temporary increases" of territorial ceilings

were introduced. Each state party to the CFE Treaty may increase its territorial ceilings on a temporary basis; that is, may deploy additional foreign forces consisting of up to 153 battle tanks, 241 armored combat vehicles and 140 pieces of artillery, in either of two cases: either during the conduction of peace-keeping operations under a UN or OSCE mandate, or during training maneuvers. Notification of such maneuvers has to be given at least 42 days prior to the event.

In addition, in emergency situations, for example during an international or domestic crisis, a temporary increase can be as high as 459 battle tanks, 723 armored combat vehicles and 420 pieces of artillery, which corresponds to approximately one NATO-standard motorized rifle division. In this case, no later than seven days after the event, a conference of states participating in the Treaty must be convened, at which the reasons for the increase are to be explained. Meanwhile, any temporary deployment of foreign troops must be subjected to additional transparency and control measures.

In the process of adapting the CFE Treaty, the total ceilings for armaments for NATO member states were greatly reduced.¹⁰ For battle tanks and artillery, these reductions were the equivalent of approximately ten full-fledged NATO-standard divisions. The volume of reductions exceeded the amount of armaments that the most powerful army in Europe, that of Germany, may currently possess. In turn, the ceilings for armaments held by Russian troops in the Treaty's area of application coincide almost completely with the ceilings that were established for that region in 1990.¹¹

Nevertheless NATO member states, taken together, have an advantage over Russia on the European continent, with respect to conventional armaments. Based on the ceilings stipulated by the adapted CFE Treaty, the balance of forces stands in favor of NATO by approximately 2–2.7:1 for air forces, and 3:1 for heavy ground-force armaments, and approximately 2:1 for personnel. However, a comparison of all the armed forces of NATO member states and Russia located in Europe would only be worthwhile if all the NATO member state troops located in Europe could be deployed at Russia's borders, if a conflict situation arose. Such a development is considered to be virtually impossible. One cannot imag-

Levels of armaments limited under the CFE Treaty, for Russia and NATO countries located in geographical proximity to Russia (as of January 1, 2003)¹²

	Russia	NATO a)	NATO a)/Russia
Battle tanks			
In possession as of January 1, 2003	5,103	7,561	1.5
National ceilings	6,350	11,133	1.7
Territorial ceilings	6,350	10,581	1.6
Armored combat vehicles			
In possession as of January 1, 2003	9,807	10,651	1.1
National ceilings	11,280	14,030	1.2
Territorial ceilings			
	11,280	14,484	1.3
Pieces of Artillery			
In possession as of January 1, 2003	6,038	7,401	1.2
National ceilings	6,315	10,108	1.6
Territorial ceilings	6,315	9,707	1.5
Attack helicopters			
In possession as of January 1, 2003	445	536	1.2
National ceilings	855	1,075	1.2
Military aircraft			
In possession as of January 1, 2003	2,358	1,391	0.6
National ceilings	3,416	3,169	0.9

a) The Czech Republic, Poland, Hungary, Germany, Turkey and U.S. troops in Europe. The accession of Baltic States to NATO has not significantly changed the balance of forces between Russia and NATO. National and territorial ceilings for Latvia, Lithuania and Estonia cannot be established, as these states are not party to the CFE Treaty.

ine that French, Spanish, Portuguese and Italian battle tanks could be transported to the region of a hypothetical conflict, such as the Caucasus. This is one result of the fragmentation of strategic space in Europe.

In current conditions, it would only make sense to compare the armed forces of Russia and those of the NATO member states located in relative proximity to Russian territory, as well as U.S. troops in Germany and Turkey. Comparing Russia (European territories) and NATO in

regions geographically close to Russia, we can see that, after the signing of the adapted CFE Treaty, the balance of heavy ground-force armaments limited by the Treaty does not display any significant superiority on the part of the North Atlantic Treaty Organization. NATO may hold between 1.2 and 1.6 times more heavy ground-force armaments than Russia in regions geographically close to Russia, while the air forces are approximately equal. The balance of armaments actually

Armaments ceilings for regular Russian troops in the flank zone.

	Battle tanks	Armored combat vehicles	Pieces of Artillery
The CFE Treaty, 1990	700	580	1 280
The Adapted CFE Treaty a)	1,300	2,140	1,680

a) According to note (1) to the Protocol on territorial ceilings for conventional armaments and equipment, limited by the Treaty on Conventional Armed Forces in Europe.

possessed is even less favorable for NATO. In such conditions, hypothetical offensive operations by NATO against Russia, if such a possibility can be imagined, are doomed to failure.

The adapted CFE Treaty retains limits on the deployment of armaments in flank regions on the territory of Russia and Ukraine. In this respect, Russia has made some concessions to states in the West, primarily Norway and Turkey, persistently demanding that flank zone ceilings be retained. However, decisions passed in May of 1996, to alter the geographical demarcation of the flank zone, were confirmed. In addition, according to the new version of the CFE Treaty, all armaments located in the flank zone may be located in regular units. As a result the military capabilities of Russia, including capabilities in the South, have grown significantly.

Finally, temporary emergency increases were forbidden in the flank zone. This prevented the appearance of additional NATO member state troops on Russia's southern and northern borders, given an escalation of the situation in regions contiguous with Russian borders.

A simple comparison of the quantitative aspects of the balance of military potential in Russia and on the part of NATO member states does not, however, reveal all aspects of the military and political situation that developed along the Russian border. It must be taken into consideration, for example, that an expansive, neutral strategic space divides the armed forces of Russia and NATO. This space consists of Belarus, Ukraine and Moldova. No one of these countries could be accepted into NATO in the foreseeable future, and direct contact between Russian armed forces and the troops of NATO member states has

only occurred in the southern part of the Baltic region, and in the Caucasus.

Calculations regarding the balance of forces between Russia and Turkey are strictly theoretical, yet it should not be forgotten that significant contingents of Turkish armed forces have been diverted to suppress the Kurdish extremist movement, or are earmarked for actions against Syria or Greece in the case of a military conflict with these countries. Threats to Russian security in the Caucasus region are generated not by fabled Turkish aggression, but by internal instability within the republics of the Northern Caucasus, unresolved conflicts in Abkhazia and Southern Ossetia and, in particular, the expansion of Islamic terrorist organizations. Direct contact between the main body of Russian troops in this region and Turkish units located near the borders of the former Soviet Union is not a possibility; they are separated by the mountainous regions of the Southern Caucasus.

The "Gray Zone" in the Baltic Region

The situation in the southern part of the Baltic Region has caused concern in some Russian military and political circles. In connection with the accession of Latvia, Lithuania and Estonia to NATO, fears have been frequently raised in Moscow that this reinforces the superiority of NATO over Russia, in terms of conventional armaments. Referring in part to this circumstance, Duma defense and foreign affairs committees in the summer of 2002 recommended that the ratification of the Agreement on the Adaptation of the CFE Treaty not be "hastened", and in doing so made the process more protracted. Moreover, the issue of a need for some sort of "new adaptation" of the CFE Treaty was sometimes raised, as

Armed forces of the states of the southern part of the Baltic region contiguous with Russia¹³

	Poland	The Baltic States a)	Belarus	Russia b)
Number of personnel	143,633	23,090	72,964	44,990
Battle tanks	947	3	1,586	1,231
Armored combat vehicles	1,388	184	2,504	1,757
Pieces of Artillery	1,132	224	1,499	1,398
Attack helicopters	111	None	55	51
Military aircraft	195	None	216	333

a) Latvia, Lithuania and Estonia

b) Leningrad Military District and the Kaliningrad Operative Group

the accession of Latvia, Lithuania and Estonia into the North Atlantic Treaty Organization could alter the strategic situation in the Baltic region.

The accession of the Baltic States to NATO, of itself, does not noticeably change the balance of forces in the southern part of the Baltic region whatsoever. The armies of Latvia, Lithuania and Estonia are minimal compared to the troops of other states here. The total number of regular armed forces is less than 24,000, and they possess no military helicopters or attack helicopters, while the three battle tanks possessed by Latvia—obsolete T-55s—are only good for training purposes. Moreover, the acceptance of the Baltic States into the North Atlantic Treaty Organization complicates the status of that organization in a military sense—operations have to be planned in a theater which is separated from the main ground forces of the Alliance, and highly vulnerable, given a hypothetical armed conflict with Russia.

Another aspect of the problem is connected with the possibility of a deployment of foreign troops in the southern part of the Baltics. This is the only event, in essence, which could affect the interests of Russia's military security. NATO may indeed acquire superiority over Russia in the Baltic strategic zone, if approximately one thousand foreign battle tanks, as many armored combat vehicles and pieces of artillery, and hundreds of attack helicopters and military aircraft appear in Poland and the Baltic

States. Clearly, foreign troops could only be sent to this region on such a scale given a grave escalation of the international situation, comparable to the most serious crises of the Cold War period.

There are no preconditions for such a development of events. President Putin has, with extreme clarity, established Russia's position as regards the consequences of NATO expansion for Russian security. In April of 2004 he stated:

“Russia has not expressed apprehension at NATO's expansion, rather, it has suggested that this expansion is not the remedy to the modern threats the world faces. ... We stated clearly that we have no concerns whatever with respect to NATO expansion, from the point of view of maintaining the security of the Russian Federation. But Russian specialists are studying closely the expansion of NATO's military infrastructure to Russia's borders and Russia's defence policy will take this expansion into account. We consider that we will resolve any issues and problems within the framework of the Russia-NATO council.”¹⁴

President Putin's position reflects two fundamental aspects of the strategic situation that has developed in Europe. First, after the end of the Cold War, the preconditions for armed confrontation—not to speak of armed conflict—between Russia and the

countries of the West vanished. Second, Russia does not consider NATO to be a potential enemy, and relations with the North Atlantic alliance are beginning to acquire the character of a partnership, while residual or new differences of opinion must be dealt with in a process of political dialog, within the framework of institutions created for just such a dialog.

Nevertheless, mutual suspicion between Russia and NATO countries has not yet been fully overcome, and military planning is still rooted in the possibility of a major confrontation between the two. This complicates their relations, and diverts intellectual and material resources from confronting truly pressing threats, primarily the fight against international terrorism and the spread of weapons of mass destruction. Several Russian analysts and political figures, meanwhile, consider the strictly hypothetical deployment of large contingents of foreign troops on the territory of the Baltic States as virtually inevitable or, at least, as highly likely. As a result, important aspects of their working papers and recommendations can be found to be greatly unbalanced. This hinders the achievement of the pragmatic, strategic aims of President Putin.

In these conditions the accession of Latvia, Lithuania and Estonia to an adapted CFE Treaty would be useful, as this would eliminate the "gray zone" that has formed near Russian borders, and in which no norms or procedures for the control of armaments, or measures of trust or transparency, currently apply. This would reinforce trust, and would help strengthen cooperative relations between former potential enemies. In part, national and territorial ceilings for armaments of the Baltic States limited by the Treaty would be confirmed by a consensus of the Joint Consultative Group during the process of accession by these states to the CFE Treaty.¹⁵ Other complex issues could also be resolved, for example the issue of whether or not Baltic States would become a part of the flank zone.

The Baltic States are willing to accede to the CFE Treaty. However, in order to bring this about in practice, it is necessary for the Agreement on Adaptation of the CFE Treaty to come into force, which requires ratification by all participating states. The problem here is that the possibility of accepting new members is allowed only by the adapted CFE Treaty, and until

it has come into force, the version of the Treaty signed in 1990 remains valid. But the latter does not envisage the expansion of membership, and the list of parties to the Treaty covers only states that signed the treaties to create NATO and the Warsaw Treaty Organization. After the collapse of the USSR and Czechoslovakia newly independent states, with the exception of the Baltic countries, declared themselves the legal successors of the collapsed states and, according to international law, they could become parties to the CFE Treaty. But Latvia, Lithuania and Estonia do not have this opportunity, as they are not successors to the former USSR, as mentioned above.

Thus, the rapid ratification of the Agreement on Adaptation of the CFE Treaty would facilitate stability in Europe, fully meeting Russia's security interests. Colonel General Yuri Baluyevsky, appointed First Deputy Chief of the General Staff of the Russian Armed Forces in July of 2004, wrote in March 2004:

*"An adapted CFE Treaty is one of the effective instruments for supporting stability and a balance of interests in the space from the Atlantic to the Urals. We cannot fail to be concerned by attempts to throw doubt over the future of the regime for controlling conventional weapons in Europe."*¹⁶

Nevertheless, the entry into force of an adapted CFE Treaty is still blocked by the problem of Russia's fulfillment of obligations assumed in Istanbul in November of 1999.

The Istanbul obligations and the ratification of the CFE Treaty by NATO states

The ratification of the Agreement on Adaptation of the CFE Treaty by NATO member states was the product of two factors. First, Russia, as it was insisted within NATO, must reduce its military personnel in the flank zone in order that the armaments located in that zone would fall within the zonal ceilings stipulated by the adapted CFE Treaty. Second, Russia must fulfill the obligations it assumed in Istanbul, relating to resolving the issue of military bases in Georgia and the withdrawal of Russian troops from Moldova.

The first condition was fulfilled. In part, 364 battle tanks and armored combat vehicles were destroyed in Trans-Dniester under international monitoring. 59 battle tanks, 393 armored combat vehicles and 29 pieces of artillery were either withdrawn from Georgia or destroyed locally. As of January 1, 2002, Russian armaments in the flank zone numbered: 1,294 battle tanks, 2,044 armored combat vehicles and 1,557 pieces of artillery.¹⁷

However, Russian obligations relating to Georgia and Moldova were only partially fulfilled. Some Russian armaments were withdrawn from Georgia, and bases in Vaziani and Gudaut closed. The Russian military presence in Moldova was reduced. Nevertheless, there have been attempts in Russian military and diplomatic circles to evade further fulfillment of obligations assumed in Istanbul. Russian diplomats, including diplomats at the highest level, claim that:

- Russian obligations relating to the CFE Treaty have been fulfilled. (This, in truth, is correct, in the sense that the number of Russian armaments in the flank zone has been brought in line with the flank zone restrictions).
- The remaining Istanbul obligations do not carry legal, but only political, force.
- Agreements to withdraw Russian bases from Georgia and Russian troops from Moldova do not involve any rigid withdrawal timetable. The relevant Russian obligations are being fulfilled, but they are not connected with the CFE Treaty.
- The withdrawal of Russian troops from the Trans-Dniester region of the Republic of Moldova is complicated by the unregulated situation in this region.
- There is no legal connection between the fulfillment of the Istanbul obligations and the ratification of the CFE Treaty.

As a result, NATO member states have suspended the ratification process. There are no reasons to expect that this position will be revised. This dead-end does not serve Russia's interests, and even questions the validity of Russia's diplomatic position in this area. In many ways, any solution

will have to speak to the content of the obligations in question.

In the Joint Declaration of the Russian Federation and Georgia, passed in Istanbul in 1999, it was stated that the parties, governed by paragraphs 14.2.3 and 14.2.7 of the resolution of the Joint Consultative Group on Adaptation of the CFE Treaty, dated March 30, 1999, did agree that by December 31, 2000, Russia will reduce its deployment of armaments limited by the CFE Treaty on Georgian territory, to the level of temporary base deployment (153 battle tanks, 241 armored combat vehicles and 140 pieces of artillery). It was also stated that by December 31 of 2000 Russia will withdraw its armaments limited by the CFE Treaty from bases in Gudaut (Abkhazia) and Vaziani, and from repair factories in Tbilisi. In addition, it was stated that by July 1, 2001, Russia will disband and withdraw military bases in Gudaut and Vaziani, and resolve the question of use, including joint use, of the military facilities and infrastructure of disbanded Russian bases at the above locations. Finally, it was emphasized that within the course of 2000, the parties would complete negotiations regarding the timeframe and procedure for closure of Russian military bases in Batumi and Akhalkalaki, and of Russian military facilities on the territory of Georgia.¹⁸ The last obligation was not fulfilled, and there is not yet any clarity as to when the corresponding agreement will be reached.

In documents approved by the leaders of the OSCE member states, it was recorded that Russia assumed the obligation to withdraw and/or destroy Russian armaments limited by the Treaty and located in the territory of Moldova, by the end of 2001. Russia's obligation to complete the withdrawal of Russian troops from Moldovan territory by the end of 2002 was also recorded here. Article 19 of the Istanbul Summit Declaration states:

"We welcome the commitment by the Russian Federation to complete withdrawal of the Russian forces from the territory of Moldova by the end of 2002. We also welcome the willingness of the Republic of Moldova and of the OSCE to facilitate this process, within their respective abilities, by the agreed deadline."¹⁹

In the Final Act of the Conference of States Parties to the Treaty on

Conventional Armed Forces in Europe, it was stated that the Participating States:

“Have taken note of the statement by the Republic of Moldova, which is attached to this Final Act, concerning its renunciation of the right to receive a temporary deployment on its territory and have welcomed the commitment of the Russian Federation to withdraw and/or destroy Russian conventional armaments and equipment limited by the Treaty by the end of 2001, in the context of its commitment referred to in paragraph 19 of the Istanbul Summit Declaration.”²⁰

Specific Russian obligations, including timetables for implementation, for the withdrawal of troops from Moldova were also mentioned in the declaration of the Ministerial Council, passed at the Tenth Meeting of the Ministerial Council, which took place at Porto in December of 2002. At this meeting, OSCE member states expressed their willingness to postpone Russia's obligation to withdraw troops from Moldova to as late as December 31, 2003. In article 6, section (3) of the above statement, it is stated that,

“We appreciate the efforts of all participating States of the OSCE which have contributed to the Voluntary Fund to allow the OSCE to assist the Russian Federation in the fulfillment of its 1999 OSCE Istanbul Summit commitments. We welcome the Russian Federation's commitment to complete the withdrawal of Russian forces as early as possible and its intention to do so by 31 December 2003, provided necessary conditions are in place.”²¹

Thus, it can be seen that any claim that the Istanbul obligations do not contain specific timeframes for implementation is not confirmed by the text of the corresponding documents. The question of the political character of these obligations is more complex. In the documents passed in Istanbul, these obligations are indeed classified as political. This, it would appear, means that they are not subject to ratification. However, the political character of one or other obligation does not exempt the state that has assumed such an obligation from the need to fulfill it. Yet, there is another aspect to the issue. Ratification

by Russia of the Agreement on Adaptation of the CFE Treaty, in essence, grants legally binding force to the political obligation to withdraw bases and troops. In Article 2 of the Agreement on Adaptation of the CFE Treaty it is stated that Article 1 of the CFE Treaty is to be deleted, and replaced with a new Article 1. Paragraph 3 of this article states:

“Conventional armaments and equipment of a State Party in the categories limited by the Treaty shall only be present on the territory of another State Party in conformity with international law, the explicit consent of the host State Party, or a relevant resolution of the United Nations Security Council. Explicit consent must be provided in advance, and must continue to be in effect as provided for in Article XIII, paragraph 1 bis.”²²

Here we see that Russia has, in a legally binding way, confirmed that it, like any other state party to the adapted CFE Treaty, retains the right to maintain troops on the territory of other CFE Treaty states only given the clearly-stated agreement of the latter. But in the case of Georgia and Moldova, disagreement with the presence of Russian troops on their territory has been expressed clearly and unambiguously.

It is impossible to agree with the point of view that the Istanbul obligations are in no way connected with the Treaty on Conventional Armed Forces in Europe. First, they were developed during the process of drafting the adapted CFE Treaty, and were passed specifically at the Conference of States Parties to the Treaty. Second, in the preamble to the adapted Treaty it is stated that treaty states *“took into consideration”* the Final Act of the Conference of the States Parties to the CFE Treaty, which was held in Istanbul from November 17 to 19, 1999, *“and also, the statements contained therein, of several Participating States, with respect to their political obligations.”²³* Third—and this is most important—political obligations assumed in Istanbul typify additional measures to implement the adapted CFE Treaty and do not exist independently of that treaty.

Poland, Hungary, the Czech Republic, Slovakia and Belarus also assumed obligations for the equalization of national and territorial ceilings. Consequently, no contingent of foreign troops of any significance

can be deployed on a permanent basis. Moreover these states, as well as Germany and Ukraine, assumed obligations not to exceed their territorial ceilings. This is of primary military and political importance, as it stabilizes the balance of forces in regions adjacent to Russia's borders. Russia's refusal to fulfill her obligations may lead to analogous acts of defiance by other states, which would directly contradict Russia's strategic interests.

Thus we can see that Russia's current position with regard to the Istanbul obligations is counterproductive from the point of view of the country's national security interests. This position hinders the introduction of a mechanism, bearing legally binding force, which Russia could use to influence the balance of forces in regions of strategic importance to the country. This leads us to the question: what military or political benefits does Russia gain in retaining its military presence in Georgia and Moldova, in defiance of insistent requests by the governments of those countries?

In the Russian mass media one can find statements claiming that Russian military bases in Georgia are a tool of political influence. For example Sergei Karaganov, a Russian pundit on international affairs, even wrote that,

*"Moscow must preserve the levers of influence in case it fails to avoid an unfavorable scenario, i.e. Georgia's disintegration. This is why Russia is not interested in a withdrawal of its military bases or peacekeeping forces, which continue to be guarantors of stability in several regions, of the neutralization of possible bloody conflicts, and of the prevention of further collapse."*²⁴

Such statements cannot provoke anything but bewilderment. First, this is nothing less than an overt call for armed intervention in the internal affairs of an independent state. Such calls cannot fail to complicate Russo-Georgian relations, reinforcing anti-Russian sentiments in the Georgian establishment, where they already exist. Second, Karaganov and other like-minded figures appear to simply be unfamiliar with the actual situation in Georgia, and fail to take into consideration the fact that the Russian contingent in Georgia will be too small to exert a stabilizing influence on the situation in the country if a grave escalation or, moreover, a general collapse, does take

place.²⁵ Another possible development of events, and one far less favorable for Russia, is more likely to take place: Russian troops in Georgia find themselves taken hostage if the situation does become more serious. The Russian military expert, Mikhail Khodarenok, justly wrote in this connection, that:

*"There is one more illusion—that Russian bases in Georgia are capable of exerting influence on the internal situation in Georgia itself. This assessment of the capabilities of the GRVZ (Group of Russian troops in the Trans-Caucasian Region-Author) is, according to the testimony of experts, excessively optimistic. Today, nobody knows whether the weak units of the Group will be able to maintain even their own security. In a crisis situation waves of even poorly-armed extremists, hiding behind a shield of women and children, will push aside the thin cordon of Russian soldiers and take control of the armaments and property of the GRVZ. More than this, it should be remembered that the majority of service personnel attached to the Russian military are local residents (although they may hold Russian passports), and their loyalty, according to officers of the Russian Federation armed forces, cannot be fully relied upon."*²⁶

The situation in the Trans-Dniester region of Moldova has its own special traits. The Russian military presence there has been greatly reduced. According to the commander of the Operative Group of Russian Forces in the Trans-Dniester Region, Boris Sergeev, this Group does not currently possess a single tank, infantry fighting vehicle or air defense system, while the number of military personnel has fallen from 7,500 in 1995 to 1,500.²⁷ Meanwhile, the need to retain a Russian military contingent in the area is a result of not only the uncontrolled conflict with the Tiraspol separatist regime, but also the need to protect stores of Russian armaments in the region of Kolbasna.

This is a truly important task, since if these weapons fall into the hands of the Tiraspol regime the consequences may be tragic in the extreme. The withdrawal of these armaments would be a fairly simple technical task. Since March of 2003, about one third of 42,000 tons of munitions and armaments

located in stores was withdrawn to Russia. According to calculations by experts, another 45 echelons must be sent to Russia to complete the withdrawal. The OSCE Head of Mission in Moldova, William H. Hill, considers that this could be completed within five months.²⁸

However, the real problem is that these armaments are being shipped back to Russia at too slow a rate. The reason is obstacles thrown up by the Tiraspol regime. For example, the leaders of the regime demand that Russia write off a debt for gas supplied to Trans-Dniester—worth about 100 million—as compensation for the withdrawal of armaments. The situation is truly tragicomic: it turns out that Russia has to pay compensation for withdrawing its own property. Moreover, one could easily form the impression that the solution to a problem of importance to securing Russia's strategic interests (and the entry into force of the

adapted CFE Treaty is just such a problem), depends on the position of a separatist group that controls the Trans-Dniester region of Moldova. This is a status quo which hardly suits Russia's status as a great power.

Conclusion

The entry into force of an adapted CFE Treaty would meet Russia's interests. There is no other legal instrument which would restrict NATO's capabilities to develop armaments and armed forces on the territory of Alliance states near Russia's borders. The system for the mutual exchange of information, notifications and on-site checks ensures a high level of transparency; this is a major factor for stability and trust, as it eliminates the possibility of covert preparations for military activity. Transparency also allows military construction to be planned and implemented, without concentration on the worst possible case scenario. This renders the secu-

Appendix 1

Structure of the CFE Treaty's area of application (1990)

Zone 1—Central Europe (CE)	The Federal Republic of Germany, Belgium, the Netherlands, Luxemburg, Poland, Hungary, the Czech Republic and Slovakia
Zone 2—"Expanded Central Europe"	Central Europe plus Denmark, Great Britain, France, Italy and the territories of the Baltic, Carpathian, Belarus and Kiev Military Districts of the former USSR
Zone 3—"Expanded Central Europe" plus the "rear zone"	"Expanded Central Europe" plus Spain, Portugal and the territories of the Moscow and Volga-Ural Military Districts of the former USSR
Zone 4—The "flank zone"	Iceland, Norway, Greece, Turkey, Bulgaria, Rumania, as well as the territories of the Leningrad, North Caucasus and Trans-Caucasus Military Districts of the former USSR

Appendix 2

Proposed ceilings for different groups of states, for armaments limited by the CFE Treaty (1990) and located in regular units

Zone	Battle tanks	Armored combat vehicles	Pieces of Artillery	Military aircraft	Attack helicopters
Zone 1	7,500	11,250	5,000	-	-
Zone 2	10,300	19,250	9,100	-	-
Zone 3	11,800	21,400	11,000	-	-

Zone 4	4,700	5,900	6,000	-	-
Area of application	16,500	27,300	17,000	6,800	2,000

Appendix 3

Ceilings for armaments limited by the CFE Treaty (1990) and owned by CIS states in Europe

Zone	Battle tanks	Armored combat vehicles	Pieces of Artillery	Military aircraft	Attack helicopters
Russia	6,400	11,480	6,415	3,450	890
in active units	4,975	10,525	5,105	-	-
in storage	1,425	955	1,310	-	-
Ukraine	4,080	5,050	4,040	1,090	330
in active units	3,130	4,350	3,240	-	-
in storage	950	700	800	-	-
Belarus	1,800	2,600	1,615	260	80
in active units	1,525	2,175	1,375	-	-
in storage	275	425	240	-	-
Moldova	210	210	250	50	50
Armenia	220	220	285	100	50
Georgia	220	220	285	100	50
Azerbaijan	220	220	285	100	50

Appendix 4

National and territorial ceilings (NC; TC) for armaments limited by the adapted CFE Treaty²⁹

Zone	Battle tanks		Armored combat vehicles		Pieces of Artillery		Military aircraft	Attack helicopters
	NC	TC	NC	TC	NC	TC	NC	NC
Azerbaijan	220	220	220	220	285	285	100	50
Armenia	220	220	220	220	285	285	100	50
Belarus	1,800	1,800	2,600	2,600	1,615	1,615	294	80
Belgium	300	544	989	1,505	288	497	209	46
Bulgaria	1,475	1,475	2,000	2,000	1,750	1,750	235	67

Zone	Battle tanks		Armored combat vehicles		Pieces of Artillery		Military aircraft	Attack helicopters
	NC	TC	NC	TC	NC	TC	NC	NC
Great Britain	843	843	3,017	3,029	583	583	855	350
Hungary	835	835	1700	1700	840	840	180	108
Germany	3,444	4,704	3,281	6,772	2,255	3,407	765	280
Greece	1,735	1,735	2,498	2,498	1,920	1,920	650	63
Georgia	220	220	220	220	285	285	100	50
Denmark	335	335	336	336	446	446	82	18
Iceland	0	0	0	0	0	0	0	0
Spain	750	891	1,588	2,047	1,276	1,370	310	80
Italy	1,267	1,642	3,172	3,805	1,818	2,062	618	142
Kazakhstan	50	50	200	200	100	100	15	20
Canada	77	none	263	none	32	none	90	13
Luxemburg	0	143	0	174	0	47	00	0
Moldova	210	210	210	210	250	250	50	50
Netherlands	520	809	864	1,220	485	651	230	50
Norway	170	170	275	282	491	557	100	24
Poland	1,730	1,730	2,150	2,150	1,610	1,610	460	130
Portugal	300	300	430	4309	450	450	160	26
Russia	6,350	6,350	11,280	11,280	6,315	6,315	3416	825
Rumania	1,375	1,375	2,100	2,100	1,475	1,475	430	120
Slovakia	478	478	683	683	383	383	100	40
USA	1,812	none	3,037	none	1,553	none	784	396
Turkey	2,795	2,795	3,120	3,120	3,523	3523	750	130
Ukraine	4,080	4,080	5,050	5,050	4,040	4,040	1,090	330
France	1,226	1,306	3,700	3,820	1,192	1,292	800	374
Czech Republic	957	957	1,367	1,367	767	767	230	50

rity policies of all states participating in the CFE Treaty calmer and more restrained. In this light, Russia's unwillingness to fully fulfill the Istanbul obligations is counterproductive from the point of view of the country's own national security interests.

¹ The CFE Treaty's area of application includes the entire territory of the European continent "from the Atlantic to the Ural Mountains", as well as the vast majority of Turkey's territory, with the exception of a small region on the border with Syria. The region was divided into "Central Europe", "Expanded Central Europe", the "flank zone" and the "rear zone". Heavy ground-force armaments include

tanks, armored combat vehicles, artillery, and armored vehicle-launched bridges required for crossing rivers.

² Each group of states was permitted to maintain up to 3,500 tanks, 2,700 armored combat vehicles and 3,000 pieces of artillery in storage facilities.

³ The USSR was granted permission to maintain up to 400 tanks and 500 pieces of artillery in the Odessa Military District, and up to 600 tanks, 800 armored combat vehicles and 400 pieces of artillery in the Leningrad Military District.

⁴ According to Western data, by 1995 the limits were exceeded by approximately 400 tanks, 2,000 armored combat vehicles and 500 pieces of artillery. See: SIPRI Yearbook, 1995. Armaments, Disarmament and International Security. Oxford University Press, 1995, p. 771.

⁵ SIPRI Yearbook, 1995. Armaments, Disarmament and International Security. Oxford University Press, 1995, p. 772.

⁶ Formal Conclusions of the Second Conference to Review the Operation of the Treaty on Conventional Armed Forces in Europe and the Concluding Act of the Negotiation on Personnel Strength, May 28-June 1, 2001, Vienna.

⁷ Ibid.

⁸ Only national limits were established for the US and Canada, reflecting the maximum amount of armaments that these two countries could maintain in the Treaty's area of application.

⁹ In other words, military aircraft and attack helicopters may travel throughout the entire area of application of the Treaty.

¹⁰ The reductions of the total limits for NATO member states amounted to: tanks—4,800 units; armored combat vehicles—4,000 units; artillery—more than 4,000 units. In addition, the American quota in Europe fell by approximately 2,200 tanks, 2,000 armored combat vehicles and 1,200 pieces of artillery.

¹¹ Russia retains the right to maintain 6,350 tanks, 11,280 armored combat vehicles, 6,315 pieces of artillery, 3,416 military aircraft and 855 attack helicopters in the European part of the country.

¹² Protocol on national ceilings for conventional armaments and equipment limited by the Treaty on conventional armed forces in Europe; Protocol on territorial ceilings for conventional armaments and equipment limited by the Treaty on conventional armed forces in Europe. The Military Balance 2003–2004. IISS. Oxford University Press, 2003, p. 231

¹³ The Military Balance, 2003–2004 IISS. Oxford University Press, 2003, pp. 71, 74, 75, 93, 231.

¹⁴ Joint press conference with the German Federal Chancellor, Gerhard Schroeder. Novo-Ogareva, April 2, 2004.

http://president.kremlin.ru/appears/2004/04/02/1553_type63380_62813.shtml

[<http://2004.kremlin.ru/text/appears/2004/04/62813.shtml>]

¹⁵ According to Article 18 of the CFE adaptation Treaty, a state which makes a request to accede to the CFE Treaty will include in that request, in part, the envisaged national and territorial ceilings for armaments limited by the Treaty. States parties to the Treaty will conduct sessions of the Joint Consultative Group to determine the conditions

of accession, including, naturally, the national and territorial ceilings. Any decisions of the Joint Consultative Group are passed by consensus.

¹⁶ Yuri Baluyevsky, "Razshirenie NATO naneset smertel'ny udar po Dogovoru ob obychnykh vooruzhenykh silakh v Yevrope"/"NATO expansion will deal a lethal blow to the Treaty on Conventional Armed Forces in Europe", Izvestia, March 3, 2004.

¹⁷ Aleksei Lyashenko "My slovo sderzhali"/"We kept our word", Krasnaya Zvezda, January 17, 2002.

¹⁸ Final Act on the Conference of States Parties to the Treaty on Conventional Armed Forces in Europe. Appendix 14. Joint statement by the Russian Federation and Georgia, Istanbul, November 17, 1999. In: The Istanbul Document 1999, p. 281. [<http://www.osce.org/docs/english/1990-1999/summits/istan99e.pdf>]

¹⁹ Istanbul Summit Declaration. Article 19. [<http://www.osce.org/docs/english/1990-1999/summits/ista decl99e.htm>] In: The Istanbul Document 1999, p. 53.

²⁰ The Final Act of the Conference of the States Parties to the Treaty on Conventional Armed Forces in Europe. In: The Istanbul Document 1999, p. 266.

²¹ Section III, Article 6. Porto Ministerial Declaration. In: Tenth Meeting of the Ministerial Council OSCE. Porto, 2002, p. 25. [<http://www.osce.org/docs/english/1990-1999/mcs/10porto02e.pdf>]

²² Agreement on Adaptation of the Treaty on Conventional Armed Forces in Europe. [<http://www.osce.org/docs/english/1990-1999/cfe/cfeagree.htm>] In: The Istanbul Document 1999, p. 131

²³ Ibid, p. 130.

²⁴ Sergey Karaganov, "Moscow and Tbilisi: Beginning Anew". Russia in Global Affairs, Vol. 2, # 1, January-March 2004, p. 34–35. [<http://eng.globalaffairs.ru/numbers/6/507.html>]

²⁵ According to the International Institute for Strategic Studies in Georgia, as of January 1, 2003, there were approximately 3,000 Russian servicemen in the country, of whom a significant portion were local residents. They were armed with 65 tanks, 200 armored vehicles and 139 pieces of artillery. The Military Balance, 2003–2004. IISS. Oxford University Press, 2003, p. 94

²⁶ Mikhail Khodarenok "Zigzagi bazovoi strategii/The zigzag of a basic strategy", Voenno-promyshlenny kurier, #14, December 10–16, 2003.

²⁷ "Vyvozu rossiyskogo vooruzhenia iz Pridnestrov'ya prep'yatstvuyut problemy mezhdru Tiraspolem i Kishinevom – komanduyushiy OGRV"/"The withdrawal of Russian armaments from Trans-Dniester is blocked by problems between Tiraspol and Kishinev, says ORGV commander" June 11, 2004, RIA Novosti News Agency, . According to data from abroad, as of January 1, 2003 there were approximately 1,000 Russian servicemen, 108 tanks, 214 armored combat vehicles and 125 pieces of artillery in Trans-Dniester. See: The Military Balance, 2003–2004, IISS. Oxford University Press, 2003, p. 94.

²⁸ Aleksandr Orlov. "Pridnestrovsky tupik"/"The Trans-Dniester Dead-End" Voenno-promyshlenny kurier, #6 (23), February 18–24, 2004.

Analysis**ON THE PROSPECTS FOR
EXPANDING RUSSIAN-INDIAN
NUCLEAR COOPERATION****By Victor Kozlov,**

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 Abridged version

Russia's potential for developing its nuclear science and technology cooperation with foreign countries is determined by the nation's significant scientific and technical capabilities and experience in constructing nuclear research and power production facilities abroad.

Maintaining and increasing this industry's exports is of national importance, since the nuclear sector's ties to other sectors of the economy provide many enterprises with new orders and jobs. Thus, the execution of the contracts for the construction of nuclear power plants (NPPs) in Iran, China and India, worth approximately \$5 billion in total in the next 6-7 years, meant about 300-400,000 Russian jobs in those sectors participating in the construction of these plants. Furthermore, the continued receipt of foreign currency is ensured throughout the entire period of NPP service (40 years) thanks to deliveries of nuclear fuel and spare parts, as well as the provision of services related to the operation and modernization of these reactors. For instance, the yearly provision of nuclear fuel services to foreign NPPs alone brings in \$350-400 million.

Russia's opportunities for increasing nuclear power plant construction in foreign countries further are held back to a considerable degree by the virtual curtailment of new reactor construction in Russia. This has resulted in a decrease in the production of domestic nuclear power plant equipment that meets up-to-date quality and reliability requirements: the prolonged interruptions in the deliveries of such equipment are quite telling. Naturally, when potential foreign customers are selecting NPP suppliers they consider our unfavorable circumstances and, thanks to the intense competition on the

market for NPPs, they either forego cooperation with Russia or are able to negotiate extremely advantageous terms.

The construction of nuclear power plants abroad is a kind of strategic cooperation, which is characterized by a high level of political, financial, and technical risks for both suppliers and customers. For this reason it is current practice for such cooperation to receive active state support in the form of guarantees that long-term commitments will be met. When facilities are under construction, these guarantees include the provision of export credits and financing, funding research and development, nuclear fuel cycle services, spare parts deliveries, etc. For this reason the political and economic changes that recently occurred in the former Soviet Union and the countries of eastern Europe could not but negatively impact upon the state of and prospects for our construction of NPPs abroad.

Some History

The agreement between the former Soviet Union and the Republic of India, signed on November 20, 1988, provided for the construction under contract of a nuclear power plant in India with two VVER-1000 reactor units.

However, in 1991 all intergovernmental agreements concluded by the former USSR relating to cooperation in the field of nuclear power engineering were either halted or suspended. At the time cooperation stopped in 1991, both parties had already completed work on selecting a construction site, agreed upon the maximum baseline costs for NPP construction, and agreed to and initialed a draft contract on the design study.

In accordance with Russian Presidential Edict 472 of April 21, 1993, *On the Russian Federation's Fulfillment of Intergovernmental Agreements on Cooperation in the Construction of Nuclear Power Plants Abroad*, negotiations with India's Atomic Energy Commission on the renewal of cooperation were carried out in 1993-94. A number of changes concerning the structure of cooperation and the provision of government credits were made to the text of the agreement. In particular, the draft Supplement to the 1998 Agreement provides for changed conditions of cooperation (technical assistance instead of construction on a turnkey basis), as well as

modification of the conditions for the granting and repaying of government credits.

After several rounds of negotiations, which took place in 1995-1998, the parties agreed to the Supplement to the Intergovernmental Agreement of November 20, 1988. This supplement was signed by Russia (the Ministry of Atomic Energy) and India (the Atomic Energy Commission) on June 21, 1998.

The obligations that Russia entered into included:

- The development of design and technical documentation for the licensing of the NPP, as well as its construction and operation;
- The delivery (on FOB Russian ports terms) of complete plant equipment, including a training simulator, instrumentation, installation, expendable supplies for the NPP, spare parts in accordance with manufacturer standards for use during the warranty period, as well as special materials produced in Russia;
- The delivery of equipment and special materials needed by Russian enterprises in order to fulfill commitments related to the construction of facilities provided for in the Agreement on contract conditions;
- The production and technical training of Indian specialists in the Russian Federation;
- The delivery of nuclear fuel and control units needed for the initial load and five subsequent reloads for each NPP reactor.

According to the conditions of the November 20, 1988 Intergovernmental Agreement and June 21, 1998 Supplement, the Indian government is obliged to use the reactors and nuclear fuel supplied by Russia, as well as nuclear materials from other sources that could be used in these reactors, exclusively for peaceful purposes and under IAEA safeguards.

In order to fulfill the Intergovernmental Agreement, on July 20, 1998, the Contract for a Design Study of the Kudankulam NPP was signed. The contract, between the Nuclear Power Corporation of India (NPCIL) and Russia's Atomstroyexport, entered into force in March 1999. During Indian Prime Minister Atal Bihari Vajpayee's

November 5-6, 2001 visit to Moscow, Russian Minister of Atomic Energy Aleksandr Rumyantsev and Secretary of India's Department of Atomic Energy and Chairman of the Indian Atomic Energy Commission Dr. Anil Kakodkar signed a Memorandum of Understanding regarding construction of the Kudankulam NPP. At the same time, on November 6, 2001, Atomstroyexport and the Nuclear Power Corporation of India signed a General Framework Agreement on the Construction of the Kudankulam NPP (Units 1 and 2). The agreement determined the Russian deliveries and services, the parties' mutual obligations, and the schedule for facility construction (68 months from the date concrete is first poured in the foundation of Unit 1).

The Agreement was later expanded with the conclusion of a number of contracts for Russian enterprises to provide supplies and services. NPCIL and Atomstroyexport signed a contract for the development of a detailed design for the construction of the Kudankulam NPP on December 17, 2001, and on February 12, 2002, a contract for the supply of equipment of long-term manufacture was signed.

The first pour of concrete—March 31, 2002—marked the beginning of the term for facility construction and the countdown until NPP Unit 1 operations commence. According to the schedule, Unit 2 operation is to begin 12 months after the launch of Unit 1.

To date, work on the facility is proceeding in accordance with the agreed-upon schedule.

Basic Indicators of the Development of Nuclear Power in India

At present, India's electricity needs are mostly met through coal and hydropower, which plays a secondary role. Coal reserves are concentrated in the east of the country. Regions near coal deposits continue to rely on thermo-electric plants. However, India's coal reserves are only enough to provide for India's electricity needs for 50-70 years, according to the calculations of the Indira Gandhi Centre for Atomic Research. Nuclear assets can ensure the provision of electric power for several centuries, and are better than coal from an environmental point of view. India's nuclear technology is sufficiently advanced to allow it to participate

creditably in meeting the country's electricity needs. At the current time nuclear power is becoming more profitable than thermal energy, especially for southern and western India, which are far from coal reserves and suffer from a lack of water.

According to the Indian Department of Atomic Energy (DAE) Annual Report for the 2002-2003 fiscal year, India was then using 14 reactor units, with an installed capacity of 2,720 MWe; the share of nuclear power in the production of energy was 3%; and in 2002 the load factor of the nine reactor units was over 90%.

In 2002-2003 19,242 million units of electricity were produced (in 2001-2002 19,199 MUs were produced); the average load factor was 90%; electricity sales, minus taxes

and the use of electricity for power production needs, increased 6%; NPCIL profits increased 15% in comparison with 2001-2002. As the DAE Annual Report notes, all nuclear power plants are certified in accordance with ISO-14001. During the last year of NPP operation there were no unforeseen events. (The construction of the Kudankulam NPP was recognized to be the safest among the NPPs under construction in India.)

Today there are nine reactor units simultaneously under construction in the country. The basic parameters of the power plants are given in Table 1 and Table 2 (the tables are based on data in the Indian Department of Atomic Energy (DAE) Annual Report for the 2002-2003 fiscal year).

Table 1:

Nuclear Power Plants in India

In operation: 14 reactors

Under construction: 9 reactors

NPP	Reactor Type	Status	State	Capacity	Electric power generated, million units (MUs) in 2002	Load factor, % in 2002
Kaiga-1	Pressurized Heavy Water Reactor	In operation	Karnataka	220 MWe	3,457	90
Kaiga-2	Pressurized Heavy Water Reactor	In operation	Karnataka	220 MWe		
Kaiga-3	Pressurized Heavy Water Reactor	Under construction	Karnataka	220 MWe		
Kaiga-4	Pressurized Heavy Water Reactor	Under construction	Karnataka	220 MWe		
Kakrapar-1	Pressurized Heavy Water Reactor	In operation	Gujarat	220 MWe	3,660	95
Kakrapar-2	Pressurized Heavy Water Reactor	In operation	Gujarat	220 MWe		
Madras-1	Pressurized Heavy Water Reactor	In operation	Tamil Nadu	170 MWe	1,048	69
Madras-2	Pressurized Heavy Water Reactor	In operation	Tamil Nadu	170 MWe		
Narora-1	Pressurized Heavy Water Reactor	In operation	Uttar Pradesh	220 MWe	3,613	94

NPP	Reactor Type	Status	State	Capacity	Electric power generated, million units (MUs) in 2002	Load factor, % in 2002
Narora-2	Pressurized Heavy Water Reactor	In operation	Uttar Pradesh	220 MWe		
Rajasthan-1	Pressurized Heavy Water Reactor	In operation	Rajasthan	100 MWe	293	
Rajasthan-2	Pressurized Heavy Water Reactor	In operation	Rajasthan	200 MWe	1,568	89
Rajasthan-3	Pressurized Heavy Water Reactor	In operation	Rajasthan	220 MWe	3,344	87
Rajasthan-4	Pressurized Heavy Water Reactor	In operation	Rajasthan	220 MWe		
Rajasthan-5	Pressurized Heavy Water Reactor	Under construction	Rajasthan	220 MWe		
Rajasthan-6	Pressurized Heavy Water Reactor	Under construction	Rajasthan	220 MWe		
Tarapur-1	Boiling Water Reactor	In operation	Maharashtra	160 MWe	2,573	92
Tarapur-2	Boiling Water Reactor	In operation	Maharashtra	160 MWe		
Tarapur-3	Pressurized Heavy Water Reactor	Under construction	Maharashtra	540 MWe		
Tarapur-4	Pressurized Heavy Water Reactor	Under construction	Maharashtra	540 MWe		
Kudankulam-1	VVER-1000 Light Water Reactor	Under construction	Tamil Nadu	1,000 MWe		
Kudankulam-2	VVER-1000 Light Water Reactor	Under construction	Tamil Nadu	1,000 MWe		
Kalpakkam** (NOT KAYAPAKKAM)	Fast Breeder Reactor	Under construction	Tamil Nadu	500 MWe		

The Prospects for the Development of Nuclear Power Engineering in India

According to information provided by the Indian Department of Atomic Energy, until recently India's natural uranium reserves were estimated at 78,000 tons. After the recent discoveries of deposits in Meghalaya, Andhra Pradesh, Orissa, and Rajasthan, it is likely that the reserves are enough to produce 15,000 MW of electricity at heavy

water reactors. India's thorium reserves total 518,000 tons, enough to produce 350,000 MWe over the course of 100 years. The Indian nuclear program is being carried out in three stages, given the limited uranium resources and large quantity of thorium in the country.

The first stage of India's overall nuclear power development plan has been completed: India's nuclear energy industry has

Parameters of Operational Reactors as of May 31, 2003

Reactor Unit	Reactor Type	Capacity	Location, state	Date first reached criticality	Date commenced commercial operations	Total electric power generated, million units as of 31 May 2003
Tarapur-1	Boiling Water Reactor	160 MWe	Tarapur, Maharashtra	1 February 1969	28 October 1969	31,585
Tarapur-2	Boiling Water Reactor	160 MWe	Tarapur, Maharashtra	28 February 1969	28 October 1969	31,681
Rajasthan-1	Pressurized Heavy Water Reactor	100 MWe	Kota, 11 Rajasthan	August 1972	16 December 1973	11,445
Rajasthan-2	Pressurized Heavy Water Reactor	200 MWe	Kota, Rajasthan	8 October 1972	1 April 1981	22,372
Rajasthan-3	Pressurized Heavy Water Reactor	220 MWe	Kota, 24 Rajasthan	December 1999	1 June 2000	4,686
Rajasthan-4	Pressurized Heavy Water Reactor	220 MWe	Kota, Rajasthan	3 November 2000	23 December 2000	3,930
Kalpakkam-1	Pressurized Heavy Water Reactor	170 MWe	Kalpakkam, Tamil Nadu	2 July 1983	27 January 1984	19,362
Kalpakkam-2	Pressurized Heavy Water Reactor	170 MWe	Kalpakkam, Tamil Nadu	12 August 1985	21 March 1986	16,192
Narora-1	Pressurized Heavy Water Reactor	220 MWe	Narora, Uttar Pradesh	12 March 1989	1 January 1991	14,686
Narora-2	Pressurized Heavy Water Reactor	220 MWe	Narora, Uttar Pradesh	24 October 1991	1 July 1992	14,487

Reactor Unit	Reactor Type	Capacity	Location, state	Date first reached criticality	Date commenced commercial operations	Total electric power generated, million units as of 31 May 2003
Kakrapar-1	Pressurized Heavy Water Reactor	220 MWe	Kakrapar, Gujarat	3 September 1992	6 May 1993	13,416
Kakrapar-2	Pressurized Heavy Water Reactor	220 MWe	Kakrapar, Gujarat	1 January 1995	1 September 1995	12,461
Kaiga-1	Pressurized Heavy Water Reactor	220 MWe	Karvar, Karnataka	26 September 2000	16 November 2000	3,945
Kaiga-2	Pressurized Heavy Water Reactor	220 MWe	Karvar, Karnataka	24 September 1999	16 March 2000	4,868

mastered the technology of generating electricity through the use of heavy water reactors, which are fueled by natural uranium (99% U 238 and 1% fissionable U 235). This provides for the production of 10 GW of electricity.

The second stage of the development of Indian nuclear power engineering has now begun. Its main task is the creation of a closed fuel cycle, where plutonium and depleted uranium obtained from spent heavy-water reactor fuel is used in a fast breeder reactor. This technology will produce 300 GWe. During this second stage, fast breeder reactor technology that produces more Uranium 233 through nuclear transmutation will be mastered. These reactors use Plutonium 239 obtained from the heavy water reactors as fuel, and Uranium 238 and Thorium 232 as a blanket. In fast breeder reactors Thorium 232 absorbs neutrons from Plutonium 239 atoms to create Uranium 233. As a result, these reactors create more uranium than is loaded into them.

India's first 40 MWe fast breeder test reactor was built in October 1985 at the Indira Gandhi Centre for Atomic

Research in Kalpakkam. On September 2, 2003, the Indian government approved a proposal to build a 500 MW fast breeder reactor in Kalpakkam, Tamil Nadu. Plans call for the reactor to produce 2,585 million units of electricity per year, given a load factor of 75%. The projected service life of the reactor is 40 years. The unit is scheduled to go into commercial operation in 2011. By 2020 India intends to build four additional 500 MW fast breeder reactors. Fast breeder reactor construction is being conducted by BHAVINI Ltd., which is 75% owned by the Indian government, while 5% of the company's equity is held by the Nuclear Power Corporation of India and the remaining 20% is composed of public bonds. The government simultaneously approved the construction of a uranium processing facility in [RTF bookmark start: BANDUGURANG]Bandugurang[RTF bookmark end: BANDUGURANG], Jharkhand state. The plant will be able to process 2,250 dry tons of ore per day. Construction should be completed in 2006.

The final stage of India's nuclear power engineering program is the introduction of the most secure technology—without the use of plutonium. The construction of improved heavy water reactors fueled by Thorium and Uranium 233 is planned at this stage. This type of reactor is self-sustaining: after the first load, Uranium 233 reproduces itself in the reactor through the periodic addition of Thorium 232. The Indira Gandhi Centre for Atomic Research designed the first 300 MW improved heavy water reactor; its construction is slated to begin in 2004.

The main goal of India's nuclear power engineering development program is reaching 20,000 MW in installed capacity by 2020, and increasing the proportion of electricity produced by NPPs to 10%. The Indian government is currently considering draft amendments to the Atomic Energy Act that would allow private investment in nuclear power engineering, including foreign investment. Reforms of the financing of nuclear power engineering are likely to begin next year.

Due to the upcoming financial reforms, India is activating its cooperation with leading western countries. The creation of joint ventures for the construction and operation of NPPs is one of the types of cooperative arrangements currently being considered.

International Cooperation

As noted in the DAE Annual Report, India is actively developing cooperation with Germany, France, and Italy in the area of NPP construction and operation, and with Vietnam in the field of scientific research, through bilateral agreements. The Atomic Energy Regulatory Board (AERB) is increasing its cooperation with the U.S. Nuclear Regulatory Commission (NRC). During a visit to France in September 2003, Department of Atomic Energy Secretary Anil Kakodkar stated that India was ready to consider the proposals of foreign partners, including those of France. India's cooperation with the United States in the energy sphere is growing dynamically. During Indian Prime Minister Atal Bihari Vajpayee's visit to the United States in September 2003, terms governing the development of scientific and technical cooperation, in particular in medicine, power engineering, and high technology. India's AERB and the U.S. NRC hold regular meetings. As AERB

press releases report, these meetings involve conferences and an exchange of information on licensing, safe operation, NPP modernization, and fire safety issues.

In January 2004, the Americans announced the signing of an agreement with India on cooperation in the areas of high technology, the peaceful use of nuclear energy, and space programs. As an IAEA member country India participates in the International Project on Innovative Reactors and Fuel Systems. Three divisions of the Department of Atomic Energy—NPCIL, the Nuclear Fuel Center, and the Nuclear Mineral Department are members of the World Nuclear Association. India and the European Organization for Nuclear Research (CERN) have agreed on the further expansion of cooperation in the sphere of fundamental nuclear research.

The Prospects for the Development of Russian-Indian Cooperation

India's desire to increase the number of reactor units at the Kudankulam NPP was voiced during Indian Prime Minister Atal Bihari Vajpayee's visits to Russia in 2001 and 2003.

Yet the prospects for expanding cooperation with India in the peaceful use of nuclear energy depend on the resolution of questions related to the requirements of the international nuclear weapons nonproliferation regime.

India is not a party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and is not, under the terms of this treaty, a nuclear state. Not all of India's nuclear activities are currently under IAEA safeguards.

In 1992, Russia undertook an international obligation according to which Russian nuclear exports to nonnuclear states, to comply with NPT provisions, are allowed only if all nuclear activities of the recipient state are under IAEA safeguards. Therefore Russian cooperation with India in the field of nuclear power engineering is limited to the construction of two reactor units at the Kudankulam NPP.

In 1998 India became a de facto nuclear weapons state. It considers these weapons to be a critical factor in maintaining nuclear deterrence and national security. Indian leaders have declared repeatedly that they

will not abandon the nuclear option. Yet even in this situation there is obvious competition between the leading nuclear suppliers, who find themselves in exactly the same position as Russia.

Despite its policy of refusing to cooperate with India in the nuclear sphere, the U.S. administration entered a dialog with India and Pakistan on a wide spectrum of issues after the events of September 11, 2001, including the provision of weapons materials security. At the same time, according to available information, the United States is actively strengthening its position in India and promoting U.S. energy companies on the Indian market. France's Framatom, with the support of the French government, is trying to create the conditions for its eventual participation in Indian NPP construction. India's official nuclear energy development program calls for the construction of new NPPs with a total power of 20 GW.

The package of Indian proposals to Russia include such major projects as the construction of six reactors (in the immediate future, units 3 and 4) at Kudankulam NPP, as well as deliveries of nuclear fuel and equipment to operational Indian NPPs.

Thus, the possibilities for expanding Russian-Indian cooperation in the nuclear sphere depend upon the following diverse domestic and international factors:

a) The position of the Nuclear Suppliers Group (NSG). After India's 1974 nuclear test the countries that export nuclear technologies decided that new international export control standards were needed. Furthermore, a special organization was needed that was not directly affiliated with the NPT, so that countries that did not belong to that agreement could participate in the multilateral export control regime. In 1975 the Nuclear Suppliers Group (NSG) was formed for this purpose.

In 1992 the Nuclear Suppliers Group adopted three important new documents related to the exports of dual-use goods and technology used in the nuclear sphere: the Guidelines for Transfers of Nuclear-Related Dual-Use Equipment, Materials, Software and Related Technology, the Guiding Principles, and a Memorandum of Understanding on procedural questions. *States that signed the Memorandum pledged to exchange infor-*

*mation and inform partners about licenses that have been issued as well as licenses that were not approved. NSG members also adopted a rule according to which **although final decisions regarding the granting of licenses are made by each government based on its own understanding of the issues, all members pledged not to permit exports without preliminary consultations with the governments of countries that for one reason or another have banned the export of the given good or technology.***

In 2003 Russia and France, with the construction of new NPP units in India in mind, conducted consultations with other Group members but encountered the strong opposition of the U.S. representatives, who were supported by the remaining members. If this NSG position does not change in the near future, India may undertake a number of unilateral measures, including the independent construction of small- and medium-sized reactors that will not be placed under IAEA safeguards, which would lead to a clear erosion of the nonproliferation regime. This alternative would hardly suit either the NSG as a whole or individual Group members, and might therefore influence their position regarding India.

- b) Even the present level of the Russian presence on the Indian energy market is becoming the object of competition by leading western companies. Given this situation, a consistent effort is needed to strengthen and expand the Russian position in this important area of Russian-Indian cooperation.
- c) The level of Russian-Indian cooperation in the realm of nuclear safety. The expansion and intensification of cooperation in this area is needed.
- d) The introduction of certain corrections in the way in which Russia fulfils obligations arising from international agreements that it has signed, among them with NSG members.
- e) The adoption by the Russian government (with State Duma approval) of a Statute on Cooperation with India in the construction of new NPP units, including a provision (with Ministry of Finance agreement) on the permissibility of applying the unused portion of the government credit provided for the construction

of the two Kudankulam NPP reactors, or a decision on the provision of a new government credit to India.

In 2001, having the formal right to base its decisions on its own understanding of the issues, Russia exercised its political determination and, without consultation with the NSG, provided nuclear fuel for India's Tarapur NPP. As a result, Russia was sharply criticized by the other NSG members.

The Main Problematic Issues:

An examination of the experience building NPPs in China, Iran and India suggests a variety of acute problems that Russian organizations are likely to encounter. The effectiveness of Russia's performance of its obligations arising from intergovernmental agreements as well as its fulfillment of contracts depends on solving several problems.

The problems include:

- The complicated multistage customs and hard currency control procedures, which are alike for all actors involved in international trade and do not take into consideration the special features of investment cooperation governed by intergovernmental agreements or based on the provision of government credits. This situation leads to unjustified additional expenditures of human and financial capital, and makes it much more difficult for Russia to meet its contractual obligations related to the provision of goods and services for NPP construction in a timely manner.

There is an urgent need for the formulation of special laws that would make the establishment of special customs procedures for the export of equipment and materials for NPPs under construction abroad, through the issuance of single (general) licenses for the entire scope of obligations arising from each contract concluded on the basis of an intergovernmental agreement.

- The issue of how decisions related to taxation, particularly the payment and reimbursement of VAT, are made. In this case, VAT reimbursement procedures, thanks to time lags and partial repayments, decrease the real financial resources of equipment manufacturers.

- The volume of budgetary funding of industry, which is provided in accordance with a budgetary coefficient established by the Ministry of Finance (0.9 on the NPP contract with China) is in practice insufficient. In particular, this concerns payments related to deliveries of equipment, materials, and spare parts. The situation is even more aggravated in cases where underfinancing or delays in budgetary outlays have occurred.
- The value of services provided by Russian organizations that are paid by state credits provided for the construction of NPPs abroad make up from 85% (Kudankulam NPP) to 90% (Chinese NPPs) of contract values. Thus, budget payments made by the Ministry of Finance (on time and in full) are critical in the financing of the Russian organizations that are undertaking the construction, deliveries, and services.
- The problem of funding equipment manufacturers (in particular those that produce equipment with a long production cycle) is key for smooth NPP construction. Given that in accord with the Russian-Chinese Intergovernmental Agreement payment for equipment is made only upon delivery, and manufacturers are practically deprived of working assets, it is inevitable that additional financial resources (such as expensive loans from commercial banks) are needed in order to maintain the production process (in order to purchase materials, necessary parts, etc.) However, the use of bank loans at market rates is obviously unrealistic, as they will increase expenses to such a degree that it is impossible to maintain project profitability.
- In order for our deliveries and services related to the construction of capital-intensive facilities such as NPPs to be competitively priced on the international market, the cost of the services of Russian federal organizations (like the Federal Inspectorate for Nuclear and Radiation Safety, or GAN, and the Federal Agency for the Legal Protection of Military, Special, and Dual-Use Intellectual Property, or FAPRID) and financial organizations working under government instructions in the area of

international agreements must be lowered. For instance, we have the example of Vneshekonombank approaching the fulfillment of the conditions of an international agreement in a commercial manner (blocking a substantial part of an advance, writing off current account funds in an unacceptable way, and charging very high commissions for guarantees, etc.)

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In conclusion, it should be emphasized that the expansion of Russian-Indian cooperation in the construction of nuclear power plants in India is in Russia's long-term interest, as it will contribute to an increase in high-tech exports and a decrease in dependence on raw materials exports. This, as is well known, is one of the basic tasks that the new Russian government has set itself.

Analysis**THE ROLE OF THE UNITED NATIONS IN TODAY'S WORLD**

**By Roland Timerbaev,
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Board**

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Abridged version

A heated debate over the place and role of the United Nations in today's rapidly changing world has emerged since the end of the Cold War, and particularly in the current century. Foremost in this debate is the UN Security Council, which, according to the UN Charter, is entrusted with "primary responsibility for the maintenance of international peace and security." There are certainly good reasons for the current debate. Fundamental changes have taken place in the world. The UN was established at the end of World War II, its Charter formed and shaped by the victorious powers and China. Although it was not entirely obvious during the Charter's formation (in 1944 and the first half of 1945), the approach of a new bipolar world order could already be felt. The Yalta summit of anti-Hitler coalition leaders in February 1945 laid the foundations for the new world order, for all intents and purposes.

The end of the Cold War, however, brought with it a unipolar system (meaning that in the place of two "superpowers," the world only has one), and a drastic change in the globe's balance of forces. New, strong actors appeared on the global scene, including Germany, Japan, and India, while the relative weight and influence of several UN founding members—France, Great Britain, and Russia—diminished. At the same time, the voices of countries in the so-called "third world" became more authoritative and demanding. In the 1940s many of these countries were colonies or dependent territories, or had long been sidelined from global issues. Primary examples of such countries were Brazil, South Africa, and Indonesia.

An international organization cannot remain unaware of or fail to respond to all of these changes. Since the events of

September 11, 2001 and the dramatic and steadily advancing threat of international terrorism, compounded by the danger of proliferation of weapons of mass destruction, the role of the UN has become a particularly sharp question on the international agenda. In addition, the rise to power of the Republican administration of President Bush in the United States has been a vitally important factor, due to the predominant influence of so-called neoconservatives in this administration. These neoconservatives advocate unilateralism and the use of preemptive force in the actions of the United States, as well as the circumvention of existing international mechanisms, first and foremost the UN Security Council.

The question is, how prepared is the UN, formed nearly 60 years ago, to address emerging challenges to international peace and security today and in the foreseeable future? This subject is touched upon daily in practically every country and nation, and directly affects nearly every person on the planet. To take only the last decade, for example, events in the Balkans, Rwanda, and Iraq come to mind, events that resulted in tragedy for hundreds, thousands, and even millions of people. Is the UN, in its current form, in a position to manage effectively these and similar conflicts? Is the UN threatened with the fate that befell the League of Nations? Is the world returning once again to a condition of general chaos, where the "law of the fist" would determine the rules of the game? Is radical reform of the UN necessary, or is the UN not yet in a position to adapt itself to the new reality? Has it become necessary to develop some other international mechanism for managing emerging conflicts that threaten global security and the security of noninvolved states? These questions urgently demand answers.

A Brief History

The world became conscious of the need for governments to combine their efforts to maintain peace at the beginning of the twentieth century. The organization of principles and mechanisms for ensuring global collective security gradually and steadily gained momentum. The formation of the League of Nations after World War I was the first serious attempt at this. However, the League consisted of a limited number of states, with many remaining outside, including the United States.¹ The League of Nations was unable to become an effective organization for collective secu-

rity or to prevent the emergence of World War II.

The United Nations became the first genuinely global organization for maintaining peace. Although the UN was unable to prevent or bring an end to many breaches of the peace and hot wars have taken place throughout its existence, the majority of governments and experts in foreign affairs nevertheless view the UN's track record in a positive light. The UN's limitations are primarily the limitations and mistakes of individual member governments. As the American political scientists Paul Kennedy and Bruce Russett fairly noted, "The organization can only be as effective as member governments, in agreement, desire it to be."²

The UN's principal body for maintaining peace is the Security Council, which consists of 15 members: 5 permanent members, which hold the right of veto, and 10 non-permanent members, selected by the General Assembly to two-year terms.³ For a number of years a UN Special Committee has been examining the issue of expanding overall membership on the Security Council and, in particular, the number of permanent members, but has not yet reached any conclusions. We will return to this issue later.

It is noteworthy that the UN, throughout its existence, has displayed a great capacity for modernization and the accommodation of new conditions and obstacles. For example, in the late 1950s and throughout the 1960s, the UN, without modifying its Charter, took on the responsibility for conducting peacekeeping operations in conflict areas—a function that was not foreseen in the UN Charter. UN peacekeeping operations are generally recognized as playing a positive role in the management of conflicts and in maintaining peace, and are actively carried out in various regions of the world. From 1991 until very recently, the Security Council undertook measures to conduct inspections in and disarm Iraq, again measures that were not directly envisaged by the Charter.

Within the UN framework there are multiple specialized agencies that have accumulated practical experience on a global scale in various fields of human activities. One of these organizations closely connected to the UN is the International Atomic Energy Agency (IAEA), which carries out the important function of preventing the

proliferation of nuclear weapons.⁴ The IAEA has contributed actively and productively in this area, and is prepared to continue its cooperation with the Security Council in Iraq, North Korea, and other regions if the necessity arises and the Security Council issues a corresponding mandate. This function is established in the UN Charter and is envisaged in the arrangement between the two organizations.

Overall, there is good reason to conclude that as a growing number of global problems arise and the interdependence and interaction of states intensifies, the world will increasingly need international cooperation, and accordingly, international mechanisms to ensure the effectiveness of such cooperation.⁵

Can We Speak Of A Crisis At The UN?

Yes, today the UN is experiencing yet another crisis, triggered by both objective and subjective factors. Essentially, throughout its existence the UN has never attained the level of effectiveness and potency necessary for a genuinely *collective* maintenance of international peace and security, based entirely on the principles and norms proclaimed in the Charter. The organization, being based on the principles of "sovereign equality of all its Members" and nonintervention in the domestic affairs of governments (Article 2, paras 2 and 7), cannot fully satisfy the interests of each of its member-states, at least given the current state of international relations. Therefore, there will inevitably be some dissatisfaction with UN activities, though occasionally this dissatisfaction takes a more extreme form, including charges of complete insignificance and an inability to take effective actions.

Nevertheless we are unlikely to find even one individual of sound mind who would demand that the UN be closed down. Of course, some rabble-rousers do exist, such as the American journalist George Will, who wrote that if the UN refuses to give the United States and Great Britain a mandate for war against Iraq, then it "will essentially cease to exist."⁶ But these are isolated, irresponsible voices.

The UN, in spite of its defects, is broadly recognized as an important and necessary instrument in international affairs. In the early 1960s, when the UN survived a seri-

ous crisis resulting from a disagreement among the permanent members of the Security Council related to their activities in Africa, one British analyst wrote that the UN “has become indispensable before it has become effective.”⁷

Reasons For The Current Crisis

What are the reasons behind the current crisis of the UN? In many ways it was engineered by the so-called neoconservatives in the current administration of the United States, though its root causes lie deeper.

The neoconservatives have long sought to overthrow the regime of Saddam Hussein in Iraq. As early as 1991 they argued that Operation Desert Storm would not be complete until the government of Iraq was overthrown. In 1992 Paul Wolfowitz, then Under Secretary of Defense for Policy, aggressively lobbied for preventative military intervention in Iraq to ensure “access to vital raw materials, first and foremost to oil in the Persian Gulf region.” He proposed that if the United States was unable to assemble a coalition, it should act alone. In 1996, Richard Perle, Dennis Feith, and David Wurmser, who now hold prominent posts in the Bush Administration,⁸ submitted a proposal to the newly established Likud government in Israel to abandon the policy of negotiations with the Palestinians. “Israel,” they wrote, “can shape its strategic environment ... by weakening, containing and even rolling back Syria. This effort can focus on removing Saddam Hussein from power in Iraq. ... Iraq’s future could affect the strategic balance in the Middle East profoundly.” In 1998, 18 prominent conservatives, the majority of which later joined the Bush Administration, including Donald Rumsfeld, Paul Wolfowitz, Richard Armitage, John Bolton, and Richard Perle, sent a letter to then-President Bill Clinton calling for “the removal of Saddam Hussein’s regime from power.” Immediately after September 11, 2001 Paul Wolfowitz advocated an assault on Iraq, but was opposed by Secretary of State Colin Powell and the Joint Chiefs of Staff. At the time Colin Powell held the upper hand, but not for long.⁹

Joseph Cirincione, a leading specialist in the nonproliferation of weapons of mass destruction for the Carnegie Endowment for International Peace, wrote in an analy-

sis of the Iraqi military operations, “For administration hawks, Iraq is the beginning, not the end. Iraq is the start of a plan to change all the regimes in the Middle East.”¹⁰ Citing Richard Perle, “There is tremendous potential to transform the region. If a tyrant like Saddam (Hussein) can be brought down, others are going to begin to think and act to bring down the tyrants that are inflicting them.”¹¹

With the recent disclosures regarding CIA and British Intelligence Services activities, it has become acutely obvious that in launching military operations against Iraq the United States was guided neither by the official goal of destroying nuclear and other weapons of mass destruction nor merely by the task of overthrowing the government of Saddam Hussein, but rather by much broader geopolitical and economic interests extending to the boundaries of the region. Middle Eastern oil—this is the main rationale for US actions.

And it is also entirely natural that the actions of the United States, with the support of the United Kingdom, provoked the opposition of France, Russia, and China, all permanent Security Council members, as well as the opposition of many other countries, including US NATO allies like Germany. There was a split among the permanent members of the Security Council, the most profound division in UN history. As a result, the United States decided to invade Iraq without a Security Council mandate, and, therefore, contrary to the UN Charter. The disagreement among leading members of the Security Council appears to have left a painful scar in a short period of time.

A Return To Realpolitik?

In the late 1980s and early 1990s, many people were euphoric over the prospects for UN action in the new post-Cold War environment, a world without the confrontation between the Soviet Union and the United States and the military blocs they headed—the Warsaw Pact and the North Atlantic Alliance. The British political scientist Mats Berdal wrote as much:

“The great illusion of the late 1980s and early 1990s was that the end of the Cold War would automatically translate into an ‘effective’ UN. It was an illu-

sion that rested crucially on the belief that the Security Council, after years of paralysis, would 'finally' be allowed to assume its 'primary responsibility for the maintenance of international peace and security.' It was almost as if the removal of East-West ideological divisions would itself ensure that Council members would always see eye to eye on issues of peace and security and, moreover, be prepared to act jointly in defense of common interests.¹²

A number of facts were presented as evidence of this. While from the UN's founding to 1990 the permanent members of the Security Council (especially the Soviet Union and the United States) exercised their vetoes 279 times, from May 1990 to July 1992 *not a single* veto was exercised,¹³ and since that time the number of cases involved the principle of unanimity among the permanent members was very limited. In 1991 the Security Council adopted a number of important decisions aimed at the destruction of weapons of mass destruction in Iraq and on establishing inspections of that country by Security Council and IAEA forces (the well-known resolutions 687, 707, and 715).¹⁴

On January 31, 1992 the Security Council conducted a meeting at the highest levels and adopted the declaration "On New Threats to Stability and Security" by consensus, which in part stated:

"The proliferation of all weapons of mass destruction constitutes a threat to international peace and security. The members of the Council commit themselves to working to prevent the spread of technology related to the research for or production of such weapons and to take appropriate action to that end.

On nuclear proliferation, they note the importance of the decision of many countries to adhere to the Non-Proliferation Treaty and emphasize the integral role in the implementation of the Treaty of fully effective IAEA safeguards, as well as the importance of effective export controls. The members of the Council will take appropriate measures in the case of any violations notified to them by the IAEA."¹⁵

Accordingly, the Security Council added the proliferation of weapons of mass destruction to the category of activities that presented a threat to international peace

and security, and therefore fell under Chapter VII of the UN Charter, which regulates "action with respect to threats to the peace, breaches of the peace, and acts of aggression."

Today however, particularly after US and UK military forces invaded Iraq without the mandate of the Security Council, it has become quite obvious that the politics of force, applied outside of and in spite of the UN, as the above-mentioned British political scientist correctly mentioned, "are alive and well, and the entirely predictable persistence of conflicts of interest and value among member states means that the Council is ... inescapably doomed to 'ineffectiveness.'¹⁶

Moreover, if the Security Council had given the United States a mandate to invade Iraq (and this was theoretically possible, given the uncertainty of France's resolve, Russia's wavering, and China's neutrality, at a minimum, in foreign affairs) and the war had been formally 'legitimized,' many, or even most, states and the global community would still have considered the war illegal. A large number of countries in Africa, Asia, and Latin America, as well as a good number of Europeans, would have considered the Security Council a tool of American foreign policy had it approved the invasion.

During the February 5, 2003 meeting of the Security Council, U.S. Secretary of State Colin Powell unambiguously stated, during a review of the Iraqi problem, that if the Security Council did not approve the U.S.-U.K. resolution to sanction military actions against the regime of Saddam Hussein, then "this body places itself in danger of irrelevance."

Do the actions of the Bush Administration imply that in the future, possibly in other regions, the role of the UN in maintaining international peace and security will fade away and the world will return to the rule of the fist, with international laws and arrangements neither used nor consulted?

The Decline Of The UN?

After the initial, overnight military success of the United States in Iraq was met by humble silence in France, Russia, and China, many began to comment that the UN era had faded into the past. Certainly, the global organization and its Security

Council had previously and frequently stood aside as decisions were made on the most severe crises, for example, the Cuban missile crisis between the Soviet Union and the United States in 1962. However, the plain truth is that it was never intended to manage such apocalyptic crises. The inclusion in the Charter of the principle of unanimity among the permanent members of the Security Council, incidentally, was the result of an initiative by Franklin Roosevelt that was accepted by Joseph Stalin and Winston Churchill,¹⁷ so that the UN could only resolve issues when the great powers work together, or at least silently consent to the decisions taken. In today's world, one cannot expect more of the UN, which was founded on the basis of sovereign equality of its member states, than it is capable of and for what it was intended.

The UN was created before the advent of nuclear weapons¹⁸ and, as several political scientists rightly maintain, wide-ranging crises like the Cuban missile crisis are not actually subject to UN involvement on the basis of the UN Charter. In these cases peace and international security have been maintained by a different "law" based on the concept of mutually assured destruction (MAD).¹⁹

However, in the first years of the UN's existence international affairs specialists harbored a fair number of illusions regarding the transformation of the UN into a world government. The "federalists" advocated the transformation of the UN into a global government. This movement was led by the American international lawyers Grenville Clark and Lewis B. Sohn.²⁰ However, the arrival of the Cold War completely dispersed these illusions.

For a time the United States dominated the UN. The Soviet propaganda of the period asserted that the United States was manipulating the UN through an "artificial majority" of votes. In the 1960s, however, a large group of newly independent governments in Africa, Asia, and Latin America joined the UN immediately after breaking free from colonialism, forming the Non-Aligned Movement, and the situation changed dramatically. Now, the majority of these countries more often voted with the Soviet Union, and the United States began to lose interest in the entire UN system.

One case in point: In 1981 aircraft from Israel's air force attacked the Iraqi "Tamuz-1" nuclear reactor [an Osiraq - trans.], which had been built with French assistance and was capable of producing weapon-grade plutonium. Arab governments, with the support of other non-aligned states, lobbied for the expulsion of Israel from the IAEA. The Republican administration of Ronald Reagan threatened to withdraw from the IAEA, or at least to stop providing funding, and the crisis was only defused thanks to the efforts of a number of Western countries with the active support of the Soviet Union.²¹

The 1990s, discussed above, was a period of renewed interest in the UN and increasing hope that it could become an effective organization in ensuring world peace. However, the recent Iraqi conflict sharply highlighted the current U.S. administration's tendency to disregard the UN's voice and circumvent its reach. How will the situation develop further? What is the outlook for the future of the UN?

A Majority Believes The UN Still Necessary, But That Its Effectiveness Must Be Enhanced

The overwhelming majority of the world's states continues to believe that the UN is still to play a critical cementing role in international affairs, despite its inefficiencies. There is a widely held opinion that given the other "great" powers' weakening influence over the course of world affairs and the inability of regional associations, such as the European Union, to counterbalance the hegemonic aspirations of Washington, only the UN has the ability to provide some restraint and serve as a force for unifying global support for peace and stability. Many countries, particularly smaller countries, continue to consider the UN and international organizations associated with it as a means for narrowing the socio-economic gap between the North and the South, which is a source of many contemporary conflicts and provides favorable conditions for the continuing growth of international terrorism.

As a matter of fact, nobody is proposing the dissolution of the UN or its replacement with some other sort of organization. The problem is how to increase its effec-

tiveness and how to eliminate the possibility of the use of force without UN sanction, as it has taken place in the past (for example, by the United States in Vietnam and Iraq, or by the Soviet Union in Hungary and Afghanistan).

This issue has been debated among UN members for practically the entire period of its existence. A Special Committee on the Charter of the UN and on the Strengthening of the Role of the Organization has existed for almost 30 years. An Open-Ended Working Group on the Question of Equitable Representation on and Increase in the Membership of the Security Council was formed. However, because of disagreements between UN members on any meaningful solutions to these problems, no breakthrough has taken place. The Special Committee meets in an yearly session, and the General Assembly annually adopts a resolution authorizing the Committee to "continue its consideration of all proposals concerning the question of the maintenance of international peace and security ... in order to strengthen the role" of the United Nations, and to "consider other proposals relating to the maintenance of international peace and security already submitted or which may be submitted to the Special Committee."²²

Proposals For Reforming The UN

There are countless proposals for reforming the UN, but the majority of these primarily come down to changing and expanding the membership of the Security Council, particularly through a reexamination of the Charter's provisions related to the permanent members of the Security Council and their powers, most importantly the principle of unanimity of the permanent members. In the 1960s the membership of the Security Council was slightly broadened, resulting in an increase in the number of elected members; questions regarding the permanent members were not addressed. The reader may recall that to adopt amendments to the Charter, a two-thirds majority of votes among UN members is necessary; it is also important that this qualified majority must include all permanent Security Council members. Consequently, without the support of all of the permanent members it is impossible to modify the Charter.

A majority of the reform proposals envision the broadening of Security Council membership to give it a more representative character that properly reflects, in the authors' opinions, the changes that have taken place in the world since the middle of the previous century: a new international balance of power, as well as a growth in UN membership. Recently, with regard to the U.S.-U.K. operations in Iraq in particular, declarations in favor of changing the principle of unanimity of the permanent members have become more frequent. Such a change would allow certain governments (meaning the United States) to undertake enforcement measures against other countries even when other permanent Security Council members exercise their veto right.

The independent international Commission on Global Governance produced a reasonably typical example of the first type of proposal in 1995. The essence of this proposal was to expand the membership of the Security Council and to introduce a new category of "non-rotating" or "standing" members made up of five governments (two from the industrially developed world and one each from Asia, Africa, and Latin America), which would not possess the right of veto. As for the original permanent members, it was proposed that they should agree not to exercise their rights of veto for a period of ten years, "except in the most extreme cases involving their national security." This period of "restraint," according to the authors of the proposal, "should pave the way for an agreement to phase out the veto altogether." The number of elected members would be increased from 10 to 13. Thus, the overall membership of the Security Council would grow from 15 to 23, and adopted decisions would require not nine votes, as today, but rather 14.²³

A proposal typical of those aiming to modify the principle of unanimity of the permanent members was submitted by Canadian Prime Minister Jean Chretien at an international conference on progressive governance that was convened in London in July 2003. The Canadian Prime Minister submitted a plan, according to which if just one permanent member of the Security Council opposed a proposed resolution that would sanction military intervention in countries where there was an imminent massive loss of life or ethnic

cleansing, a “coalition of the willing” could take action at its own discretion. According to media reports, the U.K. Prime Minister Tony Blair partly supported this idea, but German Chancellor Gerhard Schroeder expressed categorical opposition, motivated by the fact that under the Canadian proposal, actions similar to those taken against Iraq would be authorized.²⁴

Without a doubt, individual governments or groups of countries, or even international organizations, either due to their good intentions or contemporary political trends, will introduce corresponding or similar proposals on the reform of the Security Council of the UN in the future. What are the real chances of these proposals?

The UN Security Council Permanent Members' View Of Reform

Since the reform of the UN will not take place without the approval of the permanent members of the Security Council, we are chiefly interested in these governments' attitudes toward reform.

The inclusion of the United Kingdom and France in the group of permanent members reflected the circumstances of a completely different epoch, and their current status as permanent members gives them a preponderant position that is disproportionate to their practical capabilities to contribute to the implementation of the main tasks of the UN—the maintenance of international peace and security. Despite the fact that they are official members of the nuclear club, their practical means for projecting force in the real world are limited. While it is reasonable to suppose that Tony Blair fervently answered the Bush Administration's calls to participate in military operations in Iraq primarily to support his “big brother” across the ocean, he was pursuing a secondary, but no less important goal—to demonstrate that the United Kingdom is still useful for something. If we focus our attention on other indicators such as economic power or the size of territory and population, the claims of the United Kingdom and France to a privileged position in the Security Council become even more baseless. Still, it is impossible to repudiate the fact that there are very few other countries in the world with greater reasons for holding the status

of permanent member than the United Kingdom and France.

Considering all that has been said, there is reason to suppose that both countries will fight tooth and nail to retain their unique positions as Security Council permanent members, which affords them great influence and prestige. “They know,” the *Economist* wrote, “their membership [in the Security Council] is the main reason anyone takes them at all seriously on the world stage.”²⁵ It is for this reason, the journal argues, that they will not want to cede their two places in favor of one place for permanent membership for the European Union, which would possibly satisfy the claims of Germany and other influential members of the EU.

It well might be that the status of permanent membership is especially important to France, to a greater degree than to the United Kingdom. For France, acting as a “great power” is a centuries-long historical tradition deeply ingrained in the psychology of the entire French nation, not to mention the political elite. As the crisis surrounding Iraq unfolded at the beginning of 2003, France adopted a completely irreconcilable position which earned it the distinct displeasure of Washington. After the completion of military operations, Jacques Chirac remarked that “It is up to the United Nations – and it alone – to take on the political, economic, humanitarian, and administrative reconstruction of Iraq.”²⁶

Thus both western powers will continue to argue that preserving their roles in the UN and the Security Council is necessary for international politics.

These circumstances pertain in roughly the same measure to the Russian Federation. Having lost the status of a “superpower” with the fall of the Soviet Union, Russia was obliged to try its hardest to demonstrate that it would remain a great power and therefore could retain its position as a permanent member of the Security Council on a completely legitimate basis, though nobody was contesting its right. Of course, this right was first and foremost based on its position as second (after the United States) in nuclear strength, but also by other factors: the size of its territory and its unique positioning in two continents (Europe and Asia), its supplies of natural resources, and its consistent—

though slow—economic resurgence. Russian influence on the course of international events was also considered important, though the relative importance of this influence was less than it had been previously.

Therefore, it is completely natural and normal that Russia invariably emphasized the importance of the UN and has expressed no enthusiasm for reforming the organization. It is true that during the visit of Indian Prime Minister Atal Bihari Vajpayee to Russia in November 2001 a joint declaration on the outcome of the visit stated: "Russia and India agreed on the expediency of enlargement of the membership of the Security Council of the UN in order to make it more representative and to increase its effectiveness." In addition, Russia "declared its support of India as an influential member of international society, a strong and deserving candidate for permanent membership in an enlarged UN Security Council."²⁷ However it is unlikely at best that the Russian representative to the UN will undertake any practical steps towards implementing this declaration.

As for the principle of permanent member unanimity, Russia certainly is very interested in maintaining this attribute, and has underscored the importance its right of veto many times, for instance, before the U.S.-U.K. operations in Iraq. However, after the coalition's invasion of Iraq, Russia reluctantly fell in line with the United States' unilateral military intervention, because it had no real possibility of preventing the intervention. In the past, the Soviet Union never behaved in such a way. It cannot be ruled out that at some point Russia may find it necessary to take analogous action in extreme cases affecting its fundamental national interests, and the precedent set by the United States is a boon in this regard.²⁸

For the People's Republic of China, the primary usefulness of the UN at this point is perhaps to take advantage of the Security Council and to use its right of veto to prevent interference in its domestic concerns and to preclude UN support for Taiwan in its efforts to advance its case for independence. During the 1990s, China did not abstain from a single decision taken by the UN that could have in any way contributed to the ability of the UN to intervene in the internal affairs of states. As to

the Security Council decision on Iraq, China attempted to remain on the sidelines, averting a deterioration in its relations with the United States, especially since the Iraq problem did not directly impact Chinese interests.

From the outside it may appear, especially recently, that for the United States the usefulness and value of the Security Council is limited, in comparison with other permanent members' views of the organization. Since emerging as the solitary "superpower," the United States has ignored the Security Council several times and acted either alone or in a coalition with the support of a limited number of other countries, most recently in Iraq. According to the "National Security Strategy" document published by the White House in September 2002, "we will not hesitate to act alone, if necessary, to exercise our right of self-defense by acting preemptively."

The unambiguous position of the current administration of the United States was expressed by the United States' Ambassador to Russia, Alexander Vershbow:

"Since the beginning of the Iraq crisis we have tried to gain the understanding of our partners on the Security Council. However, the divergence that took place in the Security Council prevented us from addressing the issue of Iraq quickly, simply and without the use of force. This division illustrated that if the Security Council meaningfully carries out the tasks assigned to it by the founders of the UN, the Council should be strengthened.

I believe that it is not enough to discuss reform of the Council, for which we advocate that membership be expanded (expansion of the Security Council has always been thwarted when the discussion turned to selecting specific candidates for membership). The more important issue is to restore political will. Each member of the Security Council, especially the permanent members, should concentrate its attention on resolving or anticipating emerging sources of conflict before they translate into violence. So that when action becomes necessary, the Security Council would already have a consensus opinion.

It is possible that we will fail to achieve this goal. Sometimes achieving consensus is utterly impossible. This is why the existence of regional organizations that can act when the UN declines to take action is so important. That is why we reserve the right to act unilaterally or in concert with those prepared to join in a coalition with us.”²⁹

It is hardly possible to state this point more clearly. The UN is necessary if it acts jointly and in line with the United States. If not, then the United States will act alone. The United States is not interested in reforming the UN, and is especially uninterested in modifying the principle of unanimity of the permanent members of the Security Council.

However, the United States is unable to allow itself to completely disregard the UN. Indeed, before the rift over Iraq, the United States attempted to win the consent of the Security Council to use military force. Moreover, some evidence was presented to it in an attempt to convince the Security Council that Iraq possessed various weapons of mass destruction.³⁰ After the coalition forces got bogged down in Iraq, the door was once again opened to the UN with a request for assistance in managing the situation in the country, in which they had produced a state of chaos and ruin.

The Secretary General of the UN (without the support of the United States, of course) named a Special Representative for Iraq, and by July 22, 2003 a Security Council meeting took place at which the Special Representative, former Brazilian diplomat Sergio Vieira de Mello, declared that the role of the UN in Iraq “should be expanded.”³¹ At the same Security Council session, the Russian representative proposed the creation of a UN Mission in Iraq.³² On August 14, 2003 the Security Council, with the support of the United States, voted with 14 votes in support and one abstention (Syria) to adopt Resolution 1500, which recognized the creation of a Governing Council in Iraq as an “important step towards the formation by the people of Iraq as an internationally recognized, representative government that will exercise the sovereignty of Iraq.” A United Nations Assistance Mission for Iraq was established. Though this resolution did not completely satisfy Russia, France and a number of other Security Council mem-

bers, it nevertheless was presented as a notable milestone on the path of the restoration of order in the country in conformity with the principles of the United Nations. However, the United States administration’s further efforts basically to take sole control of the situation in Iraq under the UN flag met the determined opposition of crucial members of the Security Council, including France, Russia, Germany, China, and a number of other countries. Secretary General of the UN Kofi Annan declared that the United Nations would play not a virtual, but rather a real role in the reconstruction of Iraq, based on the principles of the organization.

After lengthy consultations that included top leaders of the principal states, Russia, with the support of France and Germany, achieved the unanimous passage of the new Security Council Resolution 1511 on October 16, 2003. The resolution sanctioned the creation of a multinational force under a unified command and *anticipated an expanded UN role in the reconstruction of Iraq*. By December 15, 2003 the Governing Council of Iraq would prepare and submit to the Security Council for review a timeframe and program for producing a new Iraqi constitution and conducting democratic elections. The resolution also anticipated that the occupation of Iraq would cease “when an internationally recognized, representative government established by the people of Iraq is sworn in and assumes the responsibilities” of administration.

Commenting on this decision, the Permanent Representative of the Russian Federation to the Security Council stated that given the current lack of security in Iraq, the United Nations cannot play a valuable role in the country’s reconstruction. However, he noted, the resolution grants the Secretary General the right to determine the time and manner of involvement in the political process, and he expressed the hope that the United Nations would carry out measures to stabilize the situation in Iraq. “The results were a compromise that did not solve every problem. However, at the current stage, we believe that this resolution has more pluses than minuses.”³³ There is good reason to believe that even in the face of a formidable crisis of the United Nations, the capacity of

the decision-making system, despite difficulties and setbacks, has prevailed.

An examination of the positions of the permanent members of the Security Council with regards to reforms demonstrates that **not a single** permanent member has the slightest enthusiasm for any reform that could broaden the membership of the Security Council, to say nothing of any reform that would modify the concept of permanent members unanimity. Concerning the role and purpose of the Security Council in resolving current international security issues, there are diverse and at times substantial “nuances” differentiating the positions of various Security Council members, depending on their function and on the possibility of their handling certain problems without having to turn to the United Nations. None of the countries, however, would support the elimination of the Security Council, because over the 50 plus years period of its existence the organization developed such authority and prestige throughout the world that it would seem inconceivable for anybody to infringe on its right to exist. Even public opinion polls in the United States provide consistent evidence that the vast majority of the population is in favor of cooperation between the United States and international institutions, especially the United Nations.

What Is A Realistic Position For The Security Council In The Current International System?

The opinion that a crisis will soon beset the United Nations and other international structures is widespread. Furthermore, some political scientists augur the inevitable collapse of the system of international organizations that has developed over the last half century. The argument provided in support of this theory is that forces which are betting on the nation's military strength and economic power allowing it to achieve its geopolitical goals through force and unilateral action are gaining increasing influence in the United States, and international institutions only impede their freedom of action.

Yes, one cannot deny that the United Nations is going through rough times. But there have been several times in the past when the United Nations was completely powerless, as was discussed above. It is

true that the international system has undergone a fundamental change. We have a new international balance of power now that the world has just one superpower, and that power is both able and eager to dictate its will to other countries. Does this mean that for the foreseeable future, as long as this correlation of forces is maintained (will it be for long?), the United Nations will occasionally be left, essentially, without a say in decisions concerning international peace and security?

New advocates of *Realpolitik*, one must admit, have entirely good reasons, at least from their point of view, for favoring unilateral, preemptive military operations. They experienced a tragedy that was unprecedented in their country on September 11, 2001. Moreover, the proliferation of weapons of mass destruction continues, and this proliferation is directed primarily at them and their closest allies—though other countries are also threatened—and this has triggered serious concern throughout the world. Likewise, for advocates of forceful action it may seem that the planting of the seeds of their model of democracy throughout the world would improve U.S. security and would generate conditions for securing the preponderance of their country in the long term. But this is objective reality, and one cannot simply ignore it. The reaction and behavior of France, Russia, and Germany in connection with the events in Iraq is an evidence of this fact. After the protests and threats by the first two countries to use their vetoes in the Security Council, with the active support of Germany, they were forced to come to terms with what had happened. And China decided to remain completely on the sidelines.

The global community is interested first and foremost in how events involving the United Nations will evolve. Is the Iraqi issue another temporary episode that will recede into the past, or is an enduring, long-term trend in progress?

It is not yet time to offer a conclusive answer to this question. The further actions of the current U.S. administration, and possibly the next, will depend on a number of factors, both external and internal. Will the United States be able to conduct major operations single-handedly, simultaneously in several locations on the globe? Will its mighty forces be bogged down for long in Iraq? Will the so-called

neoconservatives continue to set the tone in Washington? How durable will the ratings of the Bush Administration prove to be, and what will be the results of the presidential elections in November 2004? How will the US economy do? And so on, and so on ...

We are inclined to believe that given more or less satisfactory developments from the U.S. administration's point of view, Americans will psychologically prefer to continue to rely more on unilateral actions than on collective measures facilitated by the United Nations and other international institutions. At any rate, the United States is prepared economically, militarily, and technologically. The other major powers in the United Nations are currently unable, for various reasons, to do anything to oppose the United States in this regard.

Some political scientists suggest that a different international structure might be better able to integrate the interests of the major powers for the world's common good than the United Nations. In this context they mention the G8 mechanism, and suggest that the United Nations could be assigned the role of "translator" for the joint decisions of the leading powers.³⁴ The G8, which was primarily established for the consideration and resolution of economic and financial problems on a global scale, has actually played a fundamental role as a forum for negotiating and resolving international security issues. For example, in 2002 the G8 adopted an important resolution on a Global Partnership against the proliferation of weapons of mass destruction and related materials. In this case the participation of the G8 in the resolution of international peace and security problems appears to have been quite productive.

However, the G8 cannot become more than a forum for consultations and the preliminary resolution of some international problems that interest the governments in the G8. It is no accident that those proposing an increase in the role of the G8 in the area of international security have to seek a way to legitimize the decisions that have been made in the UN Security Council—the only mechanism with the legal authority to certify the presence of threats to peace and sanction the use of force to remove those threats.

Of course, it is extremely important for the G8 to assemble national leaders at the

highest level to facilitate the decision-making process. The leaders that participate in the G8, in addition to the yearly summits, are in constant contact with each other, meeting several times a year at the bilateral or multilateral level and communicating frequently by telephone. Aside from that, it is important to note that the G8 does not include China, on which decisions to authorize force depend as well, given its position as a permanent member of the Security Council.

That being said, for all the significance of the G8 and the importance that it should become more actively involved in resolving issues of international peace and security, the UN Security Council cannot be discarded. It has been and remains the sole legal instrument of peace. There is no getting around this fact. This is recognized in principle by everyone, including those who prefer to act unilaterally. We should also note the increasing intensity of declarations by U.S. Democrats, among them prominent political figures, in support of the United Nations.³⁵

It is important that at every historic milestone, politicians, the media, and society at large soberly and honestly analyze and evaluate the capabilities of international institutions, and make practical decisions in order to ensure effective means for maintaining peace and global security. And if the current distribution of power in the world means that the United Nations is in many ways ineffective, it is nevertheless absolutely necessary.³⁶

¹ The Soviet Union joined the League of Nations in 1934, and was expelled in 1939 after the beginning of the Russo-Finnish War.

¹ The Soviet Union joined the League of Nations in 1934, and was expelled in 1939 after the beginning of the Russo-Finnish War.

² Paul Kennedy and Bruce Russett, "Reforming the United Nations," *Foreign Affairs*, 1995, September/October, p. 59. Paul Kennedy is the author of the classic work *The Rise and Fall of the Great Powers* (New York: Vintage Books, 1989).

³ The initial Security Council had 11 members, but after a large number of governments joined the UN after gaining independence from the British, French, and Dutch colonial empires in the 1960s, an amendment to the Charter was passed that broadened the membership of the Security Council to include four additional elected members.

⁴ An encouraging fact is that for the first time in 15 years, the General Conference of the IAEA approved a healthy increase in the IAEA budget for 2004. In comparison with 2003 the budget was increased from \$245 million to \$264 million (See IAEA General Conference Document "The Agency's Programme and Budget 2004-2005," GC(47)/3, C.

XLI), and the budget is expected to be increased by an additional \$25 million by 2007.

⁵ The most comprehensive, inclusive analysis of the system of international organizations is contained in the substantial work of the American international law expert Professor Harold Jacobson, in: Harold K. Jacobson, *Networks of Interdependence: International Organizations and the Global Political System*, Second Edition (New York: Knopf, 1984).

⁶ "The UN Risks a Battering in the Coming Weeks. But Don't Write It off Yet," *Economist*, 22 February 2003, p. 25.

⁷ Mats Berdal, "The UN Security Council: Ineffective but Indispensable," *Survival* 45, no.2 (Summer 2003), IISS Quarterly, p. 7.

⁸ Richard Perle left the government at the end of March 2003 due to a "conflict of interest," because he worked for an oil company with interests in Iraq, according to media reports.

⁹ Joseph Cirincione, "Origins of Regime Change in Iraq," Carnegie Endowment for International Peace Proliferation Brief 6, no.5 (March 2003).

¹⁰ Joseph Cirincione, "The Shape of the Post-War World," Carnegie Endowment for International Peace Proliferation Brief 6, no.6 (March 2003).

¹¹ *Ibid.*

¹² Berdal, "The UN Security Council," p. 9.

¹³ Report of the General Secretary of the United Nations of 17 June 1992 (UN Doc. A/47/277 - S/24111).

¹⁴ Resolution 687 was christened "the mother of all resolutions" of the Security Council.

¹⁵ "Provisional Verbatim Record of the Three Thousand and Forty-Sixth Meeting," UN Doc. S/PV.3046

¹⁶ Berdal, "The UN Security Council," p. 9.

¹⁷ Incidentally, unlike the subsequent French governments, Charles de Gaulle and his Minister of Foreign Affairs Georges Bidault were against the right of a veto in the early stages of drafting the UN Charter. As the American journal *Cryptologia* explained, the Americans were able to decode the correspondence of many telegrams intercepted by its delegation in at a UN Charter conference in San Francisco from April to June 1945. This correspondence indicated that France imagined being the leader of the smaller member-states against the mighty Security Council, which would include the United States and other great powers. Aware of the decoded information, the United States was able to undertake the necessary steps to thwart the efforts of the French delegation against the principle of consensus of the permanent Security Council members. (William H. Honan, "War Decoding Helped U.S. to Shape U.N.," *New York Times*, 23 April 1995.)

¹⁸ It is interesting that during the period of negotiations on the creation of the global organization, the forward-looking U.S. administration, which was conducting the Manhattan Project and was conscious of the imminent production of atomic weapons, recommended the inclusion of a provision in the UN Charter on the creation of a special committee under the auspices of the UN that would take responsibility for facilitating the exchange of information on all scientific research intended for military use. The United States intended that the future UN would take control of all of the most destructive types of weapons. This provision was partially contained in a letter from one of the leaders of the Manhattan Project, Vannevar Bush, to President Roosevelt in February 1945. (See R.M. Timerbayev, *Mezhdunarodnyy kontrol nad atomnoy energiyey* [International Control of Atomic Energy], (Moscow: PIR Center, 2003), pp. 33-34.

¹⁹ See for an example: Andrey Piontkovskiy, "Krizis institutov mezhdunarodnoy bezopasnosti v svete irakskogo konflikta" [The Crisis of International Security Institutions in Light of the Iraq Conflict], *Yaderny Kontrol*, Summer 2003, No.2, p. 121.

²⁰ See V.G. Shkunayev, *Organizatsiya Obyedinyennykh Natsiy v sovremennom mire* [The United Nations

Organization in the Contemporary World] (Moscow: Nauka, 1976), pp. 27-28.

²¹ The author took part in the negotiations that took place within the IAEA on regulating the crisis in the beginning of the 1980s.

²² General Assembly Resolution 57/24, adopted in 2002.

²³ Ingvar Carlsson, "The U.N. at 50: A Time to Reform," *Foreign Policy*, Fall 1995, No.100, pp. 3-18. Carlsson was the co-chairman of the Commission on Global Governance, and was also the Prime Minister of Sweden from 1994-1996. According to Madeleine Albright, Permanent Representative of the United States to the United Nations in the mid-1990s, Washington at that time supported the broadening of the Security Council to 21 members, which would include two additional permanent members—Germany and Japan. However, Italy expressed strong disagreement, and also demanded a position as a permanent member. The Italian representative to the UN, Ambassador F. Paolo Fulci, with an irony not lost on the Americans, declared, "after all, Italians also lost World War II." (Madeleine Albright, "United Nations," *Foreign Policy*, September/October 2003, p.22.

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¹ The Soviet Union joined the League of Nations in 1934, and was expelled in 1939 after the beginning of the Russo-Finnish War.

²⁶ Michael Wines, "A Nation at War: Diplomacy; Chirac to Join German and Russian Leaders," *New York Times*, April 9, 2003, p. 6.

²⁷ See R.M. Timerbayev, "Yadernaya situatsiya v Yuzhnoy Azii i ego vliyaniye na regionalnuyu i mezhdunarodnuyu bezopasnost'" [The Nuclear Situation in South Asia and Its Influence on Regional and International Security], *PIR Study Papers*, 2001, No.17, p. 20.

²⁸ On this issue we should not forget that according to Article 51 of the Charter, it is true that "the inherent right of individual or collective self-defense" is permitted, provided "an armed attack occurs against a Member of the United Nations" and "until the Security Council has taken measures necessary to maintain international peace and security."

²⁹ Alexander Vershbow, "My ostavlyayem za soboy pravo deystvovat v odunochku" [We Reserve the Right to Act Alone], Interview with the journal *Politbyuro* No. 27 (38), July 14-20, 2003.

³⁰ In fact, teams from UNSCOM and the IAEA neither concluded their inspections before military operations had begun nor were involved in the inspections conducted by U.S. teams following the end of the military operations, which did not uncover proof of the existence of weapons in Iraq that had been prohibited by the Security Council. This revelation led to a serious political scandal in Washington and London. However, an analysis of the situation surrounding the existence of weapons of mass destruction falls outside the scope of this article.

³¹ "Sostoyalos otkrytoye zasedaniye Soveta Bezopasnosti po Iraku" [An Open Meeting Took Place in the Security Council on Iraq], *Tsentr Novostey OON* [UN News Center], 22 July 2003. . On August 19, 2003 Vieira de Mello and a number of other employees of the UN mission in Baghdad died as the result of a terrorist act.

³² *Ibid.*

³³ "V novoy rezolyutsii po Iraku bolshe plyusov, chem minusov, zayavil Sergey Lavrov" [The New Resolution on Iraq Contains More Pluses Than Minuses, Declares Sergey Lavrov], *Tsentr Novostey OON* [UN News Center], 16 October 2003, .

³⁴ See Piontkovskiy, "Krizis institutov," p. 124.

³⁵ Former US Representative to the United Nations and former Secretary of State during the Clinton Administration Madeleine Albright recently firmly defended the United Nations. (Madeleine Albright, "Think Again: The United Nations," *Foreign Policy*, September/October 2003.)

³⁶ The author would like to thank V.L. Oleandrov and V.A. Orlov for providing valuable comments and advice during the preparation of this article.

Polemics**GLOBALIZATION OF ISLAMIC TERRORISM¹**

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Abridged version

Are the nunciates of the global war of Islam against “infidels and heretics” right or is this simply an idle threat of those who resist the civilization and the military machine of the West for the sake of their traditional order? September 11, 2001 became for the “world of Islam” the day of the first grand victory in a long-lasting war against the “world of the sword”. From that day on, the West has started treating the war against terrorism, and above all against the Islamic one, seriously. However, its military machine was made to fight against armies and states but not against terrorists and guerillas. Arms, tactics and strategy designed for the standoff of superpowers are inefficient in the struggle against numerous, redispersed, closed by ethno-confessional unity, professionally trained, religiously and ideologically motivated subversive groups. The “civilized” world doesn’t know how to respond to the challenge that combines 21st century technology with jihad rhetoric. This was proven not only by the experience of Afghanistan and Iraq but also by the reaction to the proclaimed “crusade against international terrorism” of the international terrorism itself. After the coalition had seized Baghdad, the terror intensified and its geography expanded.

Political correctness that is widespread in the West insists on giving up direct statements about the inextricable connection between modern terrorism and Islamic extremism, especially political Islam as a whole. It’s true that today, during the global war against globalization, a paradoxical but efficient union of left-wing politicians, university professors and journalists, Islamites, antiglobalists and neo-fascists has emerged supported by the Middle East petrodollar injections and whose activities at first sight go beyond its Islamic component. Domestic experts though tried by the history of the Communist Party of the Soviet Union can’t draw historical parallels with the Bolsheviks and their “companions”.

The central stand in the above mentioned alliance is taken by the Islamic politically loaded structures, and terrorism is their most efficient leverage for influencing the enemy. For quite a time now, the Russian expert community has briefly described such structures as “Islamic” or “green International” sometimes also referred to as “terrorist International”. At the current stage the major components of the international terrorist movement are clear-cut Islamic, we shall in this report refer solely to them, without stretching that what is peculiar of it to the Islamic world in general.

For those who share Fukuyama’s views, the attack against the West was unexpected. Still the inevitability of the conflict could have been easily predicted, had the trends of the world policy been analyzed.

Let’s mention only **some elements that characterized the international situation in the early 21st century:**

- Globalization as the major trend of development
- Hegemony of the USA (a unipolar world), whose “challenges” had been purely theoretical until recently
- Shift of priorities of the world politics from the state pragmatics to *practical implementation*, also by means of violence, by the Western democracies of their values in the countries that are on other stages of social and political development.
- Increased opportunities to influence political processes of social and religious unities, lobbying organizations and press due to decreased opportunities of the state-supported institutions.
- Intensified standoff of developed and developing states, irreversible crisis of some Third World countries.
- Crisis of socialism, collapse of the USSR, economic, military and political degradation of the post-Soviet space.

Globalization altered the international economy and politics and affected the security of the world community as it increased its current exposure to the international terrorism. The fact that terrorists destroyed the World Trade Center and successfully attacked the Pentagon made one realize that the world came not only to the verge of the Third

World War, but that the war had already started on the territory stretching from China to Morocco. This is the war of “new barbarians” against the “old civilization”, the annihilating war. Today we are not talking whether methods of war against terrorism are good or bad. We are talking about survival of the modern civilization that includes not only the so-called “North” but also China, India and the Southeast Asia countries.

We must also mention that the Third World countries in the 20th century chose two ways for development: India and China, Pacific and Latin American states opted in favor of developing their own economies and integrating them in the world economy, whereas many countries of Africa, Near and Middle East decided to put forward and pursue their claims to the countries of the “Golden Billion”. For the first time this aspect fully manifested itself on the results of the UN Durban conference that laid down the ideological and political basis for the confrontation of the developed and the developing worlds. Possibly Durban shall take the same place in the history of the Third World War as Munich in the history of the Second World War.

President Bush identified international terrorism as the main enemy of America in its wars in the Near and Middle East. Long before the American president, President Putin called terrorism the main enemy of Russia. The analysis of the roots and current state of the international terrorism, its distinctions from the terrorism of the past decades makes us draw illustrative conclusions.

The situation of the world extremist movement of the late 20th – early 21st centuries has dramatically changed as compared to the preceding period that lasted for about half a century. After the collapse of the USSR the revolutionary leftist groups that had acted against the USA and in the Middle East against Israel, lost their patron. The same destiny struck those who were nursed by the USA against the USSR including Islamic fundamentalists. Speaking about Islamic or rather Islamite extremism, during a break-up with its recent sponsors, we must recognize its advantage against the bankrupt left-wing ideology that had dominated among extremists throughout the 20th century. This was also promoted by the Islamite’s reliance not on the ever-changing political environment but on the “eternal values” as enshrined in the Koran including jihad. Islam is the

youngest and most politically proactive of the monotheistic religions of Abraham’s triad and yields itself easily to extremist interpretations. Huge human resources represented by a billion Muslims mainly residing in the poor Third World countries helped to extend the sphere of influence of political Islamism.

Nevertheless, it’s worth describing the current picture of actions of the Islamite “green International” that was fiercely criticized by Islamic leaders who accuse experts and politicians of fuelling discord between the developed states and the Islamic countries.

If we analyze the results of a quarter of century **development of the modern political Islamism we shall note the following:**

- The modern politically loaded conservative Islam has not only held a victory in a number of states (Iran, Afghanistan, Sudan) but is also extending the sphere of its influence also by military actions.
- In the end of the 20th century, political Islamism became more active in the regions where the military standoff between Islam and the non-Islamic world ended in the 19th century (in the Balkans, Chechnya, Lebanon, Israel, Palestine, Iran, Afghanistan). The regions are on the border of the spheres of influence of the former empires – the Ottoman, Russian and British.
- In a number of states of the Islamic world the political Islamism successfully opposes the ruling elite (Algeria) or can attain as serious success in the near future (Egypt, Jordan) as seizure of power.
- Aggressive revolutionary and moderate revolutionary regimes of the Arab world (Iraq, Syria, Yemen, Libya) have the Islamite activities on their territory under tough control.
- The Islamic world supports the spread of “mild Islam” in its “export package” as a component of the foreign policy. This is exactly the mode of actions of westernized secular Turkey on the post-Soviet space.
- Modern political Islamism mastered the pseudo-democratic rhetoric and enjoys great support of the world mass media including the liberal mass media of the West. It employs a popular theory of

- multiculturalism and oppositional stand of the left-wing intellectuals. As a result, it is supported not only by the regimes led by “old allies” in the revolutionary and national liberation movement (RSA and other countries in Africa and Asia) but by the information and political (Chechnya, Israel) or military (the Balkans) assistance of the West.
- “National liberation” (separatists) movements (in Chechnya, Palestine, Kurdistan) cooperate with Islamite groups in case their interests coincide.
 - Natural demographic domination of the Shias in the Islamic countries with the course of time leads to a civil war. Examples – Lebanon and Iraq.
 - Conservative Islamic monarchies “buy off” of the Islamite by supporting their activities beyond their own territory (funding “the Afghan Arabs”, the Islamite in the Balkans, in Chechnya and Palestine).
 - Modern political Islamism is equally proactive in social and political, religious, ideological and military fields. In the military sphere it resorts to guerilla, terrorist and sabotage acts including in urban areas.
 - Currently, armed forces of the states that are targets of the Islamite are inefficient as they have been designed for full-scale interstate wars but not for suppression of guerilla fighting and sabotage activities that involve civilians (sometimes on a mass scale). The police are too weak for that.
 - The historical experience proves that only the governing regimes of the Middle East countries that resorted to total destruction (Libya, Syria, Iraq) were successful in their actions against political terrorism. Softer measures (Algeria, Egypt, Jordan, Palestine) have failed. However, this is *unacceptable* for the countries that have become major targets for the modern Islamite.
 - Economic sanctions and territorial blockade applied in the Middle East by the USA and to a lesser degree by Israel as a political instrument that restricts expansion of extremism haven’t proven effective.
 - Modern means of transport and communication, availability of information and technologies, arrival of the *world* information space and transformation of huge regions into free movement areas for people, goods and services eliminate most obstacles for physical movement of terrorists or make it superfluous for striking at their targets. A special role belongs to the possibility to apply high technologies in terrorist activities. In the financial sphere, the management of conventional and nonconventional weapons and major industries the damage can be compared with the damage inflicted by military actions.
 - The spread of information technologies renders *unnecessary* a single commanding hub or headquarters for full-scale, efficient and effective fight against bureaucratized, over-regulated and subsequently inefficient political and military systems that are confronted by highly mobile and easily coordinated groups of the political Islamite. Numerous decision-making centers with easily replaceable leaders and possibility of disperse dissemination of current groups down to units complicates the fight against them.
 - The Islamite acting against Israel, Russia and the West use “moles”. Well-trained terrorists can live a private life for a very long time without keeping in touch with their former surrounding and take decisions about performing a terrorist attack independently using expedient means and not coordinating this decision with anyone, which doesn’t allow to detect them and render harmless on the preparatory stage.
 - Globalization of the world economy makes it possible for the extremists including Islamite groups to implement personnel, financial, economic and technological means to the countries at which they aim their sabotage activities, thus acting from within the system subject to destruction.
 - Modern extremists, especially the Islamite actively recruit civilians including women, adolescents and young children (martyrdom factor). Using them is even more successful as the fight of the army against civilians inevitably gives rise to a coun-

terpropaganda effect, including international.

- For modern political Islamism it has become standard to pay a substantial compensation to the families of those who “died for the faith”. Death of a family member provides them with means of subsistence, which is of critical importance during a permanent economic crisis of the major part of the Islamic world.
- Possible physical destruction of civilians during antiterrorist operations is not a constraining factor for the leaders of extremist groups. It can be provoked for propaganda purposes or as a pretext for deployment of foreign “peacekeepers” in the zone of conflict, whereas the terrorists lose in the direct standoff with government forces.
- Under the pretence of protecting the Muslims residing in non-Islamic countries, the international Islamite terrorist organizations provoke governments of the countries to massive strikes against civilians and sanctions against their own Muslim residents in order to extend their organizational, personnel and political base. The peaceful Muslim population loyal to the government becomes a hostage and victim of the Islamite terrorism.
- It’s possible that terrorist shall undertake large-scale provocations in the Islamic world itself to activate jihad and provoke Islamic countries to withdraw from the antiterrorist coalitions.

One of the most dangerous features of the modern political terrorism is that it yields easily to replications. Any act of terrorism provokes replication, which becomes especially easy since the international mass media cover such an act in every detail. At that, the mass media act as involuntary instructors in organizing a terrorist act. In such case the efforts to cut terrorism short are blocked since the terrorist act is committed not by organized groups that can be identified and rendered harmless, but by psychologically unstable terrorist copycats. A huge role in triggering the appearance of “home-made” terrorists is played by religious sects, and in the Islamic world by theologians and clergy, who give ideological support to terrorists in their sermons in mosques, medrese, Islamic

universities, as well as by issuing fetvas that glorify jihad and suicide terrorists, the Shahids.

Today the Islamic terrorism is waging de facto a whole combination of “hot” and “cold” wars, which make up the “Third World War” mentioned above.

The hot components of it are:

1. Guerilla and terrorist wars in the Islamic, predominantly the Arab world against secular governments (Algeria, Egypt). As it was stated above, only authoritarian dictatorships (Syria, Libya and Iraq in the past), the former USSR satellites, were able to offer efficient resistance to the Islamite. By fighting them the West has made the way free for the Islamite. The fall of Najibullah’s regime in Afghanistan brought, for instance, the Taliban to power.
2. Guerilla and terrorist civil wars at the periphery of the Islamic world. If there is an Islamic government in a country, then such wars are waged by state troops. The frontlines of such wars are: the Balkans and Chechnya in Europe; Israel, Palestine, Lebanon, Tajikistan, Kashmir, Indonesia and the Philippines in Asia; Sudan, Ethiopia, Kenya in Africa. The general strike is aimed at the non-Islamic population: Christians, Jews, Hindus, Buddhists and adherents of traditional religions.
3. The terrorist attacks, first of all in the Islamic monarchies, that are often organized with the support of representatives of governing groups and local special services aimed at foreigners and non-Muslims residing in their territory and indirectly pointed at the westernized dynasties and governments. The active support by local Islamite builds grounds for future “mild” revolutions. To this group belong Morocco, Saudi Arabia, Jordan, small monarchies of the Persian Gulf and Turkey.
4. Terrorist attacks in the colonial “empires”: the USA (“9/11”), Western Europe, Russia (“Dubrovka”, etc.).

The “cold” wars include:

1. “Creeping” islamisation of the Western Europe, where immigration, including the

illegal immigration, is intense especially from the Arab world. As a result, there appear closed ethno-confessional enclaves resistant to assimilation or integration processes. Such communities provide logistical and financial support to the terrorist system.

2. Economic pressure and investment manipulations. Such are especially efficient if backed up by the use of force. According to a number of observers it was exactly what enabled Turki al-Faisal to pay a visit to Moscow in the days of the Dubrovka hostage taking.
3. Political pressure through the UN and international organizations, where today Israel has become the target of such assaults, since it failed to find any response to this type of "cold war". Efficiency of such measures and the experience gained by the Islamic community in manipulating the Third World countries prompts further expansion of such practices.
4. Massive infiltration of political Islam into states and regions of the "Islamic periphery" including the Southeast Asian nations and the former Soviet republics including Russia. As a result of it there emerged an Islamic lobby backed up by external financial resources, functioning as a political basis of the terrorist activities.

The practice of double standards has become a typical feature of the world community's attitude to terrorism. It turns a blind eye on the acts of terror in Israel and Chechnya denouncing law enforcement agencies for their "being incompetent" and discussing "peace initiatives" put forward by terrorists and their ideological allies. Politicians, the European ones in the frontlines, attempt to put pressure not on the terrorists but on Jerusalem and Moscow. The differences in the international community in countering terrorism simplified organization of terrorist attacks in Saudi Arabia, Morocco and Turkey – the response of the Islamic world to the seizure of the Caliphate capital by the "infidels". International antiterrorism cooperation has so far been a subject of theory rather than practice. This is true even with regard to such states as the USA, Russia and Israel, whose alliance in the given sphere is predetermined and even inevitable.

It is difficult to ignore the fact that in the run of the whole post-colonial period in the development the Middle and Near East was

demonstrating only three forms of governance: monarchy, dictatorship and Islamic republic. Immediate militarization of Islam that happens right after coming to power, internal repressions against ethno-confessional minorities and "heretics" unleashed by the Islamite, a shift to religious and ideological motivation of external aggression are not an exception, but a rule that in the end makes one think regimes such as Saddam's one to be a "lesser evil" to the world.

In the early 1980s a military and political axis started to shape as a result of the fight against the Soviet occupation of Afghanistan conducted by the Islamic world with the assistance from the West. The axis brought together the conservative nucleus of the Persian Gulf monarchies, Saudi Arabia, first of all, with the Afghani-Pakistani periphery of the Islamic world. Today Pakistan with its nuclear bomb, unstable military regime, and unmanageable tribal territorial enclaves poses a special threat to the WMD non-proliferation regime. The doubtful nature of control that the USA exercises in Afghanistan, a twenty year old tradition of guerilla wars against foreign "peacemakers", "dissipation" of a significant part of the Taliban in the "environment" makes one forecast the possibility of the revival of political Islam in the country at any time.

For a long time to come, Afghanistan and Pakistan shall act as a reserve for replacement of Islamic militants in the international arena and stay a source of heightened danger for the international community. The theory of the "safe Middle East" envisages the breakdown of the Afghani-Pakistani block into four – five ethnically homogenous states, which separately won't have a sufficient "critical mass" to pose a threat to anyone. However, concerns about the future of Iraq and increased pressure of the Arab world could possibly leave the USA without sufficient resources and political will to eliminate political Islamism in this part of the world.

The biggest reserve of political Islamism and Islamic terrorism is Indonesia and Malaysia. The leadership of both countries has "old scores" to settle with the West and unrealized geopolitical ambitions supported by the magnitude of the local economy and conflicts between the political elite with non-Islamic minorities who hold it under control, and above all with ethnic Chinese. The "understanding of reasons" for terrorist attacks in Morocco and Saudi Arabia expressed by the prime minister of Malaysia, his speech at the

OIC Summit makes us reckon with possible legitimization of political Islam by the "vertical power" in the Southeast Asian nations.

The undoubted component of Iran's foreign policy is the support to anti-Israel terrorist activities in Lebanon. At the same time, Iran's contribution to establishing the "green International" is insignificant in comparison with this of the Persian Gulf monarchies and Pakistan. In general, on a regional scale Iran plays a stabilizing role.

The world distribution center of political Islam is Saudi Arabia. At that, the relations between the kingdom and its former major ally, the USA, are at a critical pass. Shall there be new large-scale terrorist attacks on the territory of the USA that involve Saudi nationals, it is not improbable that the American army shall strike at Saudi Arabia, the major sponsor and one of the main organizers of the global Islamic "antiglobalism".

The discord in the uncompromising fight against the Middle-East terrorism as announced by the USA is its pursuit of diplomatic settlement to the Israel-Palestinian conflict. Partly this can be explained by the heightened interest of the international community of politicians, political analysts and mass media in this issue, which throughout the past century has turned it into an experimental ground for a trial run of peace projects, resolutions, declarations and agreements. Partly, by a seeming opportunity to gain tangible results in reasonable time. But is a peace settlement possible under conditions of a terrorist war? In the war aimed to destroy Islamic terrorism that so far has been dangerous not for terrorists but rather for the Near and Middle East regimes unfriendly to the USA, Palestine-Israeli forefront is a "weak link". Contrary to Afghanistan, Iraq, and in perspective Iran or Saudi Arabia, America is not at war in this forefront. Targeted operations of the Israelis are efficient for a limited time, however they don't tackle problems in general.

As a result, further escalation of anti-Israeli Islamic terror and its internationalization are possible. Latest terrorist attacks proved that along with Palestine "Shahids", whose actions could be described as national liberation fighting, Israel had become a target for the Islamic "terrorist International". The progress of the US troops and their allies in the theater of military actions of the Near and Middle East curtailed financial, material, tech-

nical and political support to the terrorist fundamentalism, therefore it's especially important for the Islamite to carry out the most efficient, ideologically justified terrorist acts that would be widely covered by the mass media. As an attractive assault objective Israel can only be compared with the USA and outruns other Middle-Eastern "competitors".

Russia is close to it in a "terror rating" as its southern frontiers are among the major offensive fronts for the "world of Islam" against the "world of sword". Today, Russia is a regional power. In the fight against international terrorism it can at the best case become a center of a defensive alliance that includes some of the former USSR republics. After the fall of Baghdad, the Islamic threat to Russia has not decreased but increased. Emergence of a numerous Iraqi army of professional soldiers and secret service officers in the international "labor market" makes it possible that they will find their "employment" in the organized crime and "green International". The latter is essential for Russia, as many of them studied in the USSR, are personally familiar with the theatre of military actions and can join separatists in Chechnya.

In this connection, the target of a possible future attack of the US army is of special importance. An attack on Iran shall demolish the collective security system in the Caspian States and Middle Asia. The consequences for this region are predictably negative. At the same time, at all costs, the conflict between America and Saudi Arabia would deprive international Islamic terrorist organizations of one of its major sources of financing and would hit a global structure of the offensive political Islam, and if the world community controlled hadj it would eliminate the possibility for building the network of international terrorism on such a basis.

The only way to fight terrorism is to physically destroy terrorists. Measures taken to deprive terrorists of their social network also play an important role, i.e. provide for economic recovery of the Third World countries and their integration in the world economy.

Still, we must admit that to implement that the developed countries now need such a degree of control over the current situation in the Third World that reminds of the period of colonial division.

The most painful aspect in the fight of the international community against international

terrorism is a partly temporary restriction of rights and freedoms of loyal citizens, as prescribed by the laws of war. This also refers to possible state control in the countries attacked by terrorists over the freedom of information, cash flows and private life of citizens including contacts and movement, as well as intensified regulating role of the state in the economy. All these measures are profoundly contradictory to the main trends in the world order evolution throughout previous decades towards extension of human rights and liberal values. It must be men-

tioned though not as an excuse but as an explanation to emergence and successful operation of the enlightened authoritarian rule in domestic and liberal imperialism in foreign policy, that liberal democracy is capable of winning the direct head-to-head confrontation with terrorists, but only *morally* and *posthumously*.

1 This article was presented by author during the PIR Center Club meeting on February 27, 2004.

Polemics

SAUDI ARABIA'S NATIONAL SECURITY: WHAT ROLE COULD WMD PLAY?

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According to an article in *The Guardian* in September 2003, in the recent past Saudi Arabia undertook a strategy review of its options regarding national security and nuclear weapons.[RTF bookmark start: _ftnrefl][RTF bookmark end: _ftnrefl]1 The review outlined three options available to Saudi Arabia: 1) acquire a nuclear deterrent; 2) enter into alliance with an existing nuclear power that would assure protection under nuclear umbrella; and, 3) work for a nuclear-free Middle East. The strategic impact of the September 11th terrorist attacks and the deterioration of relations with the United States have prompted the Saudi government to re-evaluate the defenses available to the Kingdom and to reconsider the possible role of nuclear, chemical and biological weapons in its national security doctrine. The presence of other weapons of mass destruction (WMD) programs in the region, notably suspected chemical and biological weapons (CBW) programs in Egypt, Iran, Syria, Israel and Sudan, also undoubtedly have an impact on the calculus of Saudi policymakers examining the value of WMD programs to Saudi security.

In this paper, we will explore Saudi Arabia's capabilities and intentions with regard to employing WMD as part of its grand strategy for national defense. First, we examine the Kingdom's past experience with WMD and possible motivations behind it. Second, we profile Saudi Arabia's technical infrastructure and capabilities for developing and delivering a non-conventional weapon on its own. Third, we discuss Saudi Arabia's past and present efforts to obtain foreign assistance for its WMD programs. Finally, we examine Saudi Arabia's non-proliferation policy and its relationship with its neighbors. Since Israel is unlikely to abandon its "basement" nuclear arsenal, and Iran appears close to developing nuclear weapons, the prospects for a nuclear-

free zone in the Middle East appear somewhat remote. Saudi Arabia's limited technical infrastructure appears inadequate to support an indigenous WMD development program. Because of its history of cooperation and exchange with foreign nuclear powers, in addition to the nation's tremendous wealth, WMD procurement from foreign sources is not unforeseeable.

Incentives and Motivations

Since the 1970's, rumors have circulated positing that Saudi Arabia had undertaken a clandestine campaign to obtain a WMD deterrent.² Regional insecurity, combined with the alleged presence of other WMD programs in the region have been cited as the main reasons why the Saudis might acquire WMDs.³ The Saudis own past experience with CBW also provides insight into the impetus for possessing WMD as a deterrent. In 1963, during the 1963-1967 Yemeni War, the Egyptian Air Force bombed two Saudi sites along the Yemeni border: Narjan and Oizan. The "gas bomb" allegedly contained mustard gas, and was probably given to Egypt by the Soviet Union.⁴ In 1979, the Saudi government reportedly used an incapacitating CW agent to quash an uprising by religious dissidents in Mecca. The agent, benzyl chloride, was acquired from France.⁵ After Iraq's invasion of Kuwait, the Saudis realized the lurking threat of Iraq unleashing CBW on its soil. Indeed, on several occasions, atmospheric sensors detected low levels of nerve and mustard gases in Northern Saudi Arabia, which most likely originated in Iraq.⁶ In response, the Kingdom undertook extensive and thorough defensive actions to avert such an attack. Although sporadic, these events highlight Saudi Arabia's vulnerability to CBW weapons. As Dany Shoham argues, what resulted was an "increased attractiveness of acquiring [non-conventional weapons] capability, both for deterrence and retaliatory purposes."⁷

Especially since the Iraqi invasion of Kuwait, the Saudis have considered themselves particularly vulnerable to foreign invasion. Despite the removal of the Iraqi threat, the overall security environment has nonetheless failed to improve. Following the deterioration of relations with the United States after the September 11th terrorist attacks, Saudi Arabia doubts the reliability of the American commitment to its defense. To quell such security anxieties, the Kingdom is likely seeking

alternative security arrangements. Iran's seemingly relentless drive to acquire nuclear weapons, Israel's extant WMD arsenal, and Saudi Arabia's own experience with CBW, provide reasons for its quest to acquire non-conventional weapons. The Kingdom's vast financial resources and robust industrial infrastructure present an ideal environment to develop WMD. The presence of both motivation and capability merits further investigation into the Kingdom's potential for developing WMD.

Technical Infrastructure and Capabilities Nuclear

Open sources suggest that Saudi Arabia lacks significant experience with the nuclear fuel cycle to develop a full blown nuclear program. It appears that both technical know-how and practical experience are missing. Specifically, the Saudis lack knowledge and training in mining, conversion, uranium enrichment, fuel fabrication, and nuclear power production. Nonetheless, Saudi scientists have participated in numerous experiments in many aspects of uranium analysis, isotope production, radiation protection, waste management, and reactor operations. Further, Saudi academic research institutions have participated in many cooperative ventures in the Gulf region (Iraq, Syria, and other nations) as well as in Pakistan, Europe, Africa, and in the United States.

Exploration, Mining And Milling

Saudi Arabia does not have identified uranium deposits. However, low-level amounts of uranium and thorium have been discovered in the Tabuk basin, which is located in the central and northwestern parts of the Kingdom. To date, these areas have not been mined. There are however, considerable deposits of phosphates located in Saudi Arabia, which have been mined and exploited. Although the cost of recovering uranium from phosphoric acid is generally higher than uranium market price, the benefits of exploiting a domestic uranium supply far outweigh the political risks associated with purchasing uranium from abroad.

Known deposits:⁸

- Al Jalamid area (five phosphate deposits measure 213 million metric tons (mt) averaging 21 percent P₂O₅)

- Umm Wu'al area (four phosphate deposits comprise 537 million mt of ore averaging 19 percent P₂O₅)
- Al Amud area (contains 24 Mt averaging 21.03 percent P₂O₅)
- Sanam area (contains 23 million mt averaging 17 percent P₂O₅)

State-owned Ma'aden (Saudi Arabian Mining Company) and SABIC (Saudi Basic Industrial Corporation) are active in the Jalamid area. Phosphates are mined there and processed at fertilizer plants based at the Al Jubail Industrial City. The plants, particularly the Jubail DAP fertilizer plant and the Ibn Al-Baytar fertilizer plant produce approximately 4.5 million mt/year of 32% P₂O₅,⁹ and 400,000 mt/year of DAP (diammonium phosphate) and 100,000 mt/year of GTSP (granular triple super phosphate),¹⁰ respectively.

Conversion and Enrichment

Saudi Arabia does not operate any known conversion and enrichment facilities or laboratories.

Nuclear Power Reactors

Presently, there are neither nuclear power plants (NPPs) nor plans for NPPs in Saudi Arabia. However, since 1978, Saudi scientists have conducted periodic feasibility studies on introducing nuclear power into the country.¹¹ In the late 1980's, scientists conducted site selections for a nuclear power plant, examining the two industrial regions of Jeddah and Dhahran.¹² Of particular interest among Saudi scientists has been the application of a low-power, dual-purpose nuclear plant, for water desalination and electricity production.¹³ Various studies beginning in 1978 examined nuclear desalination plants in Kazakhstan and Japan. These studies positively assessed the feasibility of introducing such dual-use nuclear plant into the country.¹⁴ Additionally, in the early 1990's, scientists at King Abdulaziz University and the Atomic Energy Research Institute evaluated the efficiency of nuclear power plant equipment. Specifically, they examined the overall performance of centrifugal pumps, analyzed Zircaloy fuel cladding in pressurized water reactors, and reviewed the efficacy of nuclear reactor concrete shielding.¹⁵

Reprocessing

Saudi Arabia has no known reprocessing activities underway. However, the Atomic Energy Research Institute supports several laboratories, which might be capable of conducting reprocessing activities such as: a "physical separation lab," a "chemical separation lab," and a "radio chemical lab."¹⁶ Open sources do not enumerate specific research conducted in those laboratories.

Spent Fuel And Waste Storage

Absent nuclear research or power reactors, the amount of nuclear waste produced in Saudi Arabia is minute. Primarily, it is generated from university and medical research. The main producers of radioactive waste are medical laboratories and facilities in King Abdulaziz University, as well as the King Faisal Specialist Hospital and Research Center.

- Temporary Radioactive Waste Storage Facility (Adjacent to Fahd Medical Center, King Abdulaziz University campus, Jeddah)

In 1994, with assistance from the IAEA, scientists from the Nuclear Engineering and Civil Engineering Departments of King Abdulaziz University designed and built a temporary storage structure to hold radioactive waste from research work and medical uses of radioisotopes produced in various colleges of King Abdulaziz University. The storage facility is comprised of one room (40m²), with one area reserved for liquid radioactive solutions storage and treatment and one for solid waste.¹⁷

Research Reactors And Accelerators

Currently, Saudi Arabia does not have an operating nuclear research reactor. However, they do possess a Tandetron accelerator as well as a cyclotron capable of producing isotopes, which are used for various experiments.

- 3MV General Ionex Tandetron Accelerator (Energy Research Laboratory, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran).

The Tandetron accelerator was acquired by the KFUPM in the late 1980's to aid in academic research into ion beam tech-

niques. The accelerator system is housed in a pressure tank, which contains insulating sulphur hexafluoride gas (SF₆). A 76-cm scattering chamber and a 5 cm x 10-cm Nuclear Reaction Chamber are used for nuclear physics experiments and nuclear reaction analysis.¹⁸

- Cyclotron CS-30 (Cyclotron and Radiopharmaceuticals Department, King Faisal Specialist Hospital and Research Center, Riyadh).

The facility includes a cyclotron, five shielded hot cells, and separate laboratories for target preparation, radiopharmaceutical production, radioanalyses, quality control, and other support facilities.¹⁹ The cyclotron, which first became operational in 1983, is the Cyclotron Corporation Model CS-30, of the "first generation" cyclotrons. These were designed specifically for isotope production.²⁰ The radionuclide production division plans to acquire a "baby cyclotron" to address anticipated workload.²¹

Research & Development

Saudi scientists have been involved in numerous cooperative ventures, including with such countries suspected of proliferation activities like China, Pakistan, and Iraq. Further cooperative efforts with countries of known good standing include Jordan, Germany, Switzerland, and the United States.

- Atomic Energy Research Institute (AERI) (King Abdulaziz City for Science and Technology (KASCT), Jeddah).

AERI was established in 1988. Some specific responsibilities of AERI include the following: drafting and supervising the implementation of a national atomic energy plan; conducting research in the field of nuclear sciences; and training and developing the country's specialists in the field of nuclear research. AERI is subdivided into four departments: Radiation Protection, Industrial Applications, Nuclear Reactors and Safety, and Materials. In addition, numerous laboratories carry out nuclear science research under its supervision.²² The Institute has several trained scientists in the field of radiation chemistry. Additionally, it controls a Co-60 irradiation facility.²³ The Institute seeks to develop irradiation production technologies, using ion accelera-

tors and other accelerator based technologies.²⁴

- Nuclear Research Center (Al-Sulayyil military complex, near Al-Kharj).

The nuclear research center was established in 1975 in the military complex at Al-Suleiyel. The Center now deploys the country's CSS-2 ballistic missiles. It appears to be the hub of the country's initial drive for the nuclear weapons program.²⁵

Universities

Saudi Arabian scientists are actively involved in academic nuclear research. Most research activities occur in the Engineering and Sciences faculties of several key universities, which include: King Fahd University of Petroleum and Minerals, King Faisal University, Umm Al-Qura University, King Abdulaziz University, King Saud University, and Riyadh University. Although the country has no nuclear power reactors, some scientists are involved in nuclear power reactor operation research; notably, most of this research is conducted at the King Abdulaziz University, which appears to actively cooperate with the country's national nuclear authority, the Atomic Energy Research Institute.²⁶

Chem/Bio

Saudi Arabia has a well-developed chemical and biotechnology industry. Its technological advances and infrastructure may provide a prime environment for the manufacture of CBW. The Kingdom's chemical industry appears to be fully industrialized. For example, the industry has developed in the following areas: petrochemicals (including acetic acid, formaldehyde and acrylonitrile), paints, rubber and plastic, phenolic resins, polyamide chips and fibers, germicides, anti-corrosives, anti-precipitation materials minerals and fertilizers.²⁷

The Jubail and Yanbu cities, located on the Arabian Gulf and on the coast of the Red Sea, respectively, house two twin industrial complexes, representing the center of Saudi industrial activity. The Jubail complex, under the supervision of the Saudi Basic Industries Corp (SABIC), is home to the following industries: petrochemicals, chemicals, fertilizers, and plastics, among others. The complex

comprises 19 main factories with 136 auxiliary installations. Among those are plants used for the production of ethylene, polyethylene, polypropylene, aromatics, acetic acid and formaldehyde.²⁸

The Yanbu industrial city is the smaller of the two complexes. It concentrates on petrochemicals production. It houses eight basic industrial plants, as well as over 40 supporting plants. Current production at Yanbu includes the purified terephthalic acid (PTA), ethylene, ethylene glycol and polymer plants. The construction of a new, semi-commercial plant for acetic acid production is underway.²⁹

The Saudi biotechnology sector has also experienced considerable growth in the last two decades, particularly in fermentation technologies. The Saudis' capabilities benefited from the involvement of foreign scientists in domestic research projects and from access to the latest biochemical equipment and techniques.³⁰ Analysis of Saudi scientific research suggests that the country's scientists have carried out research relevant to BW production, both domestically and abroad. In the late 1970's-early 1980's, Saudi research had focused on studying outbreaks of natural plague in Libya, as well as similar research in the United States.³¹

Delivery Methods CSS-2

In March 1988, reports that Saudi Arabia brokered a clandestine deal with China to purchase an undisclosed number³² of CSS-2 (Dong-Feng 3) intermediate-range ballistic missiles surfaced in the media.³³ The missile, mirrored after the Russian R-12/SS-4 missile,³⁴ is designed to carry a nuclear warhead and is equipped as such in China. Both countries have made assurances that Saudi missiles will not carry a non-conventional payload. Additionally, the missiles have been heavily modified to carry a conventional warhead.³⁵ Nonetheless, the missile's CEP, or circular error probable,³⁶ of 1-1.5 miles, makes it an inadequate conventional weapon. As Milhollin and White argue, "Only the large blast radius of a nuclear explosion could compensate for the inaccuracy of the missile."³⁷ Others believe that, having been unable to obtain a nuclear warhead, Saudi Arabia might also consider arming the missile with chemical and/or biological agents.³⁸ The CSS-2 missiles are reportedly deployed at two missile bases: the Al Sulayyil missile base, 310 miles (500 kilometers) south of

CSS-2⁴¹

	As deployed in China	As delivered to Saudi Arabia
Warhead	All nuclear-armed	Modified to carry conventional warhead
Payload	One- to three-megaton	3,500 to 4,000 pounds
Range	2,200 miles (3,500 kilometers)	1,550-1,950 miles (2,400-3,100 kilometers)
CEP	1.5 miles (2.5 kilometers)	
Propellant	Liquid fuel, propulsion force: 64 tons	
Length	24 meters	

Riyadh, and Al-Joffer, 62 miles (100 kilometers) south of Riyadh. According to Israeli intelligence sources, each base houses four to six concrete launcher pads and approximately 60 missiles.³⁹

According to *Defense and Foreign Affairs*, Saudi Arabia has concluded a secret "weapons-for-oil" agreement with Pakistan during a state visit to Pakistan on October 18-20, 2003, for a new generation of CSS-2 missiles, equipped with nuclear warheads and with a range of 2,500-3,100 miles (4,000-5,000 kilometers). Although deployed on Saudi territory, the missiles would reportedly remain under Pakistani control and marked as Pakistani systems.⁴⁰ Both the Pakistani and Saudi governments and the United States denied these allegations.

Al Sulayyil (Al-Sulayyil; El-Sulayil) Missile Base

According to satellite images taken by the Ikonos satellite in March 2002, the Al Sulayyil missile base consists of a site support area and two launch areas located 3.7 miles (6 kilometers) apart. The support area contains over 33 permanent and 36 semi-permanent buildings. Eight of the buildings appear to be large enough to store the CSS-2 missiles. The launch areas appear to be identical in composition and layout. They include an unidentified 50-meter long building, covered with earth, and two possible underground storage facilities of unknown size.⁴² Chinese technical advisors continue to provide technical support, maintenance and training at the base.⁴³

Al Joffer Missile Base

The base is located 62 miles (100 kilometers) south of Riyadh.⁴⁴ It reportedly houses up to six concrete launcher pads and approximately 60 missiles.⁴⁵

Foreign Assistance and Cooperation

Perhaps the only confirmed case of foreign assistance to support a WMD program in Saudi Arabia is the 1988 purchase from China of CSS-2 ballistic missiles. The range of the missiles would enable Saudi Arabia to strike targets as far away as Tel Aviv or New Delhi.⁴⁶ At the time of the sale, both sides asserted that the missiles would not be used in a nuclear strike. Then, Saudi Arabia was not believed to be capable of acquiring nuclear weapons to load upon the missiles. Nonetheless, the decision to purchase missiles with such long range and unconventional capabilities raised suspicions of Saudi Arabia's nuclear ambitions.

With regards to chemical and biological weapons, Saudi scientists are believed to have collaborated in the past with Egyptian scientists in researching aerosol devices for the dispersion of chemical and biological agents.⁴⁷ Egypt, a non-party to both the CWC and BWC, is believed to possess chemical and biological arsenals. Presently, there is no evidence to suggest that Saudi Arabia is seeking foreign assistance to develop CBW.

In recent years, the highest profile military cooperation between Saudi Arabia and another state was the decade long deployment of American forces on the Saudi territory. With the withdrawal of these forces, the Kingdom has sought to strengthen military ties with

other friendly regional powers, including collaboration with other Gulf States through the Gulf Cooperation Council (GCC) 'Peninsula Shield' rapid-deployment force, a unit of 7,000-10,000 troops, most of whom are Saudi, deployed in Saudi Arabia. In addition, there are an estimated 8,000 military advisors, instructors and technicians from Pakistan stationed on Saudi soil.⁴⁸

In March 2004, this cooperation between Pakistan and Saudi Arabia culminated in the Naseem El-Behr joint naval exercises, in which ships from the two navies coordinated missile attacks from surface ships and aircraft in what was described as "an impressive display of firepower."⁴⁹ During the exercises, high level Pakistani military officials, including Chief of the Naval Staff, Admiral Shahid Karimullah observed the exercises from vessels of the Royal Saudi Navy.

While no evidence exists of a concerted effort within the Kingdom to develop nuclear weapons, Saudi Arabia's considerable oil revenue and its history of cooperation with nuclear states, i.e. China and Pakistan, suggest that despite the lack of sufficient nuclear infrastructure, a Saudi nuclear weapons program is not out of the question. In this context, Saudi nuclear cooperation with a foreign benefactor could take one of two forms: foreign assistance in developing a nuclear capability within the Kingdom; or the extension of a foreign 'nuclear umbrella' over Saudi Arabia, perhaps using foreign weapons deployed on Saudi soil. We now assess these two options.

The Foreign Nuclear Umbrella

An examination of Saudi Arabia's nuclear diplomacy over the past few decades suggests that the Kingdom may have already established the unique role nuclear weapons could play in Saudi security doctrine. During the 1973 Arab-Israeli War, rumors circulated in Arab capitals that Israel had threatened to use its 'basement' nuclear arsenal to prevent invasion by its enemies. Such a threat has never been confirmed, according to Mohammed Khilewi, the former Saudi diplomat and nuclear physicist who defected to the United States in 1994. Yet, the Arab defeat at the hands of Israel in 1973, in addition to the nuclear threat that preceded it, fueled Saudi support of an "Islamic bomb."⁵⁰ Khilewi's account includes massive Saudi support for the Pakistani nuclear program, dating back to 1975. According to former

CIA analyst Robert Baer, this assistance amounted to "one billion dollars... to help Pakistan develop an 'Islamic bomb'" and another one billion dollars to "enable Pakistan to develop nuclear-capable F-16s from the United States in the 1980's."⁵¹ Khilewi maintains that, in exchange for this assistance, the two countries had signed a pact whereby Pakistani nuclear weapons might be used to defend Saudi Arabia against foreign aggression.⁵²

According to Khilewi's account, Saudi Arabia also sent massive aid to Iraq in its war against the fundamentalist regime in Iraq. Of the \$25 billion that the Kingdom is believed to have sent to support Saddam Hussein during the 1980's, nearly \$5 billion was marked for Iraq's clandestine nuclear weapons projects. This included advanced uranium enrichment programs, and a possible offer to rebuild the Osirak reactor destroyed by Israel in 1981.⁵³ Khilewi asserts that Iraq had agreed to share its nuclear arsenal with Saudi Arabia in exchange for the economic assistance.

After Pakistan's 'success' in developing and testing its nuclear arsenal in 1998, Saudi aid continued even as other sources of aid to Pakistan dried up. Saudi Arabia was providing Pakistan with 150,000 barrels of oil per day as undocumented assistance. Undoubtedly, this assistance helped to subsidize Pakistan's nuclear weapons enterprise.⁵⁴ Nuclear ties between the two countries grew so close that Sultan Ibn Abdul-Aziz, the Saudi Minister of Defense, was invited to tour the secretive Pakistani uranium enrichment facility at Kahuta, the Khan Research Laboratories. He was one of the few foreigners to be granted such an opportunity.⁵⁵ In October 2003, reports in the Western media again surfaced that the two countries had concluded a nuclear defense pact, although such allegations were strongly denied by both sides.⁵⁶

It should be emphasized, however, that such allegations are largely based on the account of one Saudi defector as well as speculation from the Indian press. Admittedly, neither source could be expected to offer an objective assessment of Saudi nuclear cooperation with Iraq or Pakistan. Indeed, following the 1998 Pakistani nuclear tests, a spokesman from the Pakistani Foreign Office dismissed the reports of Pakistani-Saudi nuclear cooperation as "entirely unwarranted and baseless." He added, however, that "Pakistan has repeatedly reaffirmed its commitment not to trans-

fer nuclear and sensitive technologies to any country. Pakistan has been abiding by this immutable and unlitarel (sic) commitment in the past and will continue to do so in the future.”⁵⁷ The close cooperation in a variety of fields between the two states was characterized in 1998 as “based on the deep-rooted Islamic religion as a permanent bond and in their mutual interests in the region and in the world in general.”⁵⁸ Any allegations that this cooperation has extended to the nuclear field lack clear evidence among open sources.

Nonetheless, the strategic situation of Saudi Arabia suggests that a nuclear alliance with a friendly nuclear power might be an attractive option. The Kingdom is couched between two powerful regional rivals – Israel and Iran. Both are believed to possess or to be developing WMD programs, including nuclear weapons. Indeed, as recently as 1991, Saudi Arabia may have depended on the nuclear umbrella of the United States to deter the possible use of chemical or biological weapons against targets in Saudi Arabia by Saddam Hussein. The deterioration of security ties with the United States might well provide an incentive to secure a viable nuclear alternative. Close political and economic ties might make Pakistan an attractive partner.

A Domestic Nuclear Program with Foreign Support

An alternative to the extension of a Pakistani nuclear umbrella is reliance on foreign suppliers to help support a nuclear program in Saudi Arabia. Over a period of several years, the nuclear black market of A.Q. Khan network was secretly able to supply programs in Libya, Iran and North Korea. The 1998 visit by the Saudi Defense Minister to the Pakistani uranium enrichment site included extensive visits with Khan himself.⁵⁹ Such visits clearly could have laid the foundation for covert nuclear exchange between Saudi Arabia and suppliers within the Khan network. The revelations of the existence of this network have, as yet, not revealed any such exchange. However, such interactions between Saudi Arabia and Pakistan would be much harder to detect, given the degree of trade and other interactions between the two.

The sensitive nature of the relations of both Saudi Arabia and Pakistan with the United States could perhaps further conceal any illicit nuclear cooperation. The reluctance on the part of American policymakers to pressure either of its allies in the Global War on

Terrorism could prevent even the American-led Proliferation Security Initiative from impeding such transfers.

One potential disadvantage to this option, that is the development of the infrastructure needed to support a nuclear weapons program, with or without foreign assistance, is its vulnerability to counterproliferation strikes by its rivals. Israel has repeatedly stated that it would not tolerate the development of nuclear weapons by a hostile power in the Middle East. To cement this stance against future nuclear powers in the region, it bombed Iraq’s Osirak reactor in 1981. Additionally, Iran clearly possesses the capability and perhaps even the will for preemptive strikes against any future Saudi nuclear weapons complex. However, Tehran may be more deterred by the American reaction than might Tel Aviv.

The Kingdom is currently a signatory to the three major global regimes to prevent the proliferation of WMD: the Nuclear Non-Proliferation Treaty (NPT), the Chemical Weapons Convention (CWC) and the Biological Weapons Convention (BWC). Despite its accession to the NPT, and its regular participation in the NPT review process, its commitment to nuclear non-proliferation is not impeccable. Its decision to accede to the NPT was made only in 1988, perhaps mainly to placate the United States following its outrage over the purchase of Chinese ballistic missiles. Its commitment to nuclear non-proliferation has not resulted in a safeguards agreement with the International Atomic Energy Agency for more stringent inspections of nuclear-related facilities. Moreover, the Saudis refused to sign the Comprehensive Nuclear Test-Ban Treaty (CTBT). Such resistance may be further evidence that Saudi Arabia is seeking to keep its options open regarding future nuclear weapons development. Its regional rival, Israel, has not signed these accords. Iran remains a signatory to the NPT, but appears to be exploiting loopholes in the regime in order to develop its own capacity to support a weapons program.

Saudi Arabia’s accession to the CWC would make any clandestine chemical weapons program very difficult to sustain, even though the Kingdom possesses the necessary chemical infrastructure to support such a weapons program. The strict regimen of declarations and inspections, including the as-yet-unused challenge inspection clause, would effectively

Saudi Arabian Nonproliferation Policy

Saudi Arabia WMD Milestones ⁶⁰	
1962	Becomes a member-state of the International Atomic Energy Agency.
April 12, 1972/ May 24, 1972	Signs/ratifies the Biological Toxin Weapons Convention (BTWC). (Its signature comes two days after BTWC becomes available for signature.)
October 3, 1988	Accedes to the Nuclear Nonproliferation Treaty.
January 20, 1993/ August 9, 1996	Signs/ratifies the Chemical Weapons Convention (CWC). (Its signature comes a week after CWC becomes available for signature.)
May 1999	Announces its support for the establishment of the Nuclear Weapons Free Zone in the Middle East.
<p>Saudi Arabia is not party to the Comprehensive Nuclear-Test-Ban Treaty (CTBT), the Partial Test Ban Treaty (PTBT), the International Code of Conduct Against Ballistic Missiles, any of the nonproliferation export control regimes (e.g. Wasenaar, Zanger, MTCR, etc.), and has not concluded an IAEA Safeguards Agreement, nor an IAEA Additional Protocol.</p>	

deny Saudi Arabia the ability to build a secret CW program.

Furthermore, it is not clear how effective a deterrent a CW or BW arsenal could be against nuclear programs of Israel and Iran. While chemical weapons might serve as a supplement to the use of conventional military force, they are unlikely useful to one state wishing to deter aggression from another. The unpredictable nature of biological weapons makes them an even less likely addition to Saudi strategic doctrine. Without doubt, both forms of non-conventional weapons could have a devastating impact on a battlefield. However, neither could match the destructive power of an Israeli (and perhaps soon an Iranian) nuclear arsenal.

Conclusion

Even with the ousting of Saddam Hussein from Iraq, Saudi Arabia still faces many threats to its security. It remains surrounded by powerful rivals with non-conventional arsenals. Any attempts to reduce these threats through diplomatic measures such as a Middle East WMD-free zone would appear to depend on resolving long-standing political, religious and cultural animosities. Barring any such diplomatic breakthrough, Saudi Arabia's security options seem limited at best. It's relatively small, though well-funded military guards a large territory with massive natural resource endowments. Such a security position might suggest the perceived need for an unconventional deterrent to protect these resources.

Among the choices of non-conventional weapons, Saudi Arabia's best option probably lies with a nuclear weapon. Many believe that should the Saudis decide on a nuclear option, their most likely path to obtain it would be to buy a ready-made weapon, rather than try to develop it on their own.⁶¹ The extent of the Khan network, the proliferation of nuclear weapons states, and the willingness of some states and non-state actors to sell such technology exacerbate the opportunities to purchase a nuclear weapon. In addition to Pakistan, China, which has long sought a foothold in the Middle East, along with North Korea, who would undoubtedly like to exploit the Saudi purse, might also be willing to oblige.

Saudi cooperation with friendly states pursuing nuclear programs, as well as its hostile relationship with nuclear-capable Israel and with Iran would suggest that they determined long ago that nuclear weapons are a necessary addition to the country's security doctrine. Nonetheless, its poor technical nuclear infrastructure would make any covert development of a domestic nuclear weapons program a difficult prospect. Its abundant financial resources, however, make foreign cooperation a much more attractive option. Given its history of cooperation and close ties with Pakistan, a nuclear pact may be the most viable option for Saudi Arabia to resolve its security deficit in a region with ample WMD threats. This pact may involve the transfer of nuclear weapons to Saudi Arabia, or the deployment of foreign weapons on Saudi soil.

Such a pact could address Saudi Arabia's security deficit *vis-à-vis* its WMD-equipped regional rivals. In addition, by obtaining a nuclear deterrent, even a very small one, without building a large and inherently vulnerable nuclear infrastructure, the counter-proliferation option becomes much less attractive to its rivals. Furthermore, given the importance of Saudi Arabia and Pakistan to the United States, it is unclear that Washington would take any steps to prevent such a pact as it might threaten its allies in Riyadh and Islamabad.

Although Saudi Arabia does not currently possess a WMD capability, and does not appear to have the necessary technical infrastructure, at least for nuclear weapons, to develop one domestically, Saudi acquisition of WMD is nonetheless a very real possibility. For the reasons discussed above, it deserves the consideration of policymakers intent on strengthening the global nonproliferation regime. The presence of nuclear weapons on Saudi soil, under Saudi or foreign control, would clearly add a perilous new dimension to the need for stability within the Saudi regime.

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Review**CUBA: A NEW MEMBER
OF THE NPT**

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The development of nuclear energy, either in the military field or in its various peaceful applications, entails a scientific and technical challenge for any nation and it also demands significant financial, material and human resources. Due to its strategic and special nature, especially in terms of economic or military impact, the choice of one or both options has required the direct participation of governments with the objective of successfully financing, controlling and directing national endeavors in this field.

Unquestionably, the brief history of the use of nuclear energy has also been the history of the nuclear policies followed by the different nations that have assimilated and developed it, and especially, by the major powers on earth.

The horrifying potential for a nuclear war between the former Soviet Union and the NATO powers played a major role influencing public and political opinion about nuclear energy. However, as time went on, the arms race was not condoned, and increasingly strong movements developed to limit the growth of nuclear weapons capabilities through nonproliferation treaties, test ban agreements and diplomatically agreed commitments to move towards total nuclear disarmament.

Even so, during this period the major powers did not go to war directly against each other. The strategic balance achieved by the superpowers in the Strategic Arms Limitation Treaties (SALT) of the 1970s, which underscored the doctrine of Mutual Assured Destruction (MAD), weakened when the United States launched its controversial Strategic Defense Initiative in the early 1980s. Finally, the arms limitation accords between the United States and the USSR mentioned before, followed by the collapse of the Socialist Bloc and of the USSR itself,

mark a redrawing of the world's political map and a new stage in the path toward the eradication of nuclear weapons from the earth. With the disappearance of the "balance of power" and the emergence of a single superpower, it is clearer than ever than nuclear weapons make no sense at all.

On the other hand, the end of the arms race between the major powers has not eliminated the potential for the use of nuclear weapons. During 1998 in the midst of a highly volatile situation between India and Pakistan over Kashmir both introduced nuclear devices into the equation by conducting several underground nuclear weapons tests. In the Middle East, Israel has developed a nuclear capacity and the necessary military systems to deliver its weapons throughout the region. It is also only too clear that several other nations in the region are determined to obtain nuclear strike capabilities as soon as possible.

Though these developments are deeply worrying, perhaps today the greatest current threat of the use of a nuclear weapon in a populated area arises with the threat of a terrorist organization obtaining control of a nuclear device or devices. Such groups are outside of any of the existing political or diplomatic mechanisms which function to prevent military conflict or attempt to act as negotiating forums to solve disputes between nations.

Fortunately, after fifty years it would appear that the roads to nonproliferation and disarmament have converged with political necessity and historic opportunity. After the signing and ratification of the Strategic Arms Reduction Treaties, and the indefinite extension in 1995 of the Treaty on the Nonproliferation of Nuclear Weapons (NPT), the steps that have been taken allow us to be more optimistic about the future. It is difficult to say how long it will take. This depends on many factors, but above all, on the complete understanding by those who possess nuclear weapons, that only their total dismantling and elimination will create the proper conditions for nuclear peace in the world.

However, the Second Preparatory Committee (PrepCom) on the NPT held in Geneva in May 2003 clearly reflected the US priorities in the post - 9/11 security environment, i.e. preventing others from acquiring nuclear weapons, while nuclear disarmament is con-

signed once again to the periphery, as a distant rhetorical objective.

In addition, the US-led war on Iraq was justified by the governments of the United States and United Kingdom on the grounds that Iraq posed an immediate threat, and they consequently undertook preemptive military actions against this much weaker adversary with great oil reserves. However, they have found no "smoking guns" after the clandestine nuclear weapons programme had been dismantled by the IAEA and UNSCOM after being discovered in 1991.

The PrepCom also took place in the shadow of serious challenges: North Korea's announced withdrawal from the NPT and US allegations about several clandestine nuclear facilities in Iran, which subsequently have led to condemnation by the IAEA and the UN.

Thus, there is an urgent need to focus collectively as well as in a realistic atmosphere, to address resurgent proliferation and disarmament challenges.

The Non-Proliferation Treaty

After 25 years, and despite laudable intentions, the fragility of the nonproliferation regime was obvious. Basically, any peaceful nuclear energy program will provide the means for a military one. Only a political decision is required. The limitation of the peaceful development of nuclear energy is beyond the scope of the treaty which is, therefore, rendered impotent.

Unless a general attitude of peace exists in the world, it is unlikely that true nuclear disarmament can take place. Setting aside matters of national defense, unilateral nuclear disarmament is beyond political possibility for any one of the governments of the major nuclear powers; their public would not accept it in the existing current state of turmoil on our planet. Nonetheless, this reality does not diminish in any sense the pressing need to address proliferation where there are possibilities of success.

Apart from exemplifying the existing geopolitical status quo, the procrastination surrounding the treaty's review and extension in New York in May 1995, which consisted of difficult, contradictory and polarized negotiations, reveals the urgent need to continue developing cooperation and understanding in this area between all nations, as the only pos-

sible way to attain a truly stable and secure nonproliferation regime.

The first review conference after indefinite extension of the NPT, held in New York in 2000, achieved some important agreements, especially the 13 steps on nuclear disarmament, pushed through because of the determination of the non-nuclear weapon powers. But the first PrepCom meeting after this, as international conditions deteriorated, seemed to paper over widening cracks, as some of the nuclear powers reneged on their disarmament obligations and tried to back away from the 2000 agreements.

The second PrepCom was held in Geneva in May 2003, and 106 states parties attended; this was a diplomatic but not necessarily a political success. While many wanted the PrepCom to address North Korea's violation and announced withdrawal of the treaty, the United States was determined to put Iran in the dock, and continues to push that position to the present day. On the positive side, Cuba's accession to the NPT on November 4, 2002 was widely welcomed. Its recent ratification of the INFCIRC/153 general safeguards on September 19 2003, made Cuba the 188th party, leaving only Israel, India and Pakistan outside the regime.

Some facts and realities on the Cuban Nuclear Policy.

At the end of the 1970s, Cuba decided to establish the infrastructure required to assimilate nuclear power as part of an integrated development strategy. For that purpose, it signed two basic agreements with the Government of the former Soviet Union. One agreement concerned the design, supply and construction of a nuclear power plant with two WWER-440 type units, an improved B-318 model. The other agreement concerned the design, supply and construction of a nuclear research centre with an IRT-type 10 megawatt research reactor (made in the former Soviet Union), as well as a critical assembly (zero power reactor) made in Hungary and included in a pre-existing agreement with that country.

Although these intergovernmental agreements and their respective implementation contracts were signed, in no case were the conditions for the supply of nuclear material agreed.

In the 1980s, and particularly the second half of that decade, Cuba made substantial progress in the nuclear field. An appropriate infrastructure conducive to the safe use of nuclear applications was established, and steps forward were made in the construction of the Juragua power plant and in the design and construction work for the Nuclear Research Centre.

However, as a result of the changes that took place in the global political system at the end of the 1980s and the beginning of the 1990s culminating in the dissolution of the Soviet Union, the implementation of the aforementioned basic agreements was suspended. In the light of this process and well-known external political factors, the Cuban Government decided to revise the strategic direction of the Cuban nuclear programme.

On 5 September 1992, the construction of the Juragua nuclear power plant was temporarily suspended for economic and financial reasons. The vast majority of the supplies for unit one and part of those for unit two are stored in sites designated for that purpose. A costly storage programme has been implemented which has made it possible to maintain the plant in suitable condition to continue the construction work when conditions permit.

A feasibility study was also concluded and this demonstrated the technical and economic viability of the construction work. It should be noted that circumstances prevented third parties who could potentially participate in the completion and commissioning of the nuclear plant from doing so, despite the interest that they had shown.

Safeguards Agreements.

To implement the above mentioned intergovernmental agreements, Cuba took steps for the negotiation and subsequent signature of INFCIRC/66-type safeguards agreements, and the corresponding subsidiary arrangements, with the IAEA. These safeguards agreements, were distributed by the Secretariat of the IAEA, numbered as follows:

INFCIRC/281 - The text of the agreement of 5 May 1980 between the Agency and Cuba relating to the application of safeguards in connection with the supply of a nuclear power plant;

INFCIRC/298 - The text of the agreement of 25 September 1980 between Cuba and the Agency for the application of safeguards in connection with the supply of a nuclear research reactor from the Union of Soviet Socialist Republics;

INFCIRC/311 - The text of the agreement of 7 October 1983 between Cuba and the Agency for the application of safeguards in connection with the supply of a zero-power nuclear reactor from Hungary.

In September 1993, Cuba informed the IAEA of its Government's decision not to continue the work on the design and construction of the research reactor for the abovementioned reasons, and requested the termination of the Safeguards Agreement INFCIRC/298 relating to the research reactor. In connection with that objective, Cuba did not receive any type of supplies, and the design work was not completed.

In response, the IAEA Secretariat agreed to terminate the INFCIRC/298 Agreement; the Board of Governors took note of the decision at its meeting in March 1995.

As a result of these actions, two INFCIRC/66-type safeguards agreements remained in force between Cuba and the IAEA: INFCIRC/281 (in connection with the supply of a nuclear power plant) and INFCIRC/311 (in connection with the supply of a zero power nuclear reactor). This was in force till 2002, with the signing of NPT by Cuba.

In this connection, it should be noted that no nuclear material has been received on the national territory under Cuba's jurisdiction, and that no such material requiring safeguards exists on that territory. The parts and components of the installations subject to safeguards in accordance with the aforementioned agreements are subject to IAEA inspections.

Finally, Cuba has always attached special importance to nuclear safeguards activities, recognizing measures for strengthening the effectiveness and improving the efficiency of the IAEA safeguards system. This position was emphasized by the Cuban delegation during the work in the 1990s which resulted in adoption of the Model Additional Protocol to safeguards agreements, or INFCIRC/540 (Corrected).

In October 1999, Cuba underscored this commitment by signing an Additional Protocol to its safeguards agreements relating to the pro-

vision of information and complementary access to facilities. Accordingly, Cuba became the first non-signatory to the NPT to accede to the Protocol. In summary, Cuba's commitment to strengthened safeguards underlined its abiding interest in securing the peaceful uses of nuclear energy.

The Cuban Decision to sign the NPT

Cuba's position with respect to multilateral instruments in the nuclear non-proliferation field namely, the NPT and the Tlatelolco Treaty - have been consistently expressed to the international community. Its position in favor of achieving nuclear disarmament and also the goal of general and complete disarmament under strict international control is well known since the discussion of the NPT as far back as 1968.

On September 14, 2002, the Cuban Minister of Foreign Affairs announced to the General Assembly of the United Nations in New York: "as a signal of the clear political will of the Cuban government and its commitment to an effective disarmament process that ensures world peace, our country has decided to adhere to the Treaty on the Nonproliferation of Nuclear Weapons (NPT). In doing so, we reaffirm our hope that all nuclear weapons will be totally eliminated under strict international verification."

Cuba also announced on September 17, 2002 in Vienna before the IAEA General Conference its ratification of the Treaty of Tlatelolco, which completes the process of having all states in the region of Latin America and the Caribbean as members of the nuclear free-zone in that region. The announcements by Cuba have been very warmly received by the international nonproliferation community. IAEA Director-General Mohammed ElBaradei welcomed the decisions, commenting, "With Cuba's intention to become a party to the NPT, we have come a step closer to a universal nuclear non-proliferation regime." Adding that, "the Tlatelolco Treaty provides a good model for other regional nuclear-weapons-free zones to follow...universal adherence of all countries in regions having nuclear-free zone arrangements is important to further strengthen the non-proliferation regime" The Russian Foreign Ministry commented, "we hope that this decision will influence the position of other countries that still remain outside the obligations of this cornerstone disarmament document."

Since then Cuba has taken some very important steps:

On October 23 and November 4, 2002, the Cuban government ratified the Tlatelolco Treaty and signed the NPT respectively. On September 18, 2003, it decided to sign a comprehensive Safeguards Agreement and an additional Protocol which are standards.

These steps have been taken as a proof of Cuba's commitment to multilateralism and show once more our clear political will in favor of an effective process of disarmament which would contribute to world peace.

Nevertheless, Cuba's government historically maintained a position which considers the NPT an insufficient and discriminatory instrument because:

- The treaty divides the world into two categories of States: the nuclear-weapon States and the rest, which do not possess these weapons;
- It allows the establishment of a Club of Nuclear Powers who have not genuinely tried to implement their real and concrete commitments to disarmament. The fact that no specific goals have been set for total, unconditional and verifiable nuclear disarmament makes the current non-proliferation regime inconsistent, and is evidence of its discriminatory nature;
- Today nuclear weapons have been allowed to become a major "currency of power" around the world.

Thus, the only fair basis for building a solid and consistent nuclear non-proliferation regime is to achieve total, unconditional and verifiable disarmament.

On the other hand, Cuba's reservations concerning the Tlatelolco Treaty were submitted in the Declaration made at the time it signed the Treaty on 25 March 1995. Despite the fact that no favorable changes in Cuba's security environment had been recorded, Cuba agreed to sign the Treaty as a gesture of goodwill. Cuba supports the noble objectives of the Tlatelolco Treaty since it considers that the word "prohibition" is broader in scope than "non - proliferation". On that occasion, the following was stated:

"The Government of the Republic of Cuba declares that the obstacles which have until now prevented the Republic of Cuba from becoming a full party to the Treaty for the Prohibition of Nuclear Weapons in Latin

America and the Caribbean remain and continue seriously to affect Cuban security. The only nuclear power in this part of the world, the United States of America, is maintaining a policy of hostility towards Cuba; it is intensifying its economic, commercial and financial blockade, reinforcing its campaign against the country and maintaining by force and against the will of our people the illegal occupation of part of the national territory, through which even ships carrying nuclear weapons pass, a problem whose solution will in the future have to be considered a condition for our country to stay within this Treaty".

From Cuba's perspective, such actions make it clear that our national security is not guaranteed through the signing of multilateral agreements or treaties, but depends, instead, on one State's hostile and restrictive political policies.

The US 'Cuban Democracy Act' of 1992 (the Torricelli Act) and the 1996 'Helms-Burton Act' sought to specifically ban any assistance for Cuba's nuclear program. The language of the legislation stated that the United States could apply economic sanctions against any Cuban trading partner on the grounds that it had violated American law. Moreover, this legislation included provisions requiring dollar-for-dollar reduction of aid to any country providing nuclear cooperation and assistance to the Cuban program. Furthermore, the law states that, "any resumption of efforts by any independent state of the former Soviet Union to make operational any nuclear facilities in Cuba...in view of the threat to national security posed by the operation of any nuclear facility...will be considered an act of aggression which will be met with appropriate response in order to maintain the security of the national borders of the United States and the health and safety of the American people." Ironically, this "threat" was used as the basis for a federal appropriation and for the construction of a nuclear radiation detection network along the Florida Gulf Coast in the late 1990s, even though there was no nuclear reactor construction in Cuba nor were there any indication that there were any plans to resume activities to that end.

Because of the above-mentioned economic sanctions placed upon it by the U.S., Cuba could not count on external assistance in the form of investment and loans from international financial institutions, the international banking community or the international

nuclear industry without a complete normalization of relations with Washington.

Shortly after taking office the G.W. Bush Administration began an effort to tighten the embargo against Cuba and terminated all official contact between Cuban and American officials at any level, formal and informal, as it pertained to the Cuban nuclear energy development program.

Cuba entertained a number of prospective suitors in its efforts to complete the nuclear program, and for a time after its signature of the Treaty of Tlatelolco, it appeared that perhaps a Russian firm or some other similarly interested company might be willing to assist the Cuban effort.. But disappointingly, Cuba found little real interest in the project but continued to seek investment. So, in December 2000, Cuban officials announced that it made no sense for Cuba to try to continue to complete the plant, and officially ended the 18 year effort at Juragua to develop a nuclear energy capability for the island.

Nevertheless, Cuba has invested vast resources into the development of human capital in the area of nuclear applications. This was done with the intention of providing a platform of core competencies in nuclear science and technology that would increase Cuba's domestic energy and scientific capabilities. Despite all of the previous furor and debate over its viability, nuclear energy remains a likely future alternative for Cuba. Cuba has continued to maintain close ties to the IAEA and the international nuclear science community. It continues to educate and train engineers, scientists and technicians in both the theoretical and applied aspects of nuclear science. The result is a highly regarded nuclear infrastructure (organizational and scientific) prepared to meet the challenge of Cuba's nuclear future together with an able and ready high-tech workforce with a government prepared to address the challenge of the safe and efficient management of nuclear power if need be. How to use nuclear technology will always differ from one country to another, depending on a nation's need and priorities but it is important to ensure that the public receives appropriate information to make intelligent decisions about the available options.

Cuba, by signing the NPT and the Tlatelolco accord immediately raises its status in the nonproliferation community from that of a state outside of the regime, to one of its most

ardent developing world supporters. Cuba is prepared for future opportunities due to the existence of a cadre of young, well educated and articulate scientists, engineers and technicians dedicated to advancing Cuba's science, technology and energy sector.

¹ While START-I has been fully implemented START-II fell prey to domestic changes in the US-Russian relationship and us withdrawal from the ABM treaty and has been superceded by the 2002 Moscow Treaty (SORT)

Summary

Yaderny Kontrol (Nuclear Kontrol) Journal of the PIR Center for Policy Studies Volume 10, No. 3 (73), Fall 2004

The editorial "Global Partnership: The Tale of Time Lost" analyzes the prospects and problems of the G8 Global partnership against the spread of weapons and materials of mass destruction in light of the outcome of latest G8 Sea Island summit in the USA.

The article notes, that at the head of the list of topical agenda items is the gap between the funds officially pledged by the donor countries and the funds that were actually received by Russia. Assuming that the rate of funds release remains the same, it would require centuries to implement the Kananaskis resolutions (considering that the whole Global Partnership program was to be implemented in ten years). The article stresses that unlike the G8 leaders, terrorists do not resort to long-term programming, they never put off their actions. They acted without delays in New York, in Madrid, and in the Moscow metro. They will act without delays in the future, meaning that we have neither ten nor one hundred years ahead of us.

In an interview of John Bolton by PIR Center director Vladimir Orlov entitled "Proliferation Security Initiative is an Activity, not an Organization", Under Secretary of State for Arms Control and International Security, expresses opinions on the most topical issues of contemporary world politics. Topics include Proliferation Security Initiative issues, Global Partnership program implementation and possible ways of modernization of NPT regime. Concerning questions about PSI, John Bolton notes that "The most significant obstacle we face is still a lack of familiarity with what PSI's objectives are and how we seek to accomplish those objectives. One of the things that all of the members of the core group stress right from the beginning was that actions undertaken pursuing to PSI would be done based on existing national or international authorities. We were not going to seek to engage in activity that was not on some basis other than on national legal systems or that would be consistent with the applicable international authorities."

Rogelio Pflirter, Director_General of the Technical Secretariat of the OPCW analyzes contemporary challenges from chemical weapons and OPCW activities in his article "The Chemical Weapons Ban: Enhancing International Security".

Author notes, that in modern chemical manufacturing, toxic chemicals and their precursors

are ubiquitous, key components in a plethora of products, ranging from plastics to pharmaceuticals. Even seemingly innocuous compounds, such as the solvent added to the ink commonly used in ballpoint and felt-tip pens, can be easily synthesized into lethal chemical weapons. Aware of these dangers, both global chemical industry and the OPCW conscientiously implement the Convention's "industrial verification" regime to prevent any such diversion of these chemicals for any purpose prohibited by the Convention. The CWC defines three lists or "Schedules" of chemicals within its Annex on Chemicals to be able to precisely identify and isolate a specific set of chemicals whose retention, production, consumption and/or transfer must be declared. These declarations serve as the basis for determining whether the facilities that deal with these chemicals are to be inspected.

Victor Kozlov's article "On the Prospects for Expanding Russian-Indian Collaboration in the Nuclear Sphere" examines Russian foreign economic activity in the area of nuclear power plant (NPP) exports and Russian prospects on the Indian NPP market. The author notes that in spite of a number of objective factors currently restraining Russian-Indian cooperation in the construction of NPPs, future expansion is possible. This expansion would meet the long-term interests of the Russian Federation and contribute to an increase in the volume of its high technology exports, thus decreasing the nation's dependence on raw materials exports.

Using the Comprehensive Nuclear-Test Ban Treaty (CTBT) as an example, the article "On Site Inspections under the CTBT and Other Disarmament and Security Agreements: Problems, Solutions, Prospects" by Viktor Slipchenko and Vitaly Shchukin dwells in detail on the methods used during on-site inspections, which are one of the basic tools used to verify compliance with international agreements in the area of arms control and disarmament. The authors note that despite a general tendency toward rapprochement and cooperation between the world's leading powers, there has been a sort of "rollback" to the mutual distrust and suspiciousness characteristic of the era of confrontation and Cold War. Moreover, this backtracking has not only been apparent in the degree of state openness during monitoring related to the CTBT. It has also been evident where other existing treaties are concerned as well as in relation to new treaties and agreements. For example, attempts to supplement the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological

(Biological) and Toxin Weapons and On Their Destruction with an effective monitoring mechanism have yet to be successful.

Gennady Evstafiev and Mikhail Pavlyushenko, in their article **"On the Use of Unmanned**

Aerial Vehicles in Classical and Terrorist Wars," note that the current accessibility of UAV production technologies is increasing the risk of their use by terrorists. The authors note the great amount of NATO attention paid to the proliferation and easy accessibility of technology and components for the construction of UAVs and cruise missiles, and the organization's monitoring of UAVs and cruise missiles in the world's armies in the context of the problem of the spread of WMDs and means of their delivery. For terrorists, cruise missiles and UAVs are clearly preferable to ballistic missiles. Even the simplest UAV can deliver tens of kilograms of chemical and biological agents a fair distance and, a fact that is particularly dangerous, using rather primitive dispensers pulverize them more effectively than via warhead explosion. This meets the needs of terrorists groups: creating great panic among the population and causing considerable economic losses.

Participants in the round table **"The Transformation of the Concept of National Security in the Information Age"** included Institute of World Economy and International Relations (IMEMO) Director Vladimir Baranovsky, aide to the chairman of the Federation Council Valery Manilov, Moscow State Institute of International Relations (MGIMO) professor Yuri Fedorov, senior PIR Center advisor Vladimir Dvorkin, Deputy Director of the Center for European Security Studies Tatiana Parkhalina, President of the Encyclopedia scientific and cultural organization Sergei Pereslegin, Russian Security Council staff member Anatoly Streltsov, and others. The materials from the round table reflect different approaches to the transformation of the concept of security in the era of the domination of the information highway. The economic and political security aspects of this phenomenon are examined in detail.

Roland Timerbaev and Aleksandr Shilin, in the article **"The Preparatory Committee Session for the 2005 NPT Review Conference Ended Unsuccessfully,"** sum up the results of the preparatory committee's final session. The com-

mittee was only able to reach an agreement on procedural questions, the timing of the conference, and the candidature of its chairman. The authors note that the committee was unable to work out any recommendations with respect to substantive issues, such as how NPT state participants evaluate treaty adherence and the decisions of the 1995 and 2000 Review Conferences and what must be done to realize these commitments, due to the deep differences between the non-nuclear and nuclear weapons states, and, to a considerable degree, because of the inflexible position of the United States.

The article **"The Iran's Nuclear Program Raises Questions"** by PIR Center Director Vladimir Orlov examines the situation with Iranian nuclear problem. Author notes that on the one hand, at the end of last year Iran signed the Additional Protocol to its Safeguards Agreement with the IAEA, but on the other hand Iran has not yet provided a very convincing explanation regarding Uranium-235 (note: enriched to 36%!) contamination of some centrifuge components found at the Kalaye and Farayand enterprises and Polonium-210. It is not yet clear why the Iranians needed to experiment with Polonium. Summing up, author notes, that Iran, in fact, holds the keys to the nuclear nonproliferation regime in its hands. Its leaders, however serious their disagreements regarding Iran's ultimate nuclear choice, understand this well. Consequently, they may be tempted to use this as blackmail

In Georgy Toshinsky's article **"The Untold Life of Academician Aleksandr Leypusky"** examines the little-known endeavors of academician Aleksandr Leypusky: the development and creation of intermediate-neutron reactors with liquid metal (lead and bismuth) coolant for nuclear propulsion plants of nuclear-powered submarines. Leypusky made the choice of the eutectic lead-bismuth alloy as a heat-transfer agent for the nuclear reactors even before the USSR began work on the development of nuclear-powered submarines. Eventually, after overcoming an initial period of difficulties and failures, when the possibility of halting work in this sphere was entertained several times, the lead-bismuth reactor technology was mastered. In all two ground-based prototypes were built and eight nuclear submarines that used 12 reactors, with a cumulative operating time of about 80 reactor-years.

**Yaderny Kontrol (Nuclear Kontrol)
Journal of the PIR Center for
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Volume 10, No. 4 (74), Winter 2004**

“The Deepening of Relations with Russia is not a Tactical Maneuver, but a Basic Desire” – In an interview with this journal’s editor-in-chief Vladimir Orlov, the Ambassador of the Islamic Republic of Iran to the Russian Federation, Mr. Gholamreza Shafei, discusses the priorities of Russian-Iranian cooperation, the fate of the agreement on the return of spent nuclear fuel (SNF) from the Bushehr reactor, Iran’s nuclear program, and the position of Iran in relation to the Taliban movement and al Qaeda. Speaking on the contract for the return of SNF to Russia, Mr. Shafei notes that in the original contract there was no stipulation that the delivery of nuclear fuel from Russia depended on the conclusion of any other agreements. This was proposed by the U.S. government, and only after this did the Russian side include the condition that the delivery of fuel depends on this agreement. Iran agreed to these conditions in order to ensure the trust of the world community.

“The Security of the Russian Federation’s Nuclear Arsenal” – this article by Evgeny Maslin, President of Board on Sustainable Partnership for Russia, examines the situation with the protection of stored nuclear weapons. Security, in the widest sense of the word, is understood as the achievement of suitable maintenance conditions and the prevention of accidents and the mitigation of their effects, thanks to which the protection of people and the environment from the harmful impacts, exceed permissible level. Practice has shown that achieving absolute security in these different activities is not possible. Evgeny Maslin underlines that the problem of ensuring the security of the nuclear arsenal is related to a class of complicated organizational technical tasks, and the solution has a complex character and that at the present time one may speak with fair certainty of the relatively efficient provision for the security of Russia’s nuclear arsenal, although there are no limits to improvement. Thus, it would be desirable to increase budgetary financing and international aide in the framework of the Global Partnership program.

“On Russian, U.S. and European Cooperation in the Creation of Missile Defense” – in the opinion of the author of this article, Vladimir Dvorkin, despite the presence of a wide area for joint activities on the path towards full cooperation between Russia and the United States in the area of missile defense, there stand, as in other sphere, seri-

ous obstacles in the form of lingering mistrust on the part of ruling elites, the continuation of nuclear deterrence, potential problems in relations with China in the event of the construction of global missile defense, differences in relations with countries the U.S. considers to be outcasts, anxieties over exchanging sensitive technologies and others. The author notes that the Russian Ballistic Missile Early Warning Stations, located in Belarus, Ukraine, Azerbaijan and Kazakhstan, have unique capabilities for tracking the launch of missile in this “belt of instability.” Including these stations in the information contours of a joint missile defense program, after reaching an agreement on real, and not just declared, cooperation would seem completely natural.

“The Role of WMD in the Security of Saudi Arabia” – this article by Charles Machaffey and Yana Feldman, examines the capability and intention of Saudi Arabia to use WMD as an element of its general national defense strategy. The authors note that the weakness of the technical infrastructure currently existing in Saudi Arabia makes it unlikely that the country could realize a program for the development of WMD exclusively on their own. However, if one takes into account the history of the country’s relations and cooperation with nuclear powers, there is a real possibility for the country to acquire WMD from abroad. The authors note that the sensitive nature of the relations of Saudi Arabia and Pakistan with the United States could be used to camouflage secret nuclear cooperation between the two countries. Even if the prevention of such connections is accomplished within the framework of the U.S.-led Proliferation Security Initiative (PSI), its powers may be limited by the reluctance of American politicians to put too much pressure on their allies in the global war on terrorism.

“Gray Zones” in the South Caucasus and the Problem of Proliferation of WMD, Related

Materials and Technologies” –this article analyzes the challenge to the nonproliferation regime stemming from the so-called “gray zones” – territories outside of state control. The authors attempt to answer the question of whether the proliferation of weapons of mass destruction and WMD-related materials and technologies is a part of the illegal activities of the criminal groups, terrorists and their patrons in the gray zones, or is this secondary business not of interest to them?

“Geopolitical Scenarios for the Middle East” – in this article, Sergei Norka asks the questions, what will the Middle East be like as a result of the intervention of the U.S. and its allies in Iraq, and also of the actions of the many players in the Middle Eastern arena? The author concludes that

all events in the Middle East will be planned taking the situation in Iraq into account and in accordance with the "Greater Middle East Concept". This is primarily putting pressure on Iran and Syria, the settlement of the Israeli-Palestinian conflict, control over and neutralization of Islamic fundamentalism and terrorism, the Kurdish problem, and the reduction of anti-American sentiments in the Arab world.

"The Adapted CFE Treaty and the Security Interests of Russia" – this article by Yury Fedorov deals with the question of whether the ratification of the Agreement on Adapting the Conventional Forces in Europe Treaty (CFE) is in Russia's interests, and also what problems will need to be dealt with on way to its realization. The author notes that the entry into force of the Adapted CFE Treaty does not undermine the national security of Russia, and that there is no other legal instrument for limiting the ability of NATO to put its arms and armed forces on the territories of the new member-states of the Alliance close to Russian borders.

"Activities for the Physical Protection, Accounting and Control of Radioactive Materials at Naval Transport Facilities" – in this article, Mikhail Aturin and Valery Yarosh note that the Russian Ministry of Transport and Rosatom have conducted significant works for the drafting of appropriate legislation in the sphere of increasing the security of naval nuclear facilities. Russia has cooperated with foreign countries in this work: in the beginning of 2004, a five-year program for creating the normative base in the area of physical protection, accounting and control of nuclear materials began.

"The Transformation of the Export Control System in Russia" – in this article, Elina Kirichenko and Andrei Frolov examine the basic stages of development of the export control system in Russia. The most attention is paid to those changes that took place after the passage of the Law on Export Control in 1999. The authors note that Russia is currently dealing with a series of problems hindering the further improvement of the export control system. Some of these are connected with the modernization of the separate elements of the Russian export control system; others, with the need to improve the decision-making mechanisms, strengthen enforcement, increase the general business culture in Russia; and thirdly, with internal and external political factors.

Dmitry Yevstafyev's article **"The Legacy of Sredmash in the Relationship Between Moscow and the Regions in the Early 1990's"** looks at federal control over regional nuclear facilities during the period in which the Russian state was being formed. The author notes that the initiative over this control remained with the federal center, which relied on the Constitution of the Russian Federation (of 1993) as the source of prevailing authority in the nuclear sphere, and softened spurts of regional activity through tactical concessions and by channeling their interests in the nuclear sphere into politically safer areas, even at the cost of considerable economic concessions. In the opinion of Dmitry Yevstafyev, the center's tactics proved successful on the whole, and prepared the ground for the political leveling of the potentially unhealthiest aspects of Russian nuclear regionalism after President Vladimir Putin began a series of reforms of the Russian state.

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The PIR Center has published a monograph (IN RUSSIAN)

**“THE NUCLEAR NONPROLIFERATION REGIME,
PRESENT AND PROSPECTS”**

Towards the NPT Review Conference of 2005

The author of the book is Amb. Roland M. Timerbaev, Executive Board Chair and a Consultant at the PIR Center for Policy Studies in Russia. Amb. Timerbaev was a professional diplomat for over 40 years. His last post in 1988-1992 was as Permanent Representative to the IAEA and to other international organizations in Vienna.

The monograph deals with different problems facing the nonproliferation regime today and makes some practical suggestions that may help the Conference to reach a successful conclusion.

Among these problems is the serious concern over the threat of international terrorism and the risk that non-state actors may acquire, develop, traffic in or use nuclear, chemical or biological weapons and their means of delivery, which adds a new alarming dimension to the issue of proliferation of such weapons and poses a threat to international peace and security.

The author states his strong belief that due to the collective efforts of the great majority of nations, the nonproliferation regime is, in its essence, still quite strong, and the major nations are continually looking for ways to improve it, and do, in fact, carry out such measures. Therefore, there is no need whatsoever for any radical changes or reforms of the regime, or, for that matter, for any new nonproliferation strategies.

In the author's opinion, The existence and observance of international norms and mechanisms not only admits, but even presumes a variety of methods for their effective implementation – such as bilateral or multilateral consultations, dialogue, negotiations, etc., and, when necessary, enforcement measures in the framework of international law and under the auspices of the UN Security Council. However, any attempts to use the nonproliferation slogan for self-interested political, economic or any other purposes, that have nothing to do with actual nonproliferation, are quite inadmissible.

The author expresses a measure of confidence that the NPT Conference in 2005 will adopt, on a consensus basis, decisions that will contribute to the further consolidation of the Treaty and of the entire nonproliferation regime. His confidence is based on the conviction that nuclear nonproliferation in all its aspects, as defined by the NPT, is of unwavering significance for international security and is in the interests of all nations, both NWS and NNWS.

*To purchase a copy of the monograph please please, contact Trialogue Company at
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