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Editorial

NONPROLIFERATION REGIMES UNDER ATTACK

The contemporary nuclear nonproliferation regimes face enormous challenges. Among them: North Korea leaving the NPT; speculations about intentions of some statesparties to the NPT, primarily, Iran; failure to make any progress towards universality of the regime; lack of significant progress towards the implementation of "the thirteen steps" of nuclear disarmament; some steps by nuclear-weapons states (NWS) in the opposite direction; new challenges, from non-state actors (international terrorist organizations and organized crime communities), in the form of nuclear terrorism.

Russia is currently in a difficult - and, to some extent, an awkward - position, trying to balance between its view of multilateral disarmament diplomacy as an important tool in a changing world, and the frustration with its low efficiency. There has been a growing temptation in Kremlin to make deals with the US, simply ignoring multilateral fora. But it would be also true to mention another tendency, competing with the US-centric one, which is to re-evaluate role of multilateral arms control mechanisms and find ways to bring a new life in them.

For Russia, nuclear terrorism is not a Hollywood-style scenario. According to the January 2003 statement of the head of the 12-th Main Directorate of the Defense Ministry Gen. Valynkin, who is in charge of nuclear weapon security, "the information we have obtained indicates that international terrorists have been looking for opportunities to get unauthorized access to [Russian] nuclear facilities and to provoke acts of terrorism and sabotage using nuclear devices".

Nuclear terrorism is considered to be a major threat - internationally and specifically in Russia. It could have forms of unauthorized access to nuclear devices (weapons); sabotage of nuclear installations, primarily, NPPs; unauthorized access to

weapon-grade fissile materials; or use or threat to use of radioactive sources. In each case, causalities among the population and psychological effect would be disastrous. Russian government experts have implemented a detailed analysis of possibilities and consequences of acts of "megaterrorism" and came to a conclusion that nuclear terrorism, at least in one of its faces, is a real and present danger.

In my assessment, the most threatening trend is cooperation (or coordination) between various non-state actors, in particular, between international terrorist organizations and organized crime communities. With a tremendous increase in their financial power in recent years, non-state actors have become more aggressive in their attempts to get access to (or to develop by themselves) weapons of mass destruction, including a "dirty bomb" scenario. To achieve the most impressive psychological effect, mega-terrorists would most likely try to combine "traditional" terrorism with the use of some WMD components (like CW) with a cyberterrorist act, aimed at paralyzing computer networks.

It is not clear to what extent non-state actors enjoy support, directly or indirectly, from some "states of concern". There are indications that several links existed in the past, and a possibility that such links have not disappeared, should not be ignored, but further investigated.

In 1995, after the NPT Extension conference, one of experts made a juicy statement at a seminar that "the surgery went well, the patient is alive, but he is in the emergency room".

In 2003, the patient is again in the emergency room, if of course he has ever left it. It is unlikely that he will need another surgery. What he really needs is everyday treatment based on already prescribed medicines.

Hot Topic

IRAN'S MISSILE AND NUCLEAR CHALLENGE: A CONUNDRUM FOR RUSSIA

By Anton Khlopkov, Deputy Director, PIR Center; Vasily Lata, Senior Advisor, PIR Center

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The news of a uranium enrichment plant in Iran came in September 2002 has not only elicited the serious concern of the United States and Israel, but also came as an unpleasant surprise for Russia. IAEA Director-General Mohamed ElBaradei's visit to Iran in February 2003 confirmed the considerable progress Iran has made in constructing a centrifuge uranium enrichment plant. It has become obvious that Iran has moved considerably further in the development of nuclear power engineering than was thought earlier. If just one year ago Iran's nuclear fuel cycle seemed more virtual than real, given that nearly all stages in the cycle were absent, the information of recent months has made clear that it now has developed into a coherent whole.

The findings of this study, based on Iranian, American and Russian sources, do not claim to be completely accurate. However, they make it possible to gain some insight into the degree to which Iranian nuclear physics knowledge has progressed, the time required for the country to acquire the materials and technologies needed to create nuclear weapons, as well as the danger this may present for Russia. The paper also contains recommendations on how Russian policy towards Iran should be formulated in the given circumstances.

The Iranian Nuclear Fuel Cycle

Uranium Mines

Iran's first uranium mines were opened in 1985, in Yazd province.¹ Previously, it was thought that they covered an area of some

100-150 km², and contained reserves of approximately 5,000 tons (t) of low grade ore, with a grade of just 0.1% uranium.

Data from the Atomic Energy Organization of Iran (AEOI) that has recently become available indicate that uranium reserves are considerably smaller than estimated earlier, and total about 850 t, while the ore on average contains just 0.05% uranium (that is, 100 kg of ore yield just 50 g of uranium – the rest is dirt). According to estimates made by the IAEA in 2002, there are about 500 t of proved ore reserves, and about 900 more tons of probable reserves (with regard to which only rough estimates have been carried out).

At present, according to the AEOI, work is being conducted at two uranium deposits. The first is estimated to have some 785 t of uranium reserves, while the second has reserves of about 70 t. The first deposit occurs at a depth of 300-400 m. This, together with its low uranium content, will affect the cost of nuclear power plant fuel production. The IAEA estimates that this cost will be unacceptably high, exceeding current world prices by some three to five times. The cost of nuclear fuel from uranium mined at the second site, despite the relatively shallow depth of the deposit, will not be less expensive, given the miniscule quantity of reserves by the standards of nuclear power engineering. If Iran decides to use these proved uranium reserves for an NPP, one operating WWER-1000 reactor will completely use up the reserves in just six years.

At various times specialists from Argentina, Germany, Czechoslovakia, Hungary, and Russia have been employed in the investigation of Iran's uranium deposits. The greatest contribution was made by Chinese specialists, who were part of a joint working group in the early 1990s consisting of 600 Iranian and Chinese specialists working on rotation. At present there are 23 Iranian experts and 77 engineers and laborers doing preparatory work at the deposits. Before industrial exploitation of the mines begins, plans call for increasing the number of personnel to 233.²

Uranium Ore Processing Plant

Large-scale studies of the process whereby ore is separated from dirt (mechanical processing) were begun soon after the end of Iran-Iraq war. In 1989 Iran announced the signing of a contract worth \$18 million with Argentina for the construction of a whole series of structures near the uranium deposits, including a plant for processing uranium ore. However, under pressure from the United States, the contract was voided three years later. In the mid-1990s, Russia prepared technical designs for the construction of a plant with the capacity to process 100-200 t of ore per year. However, the project was never realized. According to available data, after that date Chinese specialists assisted in the creation of an ore processing plant near the city of Ardakan; it is scheduled to be put into operation in 2005.

Taking into account the volume of uranium reserves (about 850 t), and also the AEOI estimate that after the mines begin industrial operation in 2005 it will take 17 years to exhaust their resources,³ it is possible to conclude that, most likely, the planned ore processing plant is designed to obtain 50 t of natural uranium per year, while the preparation of fuel for one WWER-1000 reactor requires three times more.

"Yellowcake" Production Plant

In 1992 a pilot milling plant for the production of uranium concentrate ("vellowcake") was built at Saghand University's Hydrometallurgical Research Center, located in Yazd province, where the uranium deposits are found. The purpose of the pilot plant was the determination of the optimum parameters and technical characteristics for an industrial-scale yellowcake production plant. In 1995, according to AEOI information, the plant was reconstructed and considerably extended with the aid of a Russian institute. Simultaneously, a design for an industrial plant was developed. According to a February 2003 statement by Ali Akbar Salehi, Iran's representative to the IAEA, the yellowcake production plant located in Yazd province, not far from the uranium mines near the city of Ardakan, is ready.4 Evidence from Iranian sources regarding the plant's location is contradictory. Some sources indicate that it is located in Isfahan.

Uranium Conversion Plant

During the course of IAEA inspections in November 1996 at the Isfahan Nuclear Research Center, Iran informed the Agency of plans to construct a uranium conversion plant at the Center. The plans called for Chinese specialists to provide a facility for the conversion of uranium oxide (U₃O₈) into

uranium hexafluoride (UF6), which is a gaseous substance used in centrifuge enrichment. A year later the transaction was cancelled by the Chinese under pressure from the United States. In a letter to U.S. Secretary of State Madeleine Albright on 30 October 1997, China's Minister of Foreign Affairs Qian Qichen promised to end plant construction. However, technical documentation on the plant, including a blueprint, was probably transmitted to Iran, allowing Iranian specialists to independently finished building the facility. Later, in 1998, the two countries conducted negotiations regarding the delivery of hydrofluoric acid (HF), which is used in uranium conversion, to the Isfahan Nuclear Research Center.

According to a statement by Iranian vice president and AEOI head Gholamreza Aghazadeh, the plant was to begin operation in the summer of 2003. The commissioning of the plant opens a direct route for Iran to enrich uranium. Plans call for the latter to occur at a plant in Natanz (located in central Iran, 40 km from Kashan and 150 km from Isfahan).

Uranium Enrichment Plant

Iran's interest in centrifuge enrichment first became known in 1995, when Iran requested that the possible delivery of enrichment technology to Iran be added to the protocol of negotiations between Minister of Atomic Energy Viktor N. Mikhailov and AEOI head Reza Amrollahi. Obviously, at the time Iranian specialists did this they were guided by the Russian-Chinese agreement on the construction of a centrifuge enrichment plant, signed three years earlier. After the Russian minister's return from Iran, Moscow made the unconditional decision to halt discussions on the centrifuge issue and conduct no further negotiations with Iran on the subject. At the same time, it cannot be excluded that Chinese specialists transmitted technical information on the Russian centrifuges, which began to operate in China in 1996. Other information suggests that the development of gaseous centrifuge technology in Iran was accomplished with the assistance of Pakistani specialists in the first half of the 1990s, and the aid of North Korean specialists during the second half of the decade.⁵ In the latter case engineering may have been conducted in North Korea with the participation of Iranian specialists, and using Iranian funds. The two countries used this

method for work on missiles. Iran financed the design of a new, modified version of the *Scud-B* missile in North Korea on the condition that a significant number would be delivered to it.⁶ The fact that information about the presence of centrifuge enrichment programs in North Korea and Iran appeared at approximately the same time – in October and December 2002, respectively – is quite suggestive.

IAEA Director-General According to Mohamed ElBaradei, who visited the uranium enrichment plant under construction in Natanz, the pilot centrifuge enrichment plant is nearly ready for operation.⁷ At that time, according to the IAEA inspectors' data, about 160 centrifuges were operational and there were components for another 1,000. In all, according to press releases, 5,000 centrifuges are planned for the facility by 2005.8 At the same time, according to some estimates, the production of enough nuclear fuel for seven 1,000-megawatt (MW) power units⁹ requires ten times more;10 that is, the planned number of centrifuges will not be enough for the operation of even one Russian WWER reactor.

During the course of a year, these 5,000 centrifuges will presumably be able to produce enough highly enriched uranium for not more than two nuclear explosive devices, which, given the United States' "close attention to the site" and the fact that the plant will be put under IAEA safeguards, makes its use for these purposes unlikely, since a shift of half of the facility's capacity from peaceful to military purposes under the circumstances is improbable. According experts, one could conceal on average up to 1% of the nuclear material under IAEA monitoring under the terms of the safeguards agreement based on INFCIRC/153,11 from which it follows that the possibility of concealing from international inspectors nuclear materials of sufficient volume to create one explosive device would require the presence of 250,000 centrifuges, while the Natanz complex is large enough for about 50,000 centrifuges.

Iran's centrifuges most likely are built out of aluminum alloy. It is possible that a Russian consignment of this high-strength material, which was sent in the beginning of 2001 for aircraft production, was used for the centrifuges. The production of aluminum cen-

trifuges is quite simple, but they are the least productive in the industry. More advanced centrifuges are made from titanium alloys or alloyed steel, while the most recent (sixth) generation of centrifuges are made of fiberglass reinforced with graphite threads. An examination of Iran's sources of materials for centrifuge construction should also mention the March 1998 detention on the Azerbaijani-Iranian border of a consignment of 22 tons of alloyed steel, which certain persons were attempting to illegally export to Iran. The steel had come from Russia and was transiting Azerbaijan on the way to Iran.

The enrichment plant, which is being actively built in Natanz, is apparently supposed to become an industrial-scale uranium enrichment facility. The plant under construction is partially underground and has, according to media reports, 2-3 meter thick walls, which Iranian specialists believe should be able to protect it in the event of a preventive strike.

Fuel Fabrication Plant

At present there are a series of laboratories for the study and production of nuclear fuel at the Isfahan Nuclear Research Center. One of them, according to the AEOI, is producing experimental fuel for WWER reactors. According to the same source, the construction of an industrial-scale fuel fabrication facility is already planned. There is no reliable information about the location or stage of construction, however, the facility will probably be located near Isfahan.

Fuel Element Cladding Production Plant In the mid-1990s, China promised to build a plant to make zirconium pipes in Isfahan. These pipes are used to fabricate cladding to encase nuclear fuel rods. When China promised the United States that it would cease cooperation with Iran in the missile and nuclear spheres, it said its specialists nevertheless would complete construction of the zirconium production facility in Isfahan. The plant was originally scheduled to be finished by the end of 1999. However, as of May 2003 construction was continuing, but was close to completion.

Even the most preliminary survey of nuclear fuel cycle facilities completed or under construction in Iran indicates that the nation has made considerable progress in the creation of a complete nuclear fuel cycle. According to current estimates, if all of the planned facilities (see Table 1) are brought into industrial use Iran will be able independently to produce NPP fuel by 2005. At present the only aspect of the closed fuel cycle about which there is no information concerns the location where a spent nuclear fuel (SNF) reprocessing facility might be constructed.

There are, however, a large number of contradictions between the technical characteristics of the nuclear facilities that have been constructed, or the construction of which is nearly complete, and the declared goals of Iran's nuclear energy development program.

- 1. When brought into operation, the uranium mines and ore processing plant will only be able to provide one third of the uranium needed for a WWER-1000 reactor.
- If the problem of insufficient ore processing capacity is solved and Iran decides to use its own uranium ore for NPP fuel, one WWER-1000 reactor will use up proved uranium reserves in six years.
- 3. The planned capacity of the gas centrifuge uranium enrichment plant is not enough to produce fuel for even one WWER reactor.

Thus, the productivity of the facilities under construction are not only incapable of satisfying Iran's demands for nuclear fuel in the long term (plans call for the construction of seven 1,000 MW reactors by 2021), but even in the short term, when a single WWER-1000 reactor will come online at Bushehr. This raises a question regarding the aims of creating these nuclear fuel cycle facilities if they are not going to be used for energy production, and the nuclear fuel that they create costs some three to five times more than the average world price. Another question concerns the justification for a heavy water production plant, now under construction in Arak, since Iran only has one research reactor, located at the Isfahan Nuclear Research Center, that uses heavy water, and very little at that. The construction of Canadian CANDU reactors in Iran in the near future is very unlikely, despite Iran's interest in

It is well known that for two decades Iran has been trying to acquire a heavy water reactor, and that this is the type of reactor most suitable for the production of weaponsgrade plutonium. In the mid-1980s, the construction of a 10 MW heavy water-moderated Indian research reactor was considered. In the early 1990s, Iran acquired a heavy-water reactor from China of near-zero capacity, which was not suitable for plutonium pro-

Table 1
Iran's Nuclear Fuel Cycle Enterprises

Facility	Location	Stage
Uranium mines	Ardakan, 200 km from Isfahan	Bore-hole drilling has begun. The beginning of operations is planned for 2005
Ore processing plant	Ardakan	May begin operation in 2005
Yellowcake production plant	Ardakan (or Isfahan)	Ready for operation
Uranium conversion plant	Isfahan	The beginning of operations is planned for summer 2003.
Uranium enrichment plant	Natanz, 150 km from Isfahan	A pilot cascade may begin operations in the near future.
Fuel fabrication plant	Isfahan (presumably)	There is no information on this facility. However, a research laboratory in Isfahan is already producing experi- mental fuel.
Fuel element cladding production plant	Isfahan	Plant construction is nearing completion.

duction, but which made it possible to simulate the operation of a large-scale heavywater reactor. In the second half of the 1990s, AEOI conducted negotiations regarding the purchase of a heavy-water research reactor (according to some sources, a 40 MW reactor) from Russia. Iran's original argument for the construction of this type of reactor, that Iran was not interested in the development or purchase of enrichment technologies and therefore wished to purchase a heavywater reactor, cannot be taken seriously given the on-going construction of an enrichment plant at Natanz.

There are several possible explanations for this sort of contradiction between Iran's stated nuclear power development aims and the facilities currently under construction.

The first is that Iran does not plan to create a large-scale closed nuclear fuel cycle, which would ensure the self-sufficiency of the country through the operation of seven 7,000 MW nuclear power reactors. In this case the active development of the nuclear industry aims at the acquisition of technology and high-technology equipment without the creation of industrial-scale uranium production, uranium conversion, and the fabrication of nuclear fuel for NPPs.

The renunciation of industrial nuclear plant construction, particularly of facilities of proliferation concern like a uranium enrichment plant, could be an attractive bargaining chip, primarily with the United States, on the "North Korean model." Repayment for the renunciation of an enrichment complex could consist of removing the one-sided American sanctions against Iran, developing valuable trade and economic cooperation, including large investments in the Iranian economy, and providing Iran access to peaceful nuclear technology. By imitating the creation of a closed nuclear fuel cycle, the present government of reformers is simultaneously pursuing domestic political goals. Given the current fragile balance between moderate and hard-line forces in the country, moderate Iranian leaders may be able to use successes in this high-tech branch to strengthen their position among the population at large. It is no accident that the main Iranian reformer, President Mohammad Khatami, announced the results achieved in the nuclear sphere on the anniversary of the Islamic revolution. Minatom estimates favor this last explanation. In the words of Deputy

Minister of Atomic Energy Valery Govorukhin, the Iranian statement regarding the beginning of uranium deposit exploitation "is, most likely, political in nature, since it cannot be reinforced by the country's technological and financial capabilities." At the same time, the goal of increasing the country's status in the region can be pursued.

The second explanation is that the country is developing nuclear technologies in order to acquire the technical capabilities to build nuclear weapons. If this is the case, Iran could go quite far without violating its international obligations. In particular, Iran has the right to produce highly enriched uraniand generate, separate and weapons-grade plutonium under IAEA supervision. In this scenario, Iran would be able to obtain the technical and material ability to build a nuclear weapon just several months after having accumulated sufficient quantities of weapons-grade nuclear materials. The political decision to use the accumulated reserves of nuclear materials for the creation of a nuclear weapon might be made if Iranian-American relations worsen further and the United States prepares for an operation to overthrow the current regime in Iran, or as a result of the U.S. or Israeli bombing of Iranian nuclear facilities; that is, if scenarios that the present U.S. administration has not excluded are realized.

The fact that Iran's nuclear fuel cycle facilities, from the uranium mines to the uranium enrichment plant, are concentrated around Isfahan (within a radius of 200 km) further supports this second explanation. Launchers for the *Scud-B*, *Scud-C*, and *Shehab-3* attack missiles, which have a range of 300 to 1,300 km, are located in the same region.¹⁶

The study of open source information, primarily from the AEOI, poses a whole series of questions regarding the aims of nuclear energy development. These questions demand answers from Iranian experts. The first question is where and for what purposes will the ore, which is soon to be mined near Ardakan, be used? Its use for nuclear fuel production is extremely uneconomical.

The second question is for which reactors will the fuel at the plant in Isfahan be produced? As indicated above, the planned nuclear fuel cycle facilities cannot produce the quantity of fuel needed for even one power unit at Bushehr. In addition, Iran's representatives themselves have stressed that Russia will supply the fuel for the Bushehr NPP.¹⁷

The third question is where will the heavy water that will be produced in the Arak plant be used?

Iranian specialists will answer many of these questions if Iran signs the Additional Protocol. At least, it obligates them to do so.

Strengthening IAEA Safeguards In Iran

For several years, in parallel with its development of nuclear technologies, Iran has repeatedly come out in support of strengthening IAEA safeguards. Proposals for the strengthening of these safeguards include the signing of the IAEA's Additional Protocol and the broadening of technical collaboration between member states and the Agency itself. Iran's position is that both must be realized simultaneously, in order to raise the level of confidence between member states and the IAEA and increase the transparency of member states' nuclear power programs on the one hand, and contribute to the development of nuclear power engineering in these countries on the other. The maintenance of a balance between the IAEA's roles of "controller" and "assistant" is a necessary condition for strengthening the safeguards regime. Further, Iran takes the position that there must be a proportional increase in the funding of Agency technical assistance programs along with the strengthening of safeguards.

One more issue that Iran regards as crucial when considering how to strengthen IAEA safeguards, is the need for a nondiscriminatory approach to nuclear power engineering cooperation, as well as the nondiscriminatory and uniform application of the Additional Protocol to the nuclear facilities of all countries, including nuclear-weapons states, and also of those countries that are not parties to full-scope IAEA safeguards, including Israel first and foremost. In Iran's opinion, the question of the universality of the safeguard system, and of the nonproliferation regime as a whole, is one of the major problems standing in the way of strengthening the IAEA.

For several years Iran has spoken out in favor of strengthening safeguards, but at the same time held back from signing the IAEA Additional Protocol.

The question of Iran's signing the Additional Protocol was one of the central issues during the visit of IAEA representatives to Iran in February 2003. According to Agency Director-General ElBaradei, "Iran has developed a fuel cycle program sophisticated enough to warrant that the IAEA obtain as much authority and as much information with respect to Iranian nuclear research, as possible."

However, during his visit to Tehran he was not able to persuade Iran's representatives to sign the protocol. AEOI head Aghazadeh said that too few countries had signed the protocol. Earlier, Iran's representatives had announced that Iran would be neither the first nor the last in the region to join the Additional Protocol.¹⁸ At the time, Aghazadeh said that the Iranian program "will be under the oversight of the IAEA, but we will leave the road open to the Additional Protocol in the future."

Russia has consistently raised the question of Iran's signing the Additional Protocol during the course of bilateral talks. For instance, Russian Deputy Foreign Minister Georgy Mamedov indicated the necessity of Iran's joining the Additional Protocol as soon as possible in his meeting with Gholamreza Shafei, Iran's ambassador to Russia, on April 14, 2003.²⁰ The importance of strengthening IAEA safeguards also were emphasized in the joint statement by Russian Foreign Minister Igor Ivanov and Iranian Foreign Minister Kamal Kharazi on March 12, 2003.²¹

It is indicative that Iran's reservations regarding the Additional Protocol are no longer fundamental in nature. The question that remains concerns the preferences the country will obtain from its signature. Thus, according to Iranian Foreign Ministry spokesman Hamidreza Assefi, "many countries want Teheran to sign this document, and we are ready to conduct negotiations in this area. However, it is necessary to clarify the benefits that Iran will receive."22 It is very much likely that Iran will have signed the Additional Protocol prior IAEA General Conference meeting in September 2003, but it is very unlikely that Iran will ratify the Protocol soon.

During his visit to Iran, ElBaradei was able to make some progress with respect to Iran's preliminarily informing the Agency about its plans to construct new nuclear plants. AEOI representatives agreed to declare their facilities at an earlier stage. In accordance with the Subsidiary Arrangement to the Agreement with the IAEA for the Application of Safeguards, to which Iran acceded in 1974, time limits were established within which the Agency had to be given information regarding new installations. Iran was obligated to provide such information not less than 180 days prior to the introduction of nuclear material into the installation. Thus, from a formal point of view, Iran's construction of an enrichment complex in Natanz does not violate the country's obligations to the Agency, since nuclear materials have not yet been delivered to the plant, and preliminary information regarding plans to build the plant were sent to the IAEA in August 2002, or more than six months ago. However, during the February 24-26, 1992 session of the IAEA Board of Governors, a number of other measures for strengthening safeguards was examined besides the Additional Protocol. In part, the decision was made that member states should inform the Agency about new installations as soon as a decision regarding their construction is made. Until recently Iran did not adhere to this Board of Governors decision. The change of the Iranian position on this issue achieved during ElBaradei's visit to Tehran should be recognized as an important breakthrough that will strengthen IAEA safeguards in Iran.

If Iran signs the IAEA Additional Protocol, according to Article 2.a.(x) of the Model Additional Protocol, within 180 days from the moment the Protocol enters into force Iran will have to present an expanded declaration to the Agency that contains its "general plans for the succeeding ten-year period relevant to the development of the nuclear fuel cycle (including planned nuclear fuel cycle-related research and development activities) when approved by the appropriate competent authorities."

Iran's Missile Capability

Along with the development of nuclear technologies, Iran has paid particular attention to the acquisition of a missile capability. Iran's missile industry is one of its most dynamically developing branches, to which it has dedicated large funds and numbers of technical personnel. The current presence of thousands of American troops in the region, beyond doubt, is a serious stimulus for Tehran's acceleration of its missile development program. Iran is surrounded by land

borders on all sides: American bases are located in Saudi Arabia, Iraq, Turkey, Pakistan, and Afghanistan, and the American presence in two others Iranian neighbors, Azerbaijan and Turkmenistan, has been strengthened. Under the circumstances, Iran has been forced to search for a counterweight to the American presence in the region. A missile capability is the only way for Iran to restrain the United States, which possesses an incomparably large conventional military capability.

At present the armed forces of Iran have about 40 launchers for theater missiles, including Scud-B and Scud-C ballistic missiles.

The Scud-B ballistic missile, which was developed and produced in the USSR, is a mobile system with a guided theater missile that entered service in 1987. The launcher is mounted on a Chinese tractor, and can be moved at a rate of 60 km/h.

The Scud-C ballistic missile was developed in North Korea with Chinese technical support and entered service in 1992. It too is a guided missile used with a mobile launcher mounted on a Chinese tractor. In peacetime these mobile launchers are on standby alert at operational bases, while in times of war they are at launch readiness, and are periodically exchanged.

The capabilities of the *Scud-B* and *Scud-C* ballistic missiles found in Iran's arsenal are presented in Table 2.

Table 2
The Tactical and Technical Characteristics
of Iranian Missiles

Characteristics	Scud-B	Scud-C
Maximum range, km	300	550
Payload, kg	1,000	700
Accuracy, m	450	1,000

Missile payload can be something other than conventional explosives.

Together with its medium-range missiles, Iran has tactical ballistic missile complexes, including the *Luna-M*, *Nazeat-10* and *Okhab*.

The Luna-M ballistic missile was developed and produced in the USSR in the beginning of the 1970s, and is a ground-based mobile

unit, with a maximum range of 65 km. It is capable of delivering a conventional 420 kg high explosive warhead this distance.

The Nazeat-10 ballistic missile was developed in Iran with the technical assistance of China, but is produced in Iran. Plans call for it to be mounted on a mobile ground-based complex. It has a range of 150 km and a conventional 250 kg high explosive warhead.

The *Okhab* ballistic missile was also developed in Iran with the technical assistance of China and is mounted on a similar mobile ground-based tactical complex. It has a range of 34 km and a warhead weighing up to 170 kg equipped with conventional high explosives.

On July 15, 2000 a successful test of an Iranian Shehab-3 missile was carried out, testifying to the country's ability to manufacture ballistic missiles. This was the missile's second flight test. The first test, which took place in July 1998, ended with the explosion of the missile during the test. The Shehab-3 is a single-stage ballistic missile, capable of carrying a 1 t warhead a maximum range of 1,300 km. The missile has an impact accuracy of about 2 km. In the opinion of a number of experts, this missile was developed on the basis of Scud-C technologies and the North Korean Nodong missile. With this range the missile is able to strike almost all regions of the Middle East, including Israel, and also some regions of Russia, depending on the launch site. The launchers of Iran's forward-based missiles are located in Isfahan and near Hamadan.

The appearance of the Shehab-3 missile in Iran's arsenal indicates a qualitative change in the threat not only for Israel, but also for Russia. The missile's range already allows it to strike Russia's southern regions, in which more than 20 million people live, including the provinces of Volgograd and Astrakhan. Iran's missile capabilities are presented in Figure 2.

At present Iran is working on increasing the range of the *Shehab-3* ballistic missile. This may involve the use of more powerful accelerators or a reduction in payload mass. It may be technically ready for deployment by 2005, and will be a multiple-stage missile.

In addition, Iran is working on the development of the *Shehab-4* missile, with a range of 2000 km and a heavier warhead,

capable of carrying a biological or even nuclear payload. There are reports that Iran is attempting to acquire China's *M-9* missile technology.

Iran is also conducting work on the development of the *Shehab-5* missile, which will act as a medium-range intercontinental ballistic missile (ICBM), with a range on the order of 4000 km.

By 2005 Iran also plans to develop:

- Theater missiles based on M-11 technology, with Chinese assistance, that have a range of 300 km and a conventional 800 kg warhead;
- Zelzal-2 theater missiles, with the technical assistance of North Korea, that have a range of 200 km and a conventional 600 kg warhead.

In 2005, when its nuclear fuel cycle facilities become operational, Iran's armed forces will include: 16-20 launchers with 80-100 *Nazeat* missiles; 40-60 launchers with 200-300 tactical *Okhab* missiles; as well as 24 launchers with 150-180 *Scud-B* theater missiles; and 4-6 launchers with 10-20 *Shehab-3* missiles.

In the more distant future, in 2010, Iran may have up to 16-20 *Shehab-3* launchers. In addition, Iran plans to develop a promising IRBM that uses technology from the North Korean *Taepodong-2* IRBM by 2010. It will be launched from a stationary ground-based missile complex, and will have a range of 4000 km and a 2000 kg warhead. Plans call for a separable warhead that can carry either a conventional or, possibly, a chemical payload.

Iran's missile program is characterized not only by a rapid increase in the number of delivery vehicles, but also by their qualitative development. While the first tactical missiles, the *Luna-M*, *Nazeat*, and *Okhab*, were unguided and inaccurate, the *Scud-*, *Shehab*, and *Zelzal-*class missiles, and the promising IRBM, will have substantially higher performance characteristics.

Thus, Scud-B and Scud-C missiles have a considerably larger launch weight and payload mass, as well as increased accuracy, hitting a target through the use of an inertial guidance system. These missiles complexes have the option of remote control, monitoring and launching, including remote retargeting of launchers through the use of launching and mobile command post equip-

ment. Retargeting takes 15 minutes. Preparation and pre-launch operation time has been substantially reduced. The time needed for a repeat launch has been reduced to 1-2 hours.

As far as the promising IRBM is concerned, along with a separable warhead, this missile possesses greater accuracy due to an inertial guidance system. Its increased range (up to 4000 km) and warhead mass (up to 2000 kg) makes it possible to deliver strikes on facilities at a significant distance from missile bases.

Recommendations for Russia

The above estimates indicate that by 2006, one year after the enrichment complex at Natanz has become operational, Iran will have acquired the technical capability to join the club of states that possess nuclear missile capabilities. Under these circumstances, questions regarding Russia's position on further cooperation with Iran in the nuclear and other spheres, and what actions Russia should undertake to decrease the possible negative consequences of Iran's development of its nuclear industry, are unavoidable.

Russia should tie the continuation of cooperation with Iran in the nuclear sphere to the country's signing and ratification of the IAEA Additional Protocol. Russian representatives, conducting negotiations with Iran on various ways to improve cooperation, including in the peaceful use of nuclear energy, invariably raise the question of the nation's accession to the Additional Protocol. Russia is experienced in conducting "critical" dialogues with Iran. In 1995, when the Nuclear Non-Proliferation Treaty was extended, Russia was able to convince Iran not to block an indefinite extension in exchange for the continuation of cooperation at Bushehr. Under the current circumstances, Russia must stiffen its position on Iran's accession to the Additional Protocol and directly link further cooperation in the field of nuclear power engineering to the resolution of this question. If Tehran signs and ratifies the Additional Protocol, Russia will most likely face serious competition on the Iranian NPP market; however, economic and political expenses could prove far higher, if Iran continues to remain outside the protocol.

During negotiations with AEOI representatives, Russia should strictly adhere to the position defined by Minister of Atomic Energy Aleksandr Rumyantsev and later confirmed by President Vladimir Putin regarding the return of SNF from the Bushehr NPP to Russia. Negotiations over the details of the protocol on the return of SNF have been going on a long time; however, to date no agreement has been signed. In August 2002, there were statements to the effect that the protocol on SNF return would be signed in September or October. After Rumyantsev's visit to Iran in December of the same year, they said they would be ready to sign the protocol within a month. However, it remains unsigned.

The most likely reason for the protracted negotiations is the search for mutually acceptable provisions governing the procedure for SNF storage in Iran and the time frame for its removal. It is well known that Russia, under pressure from the United States and Israel, wants to reduce this period to the minimum required from a technological point of view. Normally this means a three-year period of SNF storage in cooling ponds near the NPP.

In case the Iran SNF return procedure is agreed upon within a shorter time, it is evident that the US must bear expenses for manufacturing of special "thicker" containers for safe transport of SNF to Russia and, possibly, provide Russia with technological support in solving this issue. According to certain information Minatom of Russia and the US Department of Energy have been already conducting consultations on this problem.

Russia need not phase out the construction of light-water power reactors in Iran. WWER-1000 reactors cannot be used for the creation of nuclear weapons. The only case in world history of the creation and testing of a warhead with a payload of nuclear power-derived plutonium was in 1962. It took 15 years of experiments and 62 full-scale tests for the United States to create and successfully test a nuclear warhead from plutonium that was isolated from SNF from the British Magnox reactor. However, this reactor is loaded with natural uranium, which makes the isotopic composition of the resulting pluconsiderably more similar weapons-grade plutonium than plutonium from a light-water reactor. In Iran, even taking into account the considerable progress this country has made in the field of nuclear

power engineering in recent years, similar technical capabilities are absent.

For Russia, the economic desirability of building an NPP in Iran is obvious. The total cost of building one power unit is more than \$1 billion. About 300 Russian enterprises participated in the construction of the Bushehr NPP. According to some estimates, the contract to complete the nuclear reactor in Iran created about 20,000 jobs. The contract to produce components for the Bushehr NPP is providing 70% of the work for the firm Izhorskiye Zavody, and resulted in a four-fold increase in average wages at the plant in 2002 alone, while the state budget received 3.5 times more in taxes.

Russia must also pay special attention to the control of exports from domestic enterprises that manufacture products and services of proliferation concern, and also to scientific research centers that have scientific and technical secrets in the nuclear and missile sphere.

In the past, Iran has repeatedly attempted to acquire illegally high-tech equipment that can, in part, be used for creating weapons of mass destruction and means of their delivery. In 1997-98, Russia's FSB curbed a whole series of attempts to bypass the export control system and acquire missile technologies, including missile engine and guidance system components. There is information about the Russian (and Ukrainian) experts - former employees of government-owned missile and aircraft building enterprises and left today without work and money for a decent living who go to Iran as tourists where they participate in research and development related to missiles. In January 1999, the leadership of the Scientific Research and Design Institute of Energy Technologies (NIKIET) curbed the unsanctioned contact of several institute employees with Iranian specialists. In addition to this, in December 2001, FSB Director Nikolai Patrushev stated that there had been increasingly frequent discoveries of people employed in Russian government bodies and the "power" ministries (those ministries with troops at their command, such as the Ministries of Defense and Interior as well as the FSB) "taking the initiative" and attempting to establish criminal contacts with the special services of other countries, including Iran.

Russia should be more active in the official level discussions of the Iran's missile and nuclear dossier in the bilateral working group format Russia-USA and Russia-EU.

It is obvious that Russia, the United States, and EU cannot independently check the development of Iran's nuclear and missile programs. The problem of the absence of hard information on the Iranian nuclear fuel cycle was noted by Russian Minister of Atomic Energy Aleksandr Rumyantsev. The isolation of Iran and, as a result, the shortage of information about domestic developments there, has a negative effect on the entire international security system.

The international organizations that are trying to monitor the situation, including the IAEA, face the same difficulties. It is therefore no surprise that high-ranking IAEA representatives are interested in any information about the Iranian nuclear program that is received from Iran itself. Thus, high-ranking IAEA representative, who accompanied ElBaradei on the trip to Iran in February 2003, asked the PIR Center for a transcript of a press conference dedicated to the Iranian nuclear program that was held immediately after PIR Center Director Vladimir Orlov visited Iran.

Bilateral Russian-American working groups on nonproliferation and export control issues had already existed, but were abolished at the initiative of the United States upon the arrival of the Bush administration.

In order to effectively carry out this task, we must first increase mutual confidence. To date, the United States has considered the transmission of confidential Russian information to it as its due, and used information thus obtained exclusively in its own national interests, often to the detriment of Russia's. Thus, in 1997, soon after the Russian Federation Security Council gave the United States a list of Russian organizations suspected of missile technology cooperation, the Americans imposed unilateral sanctions on them. After the confidential transfer of the names of two Russian missile specialists suspected of making an unsanctioned trip to Iran, one of the largest American newspapers published an expanded interview with one of these "heroes."

One of the issues the bilateral commissions should address is the sources providing sensi-

tive technologies to Iran. Where is the technology coming from? There is a whole series of suspect countries that can be listed as the most active "proliferators." These include Pakistan, North Korea, and China. In order to develop certain nuclear technologies, Iran may have followed its own "missile" example, whereby the country financed the development of a new, modified model of the *Scud-B* missile in North Korea on the condition that a significant quantity be delivered to Iran.

There is also evidence that Iran's missile and nuclear programs use the technologies and support of Western firms. "We have this information, and we are ready to provide it to our partners," President Putin stated in one of his addresses. According to the Minatom of Russian and the US Department of Energy top officials' statements, the centrifuge technologies could get to Iran from Europe. In particular, they might have been owned bv German-British-Dutch the Consortium URENCO. U.S. Assistant Secretary of State John Wolf, too, has recognized the existence of a problem with the leakage of technologies from the United States to Iran.

Multilateral consultations on Iran's missile and nuclear programs have already been under way at the non-governmental level.

However, at the present time there are no good reasons making it worthwhile for Russia to harm its trade and economic relations with Iran, in spite of tempting proposals from the United States. The promises of the United States to compensate for Russia's losses in the Iranian market thus far are only promises. Will money really flow into Russia, if it forgoes collaboration with Iran? This is far from certain. Many remember the story in the Ukraine, when in March 1998 official Kiev rejected participation in the Bushehr project in exchange for American promises to compensate for these losses in the form of an increase in assistance to Ukraine's energy sector and the placement of American orders at Kharkov's Turboatom enterprise. This was the enterprise that was supposed to build the turbines for the Iranian NPP. After Ukraine's refusal to participate in the Bushehr project, the Americans soon forgot their promises, and as a result the enterprise lost \$5.1 million dollars (the sum spent on the development of the turbine.) In total, as a result of nonparticipation in the Bushehr project,

Turboatom failed to earn about \$40 million. Ukraine waited for compensation from the United States for four years, and then, during Iranian President Khatami's visit to Kiev, agreed to renew cooperation in the nuclear sphere. In the beginning of 2003, 40% of the construction occurring at Bushehr NPP was being done by Ukrainian specialists.

On the eve of the May 2002 presidential summit in Moscow, Richard Pearl, the head of the Council for Defense Policy at the U.S. Department of Defense, proposed erasing the debts Russian inherited from the USSR in exchange for its refusal to cooperate with Iran in the nuclear sphere. Since Russia's obligations to the United States for Soviet debt total about \$3 billion, this proposal alone can hardly interest Moscow: the cost of one reactor is about \$1 billion, and Iran plans to build seven.

Moreover, it would be wise to devote attention to broadening economic cooperation with Iran, in order to overcome the negative consequences of a decrease in the level of confidence between the two countries caused by the release of information about the construction of sensitive nuclear facilities in Iran as well as the intensification of Russian-American cooperation.

It is no accident that the Russian foreign policy concept views Iran as one of its main partners in the Moslem world. The partnership with Iran is in many respects the solution to the problems of radical Islamic movements in the Caucasus. For Russia, in which more than 20 million Muslims live, the support of its antiterrorist actions in Chechnya by a power as authoritative in the Islamic world as Iran is quite valuable. Tehran's position played a positive role in the solution of the Tajik problem and the regulation of the Karabakh conflict. Nor should one forget the positive role Iran played in opposing the spread of Wahhabism from Afghanistan to neighboring countries. Thus the retention of a partnership with Iran for the long term and the development of trade and economic ties are both extremely important for Russia.

From 1995 through 2002, commodity turnover between the two countries grew by five times and reached the \$1 billion mark. However, the trade increase was essentially caused by revenue from large-scale projects, including the expansion of thermoelectric power stations built with the technical assis-

tance of the USSR in Isfahan and Akhvaz, and the construction of the nuclear power plant in Bushehr. Russian military equipment deliveries, defrosted after the December 1995 signing of an intergovernmental protocol on the regulation of mutual financial obligations, increased the trade volume as well. Today these sources are practically exhausted, but contracts for new large-scale projects, including a construction contract for a second power unit at Bushehr, have not been signed.

Nor is it worth rejecting cooperation in the sphere of conventional defensive armaments. Today Iran is the third most important buyer of Russian weapons after India and China, despite the fact that Russia manifests serious restraint in its sale of military equipment, supplying only a small portion of the arms in which Tehran has indicated its interest. First of all, these are armaments that do not present a potential threat to Russia and cannot be used by international terrorists. These contracts, as in the past, are extremely important for Russian defense enterprises. Thus, the recent agreement to supply Iran with 300 BMP-2 infantry fighting vehicles at a cost of about \$60 million is a virtual "life buoy" for the Kurganmashzavod factory, which finished 2001 with losses of approximately \$7 million and continued to suffer losses in 2002.

After the military operation by the United States and Great Britain in Iraq, Iranian leaders will presumably think about the need for large-scale purchases of more high-tech Russian armaments, and for increased funding for these purchases. In this case Russia should exercise restraint, in part in order not to aggravate relations with the United States, which sees the strengthening of Iran's military power as a threat to its national interests. According to Russian President Putin, relations with Iran are unique, in that we "need to calculate the security concerns of the world community. We, as a country that is a member of the UN Security Council and the G8, must consider these concerns, but [...] not forget our national interests."

It would be best for Russia to adhere to a very pragmatic approach vis-a-vis Iran, developing mutually beneficial commercial and military ties. At the same time, Russia should strive to understand the fears of Western countries regarding domestic political developments in Iran, particularly given the fragile political balance in the country and the results

of the February 2003 elections of people's representatives to city and local Islamic councils, in which for the first time in six years the supporters of President Khatami were defeated. The future relations of the two countries should be characterized by "alert cooperation."

¹ According to AEOI President Reza Amrollahi, smaller uranium deposits have also been discovered in the provinces of Isfahan, Azerbaijan, Khorasan, and Sistan-Baluchestan.

² Official Atomic Energy Organization of Iran website, http://www.aeoi.org.ir.

³ These calculations are given on the official Atomic Energy Organization of Iran website, http://www.aeoi.org.ir.

⁴ "Achieving Nuclear Fuel Production Technology in Iran, a Great Scientific Achievement: Official," IRNA, February 11, 2003.

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 Vladimir Dvorkin and Aleksandr Shcherbakov, "North Korean Missile Dreams," *Voprosy Bezopasnosti*, No. 2 (March 2003).

⁷ Ian Traynor, "UN alarm at Iran's nuclear programme," Guardian, March 18, 2003.

⁸ Joby Warrick and Glenn Kessler, "Iran's Nuclear Program Speeds Ahead," Washington Post, March 10, 2003.
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⁹ Iran's nuclear power engineering development plans call for the construction of seven 1,000 MW power units by 2021.

¹⁰ David Albright and Corey Hinderstein, "The Iranian Gas Centrifuge Uranium Enrichment Plant at Natanz:

Drawing from Commercial Satellite Images," paper published by the Institute for Science and International Security (ISIS), March 14, 2003.

[&]quot;A New Post-Cold War Challenge: the Propagation of Weapons of Mass Destruction," unclassified Russian Foreign Intelligence Service Report, 1993.

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¹³ "Unclassified Report to Congress on the Acquisition of Technology Relating to Weapons of Mass

Destruction and Advanced Conventional Munitions, 1 January Through 30 June 1999," http://www.nti.org/db/china/engdocs/cia0200.htm.

¹⁴ Paul Hughes, "Iran Says Its Enriched Uranium Plant Under Way," Reuters, February 10, 2003.

¹⁵ German Solomatin, "Russia's Minatom: Iran Does Not Have the Capability to Produce Its Own Uranium-fuel Cycle," ITAR-TASS, 11 February 2003.

Vladimir Dvorkin, "Status and Prospects for Missile Development in *Third World* Countries in the Period Up to 2015," *Yadernyy Kontrol*, No. 1 (January-February) 2002, p. 44.

p. 44. ¹⁷ "Iran Seeks Nuclear Know-how, not Atomic Weapons," IRNA, February 10, 2003.

¹⁸ As of March 25, 2003, the Additional Protocol had been signed by 69 states, the Board of Governors had approved Additional Protocols with 78 states, and the Additional Protocol had already entered into force in 30 states, including just one Middle Eastern country – Jordan.

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19 Azadeh Moaveni, "Iran Pledges Transparency in Its Nuclear Development," Los Angeles Times, February 23, 2003.

²⁰ Sergey Kozhukhar and Nikita Krasnikov, "Georgy Mamedov Indicated the Importance of Iran's Signing the Additional Protocol to the IAEA Safeguards Agreement as Soon as Possible," ITAR-TASS, March 14, 2003.

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Hot Topic

IRAN'S APPROACH TOWARDS A NUCLEAR OPTION

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Introduction

Iran has allegedly been accused of trying to acquire weapons of mass destruction, especially nuclear weapons. Having a look at the literature would indicate plenty of materials accusing Iran directly or indirectly for continuous efforts to obtain nuclear weapons. Especially the press in the western countries, namely the US and a few European countries, usually release related news and analyses with a pessimistic vision on Iran.

With the recent report of the IAEA Director General², which was released before the IAEA Board of Governor's session, 16-19 June 2003, the so called issue of danger of nuclear proliferation by Iran was put at the top of international mass media again, while the pessimistic parts of the report were highlighted.

These articles and analyses, intelligence estimates, testimonies or research reports mostly point out the Iran - Russia nuclear cooperation as a major security concern and argue that Iran will obtain nuclear weapons in a very near future.

Subsequently, the US administration has threatened Iran and its potential partners through several "carrot and stick" means. In fact, for the last decade Iran was on the US - Russian relations agenda³ and other countries, namely EU member states, concerned of proliferation, have asked Iran to accept more obligations. For instance, they insist Iran accept the additional protocol to NPT.

All these facts show the importance of the danger of proliferation and also Iran's positions and activities in this regard. However, in comparison with the foreign literature on Iran's nuclear activities, the articles and reports produced inside Iran are few and mainly contain official position declarations. Therefore, most of the questions raised by

foreign politicians, researchers, reporters and journalists have not been answered adequate-ly.

The aim of this article is to answer three questions, including: What are the main allegations about Iran's nuclear activities? Why are these allegations raised? What is Iran's approach against these allegations and especially, the allegation of a nuclear weapons option? And finally, what is a desirable position for Iran regarding the nuclear option? To this end, at first the most important allegations will be listed, then a few points will be provided to clarify the process of allegations. Next, the motivations behind these allegations are considered. Finally, Iran's policy and activities regarding nuclear option and also the reasons for nuclear disarmament, consistent with Iran's national interest, will be discussed.

Allegations

Here I will consider and review some of the most important and recent allegations about Iran's nuclear activities. Since the Iran - Iraq War (1980-88), the issue of proliferation of weapons of mass destruction has been raised and repeated from time to time. «For more than a decade American officials in Congress and successive administrations have fixated on the threat of Iran's acquiring nuclear weapons.»

Concerning the allegations of proliferation of WMD by Iran, one can see several stories. While some argue that Iran has a nuclear weapons program, other sources cite the import of dual use materials or know - how and even the purchase of nuclear weapons. In this way, the Americans and Israelis are playing a major role to produce anti-Iran literature. For example, according to these sources «Iran has a secret plan to obtain nuclear weapons and is busy with putting it into practice. To that end, Iran obtains knowhow, technology, and equipment from Russia, North Korea, and China or other sources»⁵.

They have also tried to convince other countries through official negotiations or publications. While, at the first phase, the main objective was to inform and convince others of the danger of proliferation by Iran, later they began to propose some ways of getting rid of this problem.

For them, one solution was exerting political pressure on Iran's nuclear energy partners.

«The U.S. has pressed China, Russia and others to cut off supply of vital technology, materiel and know-how to Iran. This supplyside nonproliferation strategy has achieved some success. ... Supply side constriction should continue. This should include efforts to interdict overtly or covertly transfers of equipment and know-how to Iran that would directly augment its nuclear weapon production capability.»

For them, this could not be enough to prevent Iran from obtaining nuclear weapons. «... a serious strategy would pursue every possible means to block supplies coming into Iran while at the same time demonstrating through deeds, not rhetoric, that Iran does not need nuclear weapons ... to ensure itself against attack by the U.S., Israel, Iraq or Pakistan. The U.S. must concentrate on redressing the sources of Iran's potential demand for nuclear weapons.»

With the victory of the US in the recent war against Iraq, some proposed to resort to preemption and military instruments against Iran and they advise a limited war to suppress Iran's nuclear infrastructure.⁸

However, most of the reports about Iran are focused on motivations to acquire weapons of mass destruction rather than facts. These motivations contain those of political, ideological and strategic motivations which all could lead Iran towards weapons of mass destruction. For example, in political terms, while nuclear neighbors surround Iran, to be ensured of its national security in the present and future, it should have nuclear bomb. Further, as Iran is recognized as having ambitions for regional dominance, to realize this end, a nuclear bomb is needed. Also, regarding Iran's ideological hostility with the US and Israel, which both are armed with nuclear weapons, Iran should obtain this kind of bomb as well.9

Motivations

What are the reasons for accusing Iran of trying to acquire nuclear weapons? Three reasons exist for this accusation:

Political Hostility

As it was mentioned, after the revolution and especially during the Iran - Iraq War, the former attitude towards Iran has deteriorated. A mutually hostile mentality substituted the former amity between Iran and western countries. In this way, it is clear that any

action and policy by one side will be viewed suspiciously. Accordingly, one can get the impression that this suspicious vision is rooted in the threat perception caused by the enemy. Revolutionary Iran's new independent policy and decision to compete with the colonial powers and the US as a hegemonic super power have led to the US watching Iran's activities, especially its nuclear activities, with a close eye. Hence, there is no doubt that Iran's nuclear activities are exaggerated and pessimistically interpreted. Those allegations are under the basis of estimates that have not yet been proven. For example, according to predictions, Iran should have had access to nuclear weapons at least ten years ago, however, since those predictions appeared as invalid and unreliable, they choose another deadline for this event. But none of those predictions have been realized. The following table describes the situation.

CIA estimates of the time needed by Iran to acquire the technical capabilities to develop nuclear weapons

CIA estimate, year	Forecasted year of acquiring the capability
1992	2000
1995	2003
1997	2005-2007
2000	2000

Source: Risen James, Miller Judith. «CIA Tells Clinton an Iranian A-Bomb Can't Be Ruled Out» New York Times. 2000, 17 January. In Anthon Khlopkov. «Iran's Nuclear Program in the Russia - US Relations» Yaderny Kontrol, Winter/Spring 2003, p.67.

Propaganda in the place of facts is another indicator of the political campaign against Iran. «Opposition of certain powers to Iran's peaceful nuclear development plan in the post revolution era under false excuses is a matter open to question. These countries not only had remained silent to the rapid and even unrestrained nuclear development of Iran before the revolution, but they had also played a major part in its development process.»

In the meantime, the current nuclear technology program is not as ambitious as the nuclear program in the Shah era. ¹¹ «... (Iran) was allured into investing billions of dollars

in the construction of nuclear facilities such as the Isfahan nuclear technological center for nuclear fuel manufacturing -undertaken by both the French and the British-and Bushehr nuclear power plants, etc. Can we now ignore all those investments and just dispense with them?"

The recommendations made by Stanford Research Institute for the production of 20,000 megawatt nuclear electricity within a period of 20 years and the monopoly of western countries over Iran's nuclear contracts for the construction of nuclear power plants and production of nuclear fuel point to the influence exercised by the West over Iran's nuclear activities in the pre-revolution era

Which of these Western policies should we adhere to? The US researchers' offer of production of over 20000 megawatt nuclear electricity and their plan for its materialization, or the politically charged interventionist suggestions made by certain politicians saying that oil and gas rich Iran does not need to build nuclear power plants? I would like to ask whether the same suggestion has ever been forwarded to other fossil fuel rich countries such as the United States, the Russian Federation, UK, Canada, Mexico and others.»

Writing Scenarios

A common feature of the literature on Iran's nuclear activities is the likely scenarios about the future. To predict the events in the future, they imagine scenarios according to which they propose solutions. Acquiring nuclear weapons and formally declaring it by Iran, while it has also the intention to withdraw from NPT is the worst-case scenario. Still there exist some other scenarios. For example, if a friendly government in Iran takes power, it will be more easily tolerated than a government with an unfriendly approach towards the international system. Also, in some other scenarios, Iran having a nuclear or weapons of mass destruction arsenal is given.13

In all of these cases and scenarios the core issue is Iran's nuclear activities. Therefore, while these presumptions are repeatedly claimed about Iran, one natural result of this process is to believe that Iran has a nuclear arsenal or a program of which its final product will be development of a nuclear bomb.

So one can understand that arguments about Iran are not under the basis of direct or field research on Iran's nuclear activities. However, we only witness quotations and generalizations that are repeated at the international level.

Belief in the Realism School of International Relations

Although the history of the realism school has more than 50 years background and other schools of International Relations have been raised, realism and neo-realism are in the main stream. According to realism, security is one of the main concerns of nation-states and they consider it a top priority national interest.

Therefore, when researchers and writers are focusing on Iran and view its nuclear activities as a potential security threat for their countries' interests, it shows their strong belief in realism. In other words, their belief in realism and hence analyzing Iran merely through a realistic prism lead them to see Iran as a threat and then to accuse Iran of the quest to obtain nuclear bomb.

Iran's Nuclear Policies and Activities

In response to allegations Iran has repeatedly denied having a nuclear weapons program. And in explaining the need for nuclear technology, Iranian officials state:

«Our prime priority of the nuclear program is generation of nuclear electricity. Due to the rapid socio-economic development of Iran during the past three decades...The second objective in the nuclear development plan of Iran is the attainment of self-sufficiency in the provision of nuclear fuel. The decision to build different types of nuclear power plants obliges us to work for the production of different types of nuclear fuels, of course, all under the surveillance of IAEA safeguards.⁷¹⁴

Further, Iran not only is a member state to all WMD conventions, namely, NPT, BWC, and CWC and has signed CTBT, but also is an active country in international disarmament forums. Iran has always asked to strengthen disarmament conventions and strongly supported the idea of Weapons of Mass Destruction Free Zone in the Middle East. ¹⁵ Iran has also sponsored a new kind of inspections, namely, voluntary inspections.

And with respect to the Additional Protocol, «Iran's policy towards the Protocol is both

clear and rational. ... (Iran) has no difficulty in accepting this protocol and, as a mater of fact, it is approaching it positively. At the same time, it doesn't intend to ratify and enforce the provisions of this protocol without any conditions...Our people and authorities always ask why Iran, which has acceded to different nuclear treaties and safeguards agreements and has rendered all sorts of cooperation demanded by IAEA, and while its nuclear activities, as attested by the official reports of IAEA inspection teams are peaceful, still remains subject to various international pressures and restrictions. Meanwhile, countries which possess weapons of mass destruction and refuse to accede to treaties such as NPT are left on their own without being asked to be accountable for their nuclear conduct.»¹⁶

Further, Iran has its own expectations and criticism. Iran expects the NPT member states to give technical assistance according to article IV of the treaty and lift the current sanctions over Iran. At the same time, Iran sees no legal justification for discrimination and double standards. In general «the Islamic Republic of Iran believes that all provisions of the NPT are of equal importance. Maintaining the balance of the «rights and obligations» enshrined in the treaty preserves its integrity, enhances its credibility and encourages both NPT's universality and its full implementation.»¹⁷

Finally, the author would like to state that Iran has sought to play an active role in the international fora on disarmament, supporting the codification of international law of disarmament, and offering proposals to obtain comprehensive disarmament.

Iran and the Desirable Option

Finally, I would like to consider the question of whether a nuclear option is really a desirable option for Iran or not?

Due to the following reasons I argue that the nuclear weapon option is not a desirable option for Iran.

1. The Islamic Republic of Iran's positions and actions are based on the Islamic point of view according to which any use of weapons of mass destruction is unjustifiable. Thus, as weapons are considered destructive and inhumane, Iran has denounced pronuclear positions and called on the members of international community to eliminate

WMD completely¹⁸. In other words «Iran considers the acquisition, development and use of nuclear weapons inhumane, immoral, illegal and against its very basic principles. They have no place in Iran's defense doctrine. They neither add to Iran's security nor do they help rid the Middle East of weapons of mass destruction, which is in Iran's supreme interests.»

Iran, as the last victim of the most organized use of chemical weapons in the world during the Iran - Iraq war, is strongly opposed to using WMD as a whole.

2. Iran, as a developing country, believes that development in the social and economic sectors is very important. Due to Iran's increasing population and its numerous domestic needs, any use of the national budget for unnecessary expenditures would be economically devastating. In order to ensure national security, beside the military aspects, Iran also has to pay attention adequately to other aspects of national security, namely, economic, social and political aspects.

The experience of some developing countries such as North Korea that have tried to invest in nuclear weapons, while neglecting its economy, demonstrates clearly the catastrophic results of such policies. Experts have estimated that for developing countries, the cost of developing a nuclear bomb would equal approximately 10-15 years of lost development.²⁰

Economically, to provide enough capital for developing nuclear weapons would be a great burden on developing countries. Furthermore, the responses of the international community through policies such as sanctions would further increase obstacles on the path of development. India and Pakistan's 1998 nuclear tests have led to more insecurity instead of strengthening their nations' security.²¹

3. Iran is nearly surrounded by several atomic powers. Russia in the north, Pakistan in the east and, recently, the US in the south all possess nuclear weapons. Further more, Turkey, a western neighbor of Iran, is a party to NATO and Iraq had strong motivations to attain nuclear status. However, the solution of outstanding problems, existing between Iran and its neighbors, do not require possession of weapons of mass destruction. Hypothetically, it is probable that Iran's poor

nuclear arsenal would be non-useable against weak neighbors and ineffective against the strong nuclear arsenal of powerful rivals like the US. Furthermore, any attempt by Iran to acquire nuclear weapons would probably meet a preemptive attack.²²

4. Progress in the field of disarmament during the last decade brings with it a glimmer of hope that obstacles can be resolved. While, at the peak of the cold war, due to suspicion and distrust existing between the super powers, issues of inspection and disarmament were not seriously considered. Today, due to the change of international relations, confidence building measures, detente and agreements on disarmament and arms control are an ongoing process and a reality in the international arena.

Thus, today hope for total nuclear disarmament exists. One could also add that with the rapid development of technology, which can ultimately change the rules of the game in international relations from hardware to software, the status of nuclear weapons has been weakened.²³

5. Finally we must ask, (whether the international regime of non-proliferation could tolerate any crossing of its red lines?) The answer is no. The reason is that even if a country is not a party to NPT, due to the statement of Security Council in January 1992, any attempt to obtain weapons of mass destruction would be viewed as being against international peace and security. This in turn means that, in such a case, the Security Council would be entitled to respond coercively.²⁴

Conclusion

In the modern history of warfare, weapons of mass destruction (nuclear, biological and chemical weapons) have been the strongest instrument of power for states to demonstrate superiority over their enemies. Either the use or the threat to use these destructive weapons were enough to force the other side to surrender. The modern history of war is full of such cases. During the cold war the debate over weapons of mass destruction was a dominant theme in any security-related forum. After the end of the cold war, the community international witnessed upward trend towards the proliferation and even the threat of use of these weapons. While in the 1990s the international community adopted several conventions and agreements in the nonproliferation and arms

control area, a few states have emerged armed with WMD.

Deterrence as practiced during the cold war is no longer applicable. Furthermore, deterrence as a strategic concept of the dominant level of the international system has been lowered down to the level of sub-systems and even its features have changed.

Although the aim of some countries, especially the great powers, is to acquire more military power, their attempts are not based on the idea of deterrence.

On the other hand, during the last decade, a strong ethical trend has influenced international relations discouraging any resort to force and encouraging detente, security, confidence building measures, cooperation, peaceful settlement of disputes and dialogue. Such factors have weakened the deterrence context. As a result, the international provisions of disarmament and arms control have been improved through declarations, resolutions and conventions. Examples from the 1990s include several international disarmament and arms control provisions like CWC, as well as the indefinite extension of NPT and CTBT.

In the 21st century, the national security policy of most states is no longer one-sided, but rather multi-dimensional. WMD as military instruments of security are no longer acceptable and states today tend to rely on nonmilitary mechanisms like disarmament. It is necessary to emphasize that this claim is not intended to reduce the importance of military assets per se. In other words, with new developments, security has acquired new dimensions and these are overshadowing the traditional military aspect. Weapons of mass destruction pose a serious threat to security on several levels, they are harmful, and due to WMD terrorism, even the nuclear weapon states have deep concerns about their own national security.

Countries have two major choices in the area of national security: disarmament or deterrence. States are obviously responsible for their national security as enshrined in the UN Charter under the jurisdiction of legitimate self – defense. There is no doubt that as a result they require armament. However, while acquiring weapons of mass destruction is devastating, conventional weapons are reasonable for that end.

Iran supports comprehensive and total disar-

mament and always asks the nuclear weapon states to comply with articles IV and VI of NPT. These articles respectively emphasize technical assistance in the field of nuclear technology and final nuclear disarmament.

The recent report of the IAEA Director General on Iran's nuclear activities, in spite of anti-Iran propaganda, was not claiming violation of NPT and its safeguard regulations. However, it pointed out the failure to declare all of the nuclear activities according to a timely framework. This is not a problem only with Iran. If the same report was provided about other countries, the same problem or even worse would appear.²⁵

All these developments are aimed at increasing the pressure over Iran in order to achieve the ratification of the Additional Protocol by Iran. However, it should be stated that in order to motivate any country to be involved in an integration process, namely accession to international conventions, more advantages should be given to it. And with respect to Iran, this advantage can be the lifting of sanctions and the daily threats to attack Iran by the US. For these ends multilateral diplomacy can be fruitful. International communities, especially think tanks, can play a role.

If they produce unreliable and invalid reports and analyses that certainly are influential on politicians, we have to expect more tensions in the international arena, regardless of what country is in focus. However, we could optimistically expect their constructive role in decreasing tensions among countries.

Iran's Nuclear Quest: Motivations Consequences/ in Raju Thomas (ed.) The Nuclear Non Proliferation Regime, Prospects for the 21st Century

(Macmillan Press, 1998).

10 "Iran's Nuclear Policy (Peaceful, Transparent, Independent)," Speech By: H.E. Mr. Reza Aghazadeh Vice-President of the Islamic Republic of Iran, IAEA

Headquarters -Vienna, 6 May 2003.

Greg J. Gerardi and Maryam Aharinejad "An Assessment of Iran's Nuclear Facilities," The Nonproliferation Review. 1995, Spring-Summer. 12 Ibid.

¹³ See for example; Geoffrey Kemp. Op. cit

"Iran's Nuclear Policy (Peaceful, Independent)"... Op.cit.

In this report, the following reasons are justifying Iran's investment in nuclear technology: «The Islamic Republic of Iran can not merely rely on the provision of its energy from fossil fuels just on the ground of possession of large fossil resources for the following considerations:

First, these resources are limited and belong to all subsequent generations and unrestrained use of them is not prudent.

Second, the utilization of these resources in processing industries such as petrochemicals will generate much greater added value.

Third, local use of these resources as fuel will drastically affect our foreign exchange earnings from export of crude oil and natural gas. It's worth mentioning that the continued use of energy in its present form in our country is bound to turn our country into an importer of crude oil and some of its by-products in the coming decades.

Fourth, our government is paying considerable indirect subsidies on local fuel consumption which entails heavy costs for the government in a way that the current pricing mechanism does not even meet the production and distribution costs of these fuel products. And the final and very important consideration is environmental issues which are now of concern to the entire international community and all countries are encouraged to observe the environmental standards to ensure the survival of the earth and its environment in line with the international initiatives which are now in force.

The aforementioned considerations have made the reliance of our country on fossil fuels for energy generation unreasonable and unaffordable and have also made the use of new technologies including the nuclear technology more competitive,»

Mohammed Javad Zarif, "The Necessity of a Nuclear Free Zone in the Middle East," Ettela'at, (A Farsi Newspaper), 23 May 1999.

16 Ibid.

Mohammed Javad Zarif - Iranian Deputy Foreign Minister in the Parliament Session for Ratification of the CWC, June 1997.

Iran's Nuclear Policy (Peaceful, Transparent, Independent)... Op.cit.

Amin Tarzi. "Non - Proliferation Regime," Negar (Monthly on Military - Strategic Reports and Analyses in Farsi), June 2000, p. 38.

²⁰ Reza Mansoori, "It Happened in the Neighborhood," Payam-e Emrouz (A Farsi Monthly), June-July 1998, p.

21 M. Mokhari, "Military Security in the Light of the Globalization," Gofteman-e Amniat-e Melli. (National Security Security Discourse, in Farsi), 2001, Vol.1, No. 2.

p. 94.
²² Abdul Hossein Hojjatzadeh, "Revolution in Military Security," Amniat-e /We///. (National Security Quarterly, in Farsi). 1999, Vol.1. No.1. Fall. p. 106.

Resolution of the Security Council, December 1992. ²⁴ For more information on Iran's views about this report, please see: Statement by Iranian Delegation IAEA Board of Governors Meeting, 18 June 2003.

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² Report by the IAEA Director General "Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran," Board of Governors GOV/2003/40, 6 June 2003.

Anton Khlopkov. «Iran's Nuclear Program in the Russia - US Relations,» Yaderny Kontrol, 2003, Winter-Spring, pp, 55-33.

[†] George Perkovich, "Dealing With Iran's Nuclear Challenge," Carnegie Endowment for International Peace, 28 April 2003.

Ze'ev Schiff, "Weapons of Mass Destruction and the Middle East; The View from Israel," James A. Baker III, Institute for Public Policy, Rice University, March 2003.

George Perkovich. Op. cit

Ibid

⁸ "The Forgotten Threat? Iran and Weapons of Mass International Security

Program, Harvard University, 12 March 2003.

Geoffrey Kemp (ed.), "Iran's Nuclear Weapons Options," January 2001, www.njxoncenter.org; Haleh

¹⁵ Ibid.

Polemics

THE PILLARS OF INTERNATIONAL SECURITY: TRADITIONS CHALLENGED

By Andrey Piontkovsky, Director, Strategic Studies Center

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The "Yalta System" Collapse

The widely spread opinion that, since Yalta and until March 20, 2003, there existed a certain international security architecture consecrated by international law and effective international institutions is a profound aberration.

The bi-polar world that had existed since Yalta and until the collapse of the Berlin Wall, in 1989, was based on the currently "vogue" word – "club law" – of the two toprank players – the USSR and the USA. The UN and the Security Council were used as showcases where the world-stage's top stars, together with a crowd of extras, battled each other with propagandistic declamations and ideological arguments. The actual security issues of war and peace were resolved in a different place – where the two superpowers' dialogue took place.

Let's remember for example, the most dramatic conflict of the half-century confrontation – the Caribbean crisis. The Security Council session, where Adlai Stevenson displayed photographs of Soviet missiles in Cuba, was quite spectacular and turbulent. However, the actual process for resolving this conflict, the record of which is now known not only by day, but also hour by hour, had nothing to do with the Security Council.

The two nuclear superpowers learned a lot from the Caribbean crisis. The result of this event was the development of a series of bilateral nuclear agreements – the Anti-ballistic Missile Treaty, SALT-1 and SALT-2 (never ratified, yet observed by both parties), and the creation of permanent institutions to support these agreements.

The goal of these agreements was the codification of relations between two extremely hostile entities and preventing their animosities from escalating into a military conflict, fraught with nuclear build-up. War became impossible because both parties adopted the nowhere openly verbalized - yet implicit throughout those entire agreements - concept of mutually assured destruction (MAD). Both parties developed their strategic forces in such a way as for both of them to maintain the potential of imposing an unacceptably high amount of damage on their adversary through a retaliatory strike. Hence, the launching of a nuclear war (first strike on the enemy territory) would have automatically meant mutual self-annihilation.

The MAD concept (and not the UN Charter) was the true cornerstone of the international security system during the cold war period.

This system had prevented a direct superpower clash that would have been fatal for the world, yet it failed to avert dozens of local conflicts and warfare in various regions of the world that destroyed millions of lives. In many of these, directly or through intermediaries, either the USSR or the US –or both – were involved.

The nostalgic refrain about the inviolability of national sovereignty, allegedly effective in those happy days of the post-Yalta architecture of international security, certainly sounds strange to our ears. National sovereignty was violated to the left and to the right, including by the Soviet Union. It should suffice to remember treks to Hungary, Czechoslovakia or Afghanistan.

However, it is important to mark for the future that there were circumstances when the breach of sovereignty was an obvious boon, indisputable in the eyes of the world. The Vietnamese troops' invasion of Cambodia was a clear breach of the latter's sovereignty, but it saved another one-third of the Cambodian population from annihilation by an insane regime.

The New Threats

Collapse of the bi-polar world generated certain illusions with regard to security, the extreme manifestation of which was the Fukuyama concept "the end of history." Very soon it turned out that it was not the end of history, but the beginning of many new

and unpleasant histories – the painful disintegration of Yugoslavia, conflicts on the former territory of the USSR, in Somalia, Rwanda, East Timor, etc. Finally, the events of September 11th demonstrated a new all-out challenge posed to civilization by international terrorism.

The world community found itself unprepared for all these challenges – both institutionally and conceptually. The delusive character of such security institutions as the UN and the SC has already been referred to above. Another widespread fallacy was the belief in certain norms in international law – standards that would guide all nations. If that were so, all the world's problems would have boiled down to the defining an action as being legitimate or non-legitimate. If only it could be that simple. Let's review a few commonly recognized principles of international law, recorded in dozens of declarations, charters and treaties:

- Sovereignty and territorial integrity of a nation;
- The right of nations to self-determination;
- Human rights formulated in the UN Declaration and reiterated in the laws of the majority of nations, including Russia;
- The right of states to self-defense.

If we now look at any serious international problem, at any of a few dozen smoldering or flaring local conflicts, we will see how wildly inconsistent those principles are. Actually, all conflicts and problems are preeminently generated by these inconsistencies.

Anyone who took at least an elementary course in logic would know that if a system of axiomatic statements contains mutually conflicting assertions, A and non-A, any arbitrary deduction can be derived. Contemporary international law represents exactly such system, and because of that, practically any action of a state in the international arena (as well as its opposite) may find validation in one of the norms of international law.

Most advanced politicians understand this very well. Here is what RF President Vladimir Putin said during his press conference at the closure of the St. Petersburg summit of April 12, 2003: "However, in recent times many imperfections in the structure of international law have revealed them-

selves, as well as inherent inconsistencies in which, in my view, a serious potential for conflict is concealed."

He continued, "Politicians, state leaders rely on effective mechanisms of law. The inadequacy of those mechanisms may be fraught with serious implications. I am convinced that if clear operational mechanisms of law were timely set for crisis resolution, much more efficient solutions to the most complicated world problems could be found."

Let's now dwell in greater detail on the latter principle and the specifics of its application the world over after September 11th. As mentioned above, nuclear security during the cold war was based on a principle of containment, where each party was aware that its potential adversary was not suicidal. How can this principle operate now when we deal with the suicide-terrorists? A new potential menace has appeared in the world – terrorists with access to WMD – for which the containment principle does not work, and which can be counteracted only with preventive measures.

The principle of the inviolability of national sovereignty has never been peremptory, and all the more so cannot be in the contemporary world. Initially the concept of preventive strike was very clearly and straightforwardly formulated in the "New US National Security Doctrine" published in September 2002. The declaration by the US, to the right to conduct preventive strikes as an intrinsic extension of the right of a nation to self-defense, has been repeatedly criticized in the Russian press.

Yet, here are the two quotes:

"If anyone tries to use weapons commensurable to weapons of mass destruction against our country, we will respond with measures adequate to the threat. This is at all locations where the terrorists will be, or the organizers of the crime, or their ideological or financial sponsors. I underline, no matter where they are."

"In such cases, and I officially confirm this, we will strike. This includes preventive strikes."

Who are these hawks, preaching a concept of preventive strikes violating the sacred principle of national state sovereignty? Donald

Rumsfeld, Paul Wolfovitz, Dick Cheney, Condoleezza Rice?

The first quote comes from President Vladimir Putin's speech at the October 28, 2002 session of the government. The second is a statement by Defense Minister Sergei Ivanov, made even earlier, on September 22, 2002.

Vladimir Putin's declaration was an official order by the Supreme Commander-in-Chief to respective government agencies to develop a new Russian military doctrine that would include the concept of preventive strikes in response to threats to which the traditional deterrence concept proved ineffective.

It looks as if each nation, taken alone, would adopt for itself, with ease and enthusiasm, the concept of preventive strike, as a derivative of the right to self-defense principle, yet would rather skeptically treat the readiness of other nations to adopt a similar concept.

Who indeed, will, in this case, define whether the preventive strike is legitimate, and the extent of its validity in regards to the actual threat? The Security Council? Has the Security Council ever defined anything? During the cold war, when its non-utility was obvious, or in the subsequent decade, when it demonstrated its helplessness, having not been able to prevent or stop any of the conflicts that mowed down hundreds of thousands of lives in the former Yugoslavia, the former USSR, Rwanda, Somalia or Afghanistan?

World Government is at Hand

The increasing chaotic character of the modern world, challenges of radicalism, terrorism, and the proliferation of weapons of mass destruction generates an objective demand for some form of non-fictitious (UN, SC) but real world government. Demand causes supply. After September 11, 2001, the US has been attempting to play this role. This situation doesn't seem to satisfy anyone, including the Americans themselves.

Confrontation with the US and the formation of various anti-American triangles will only lead to the US government becoming more intransigent and, conversely, less efficient (with negative implications for the world at large) the more their isolation increases.

Pleas to return to a certain "system of international security," allegedly destroyed by the Iraqi crisis, are totally vain appeals, be they sincere or pretended. There never was such system; there weren't even conceptual approaches adequate to the challenges of the contemporary world.

All the more, the world community should focus on the development of both the concept and the institutions for a new world order. First of all, it is necessary to turn to the problem of conflict within the various international law principles and try to develop some reasonable rules of balance among them.

Yet there should be clear awareness of the fact that, with every potential improvement to the international law norms, the solution to the problem cannot be purely legalistic. It will always be political. It is impossible to invent an abstract scheme suitable for the resolution of any emerging conflict, in which both democratic nations and totalitarian regimes bent on obtaining nuclear arms will be equal actors.

Only an alliance of responsible world powers, united by common vision of the problems and challenges facing the modern world, common values and having the resources – political, economic and military – to implement their joint policy, can perform the role of the efficient world government.

The best to meet these requirements is the Group of Eight. Russia, having become a rightful member of this framework, is objectively interested in the G8 expanding its area of responsibility into the sphere of international security. Because of the traditionally informal and confidential nature of discussions within the G8, it is the most useful forum for the realization of joint decisions on key issues of world politics.

The US will remain a leader within this eight (and in the future, maybe, nine or ten), yet constructive and open discussion of the current key policy issues would allow the leading powers to develop a culture of consensus. It is in the common interest of the world community not to alienate the US but to convert it into a responsible leader accounting for the interests and concerns of its partners.

The United Nations, with its enormous bureaucratic structure, certainly will not dis-

appear. It could play the role of organizer of joint decisions made by the leading powers.

Such a transformation of the G8 into a leading international security institution is impossible without Russia's participation. Full participation in the G8 is a very important political resource for Russia. In our opinion, it is a much more important than Russia's permanent membership on the Security Council – a position based on inertia, over-

estimation of our diplomatic attributes, and inherited after the disintegration of the USSR superpower. The G8, as an institution for global security, will simply be inefficient without Russia, which is geographically adjacent to the sphere of instability that poses the worst potential threat to the world. For the same reason, Russia will not be able to maintain its security outside an alliance with the leading industrial nations.

Commentary

THE WAR IN IRAQ: LESSONS TO BE LEARNED FOR RUSSIA

By Vladimir Dvorkin, Senior Advisor, PIR Center

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An Exemplar of Contemporary War

Before the beginning of the war in Iraq there was no lack of predictions regarding the character of the beginning and course of the operation. Massive strikes by cruise missiles and aviation using high precision navigation systems, a prolonged period of so-called non-contact war, and active guerilla operations were predicted; even the possible use of tactical nuclear weapons by the anti-Iraq coalition was considered.

However, there is nothing amazing in the fact that the operation in Iraq did not begin as predicted by military analysts: not with massive, but with limited cruise missile and aviation strikes. Moreover, the ground war began almost immediately. There should be many dozens of basic and reserve operation plans in modern wars. The war in Iraq was no exception.

The operation plans, evidently, were refined by taking into account many factors: besides the basic purpose of overthrowing the regime of Saddam Hussein, the disposition of Iraqi army detachments, reconnaissance information about the state of command units and facilities, including the location of the dictator, the state of the air defense system, the readiness of staging areas for the offensive, the weather conditions in areas of planned military action, and many others.

One cannot exclude the possibility that if Turkey's decision on allowing U.S. troops access to its territory had been made in a more timely fashion, then the beginning would have been different. Timely information about the moral and psychological state of key personnel and troops are also an important concern in the selection of operation plans. Are they ready to capitulate? On what condi-

tions? What blows could push them to surrender?

The «unaggressive» beginning may also be due to costs associated with the basic argument for the overthrow of the Iraqi regime the destruction of weapons of mass destruction. There was no proof that there were any weapons, but nor was there confidence in the reverse, since in a totalitarian country it is possible to hide practically anything.

In any case, there are no reasons to doubt that there was an entire collection of operation plans, from which one can flexibly select the one that is most rational in any given tactical situation. The selection of some plans requires a decision at the highest military and political levels, while others can be decided locally. But plans are plans, while the course of war can present surprises, for which one must always be prepared and regarding which one must always be ready to perform a highly professional tactical situational analysis.

The many erroneous forecasts most likely resulted from the extrapolation method: since the capabilities of high-precision weapons constantly grow and their proportion in the total volume of armaments has grown from 10-15% at the time of the first Gulf War to 80-90% in 2003, while ground operations in the first war were short-term and in the war with Yugoslavia there were none, analysts predicted that these tendencies would develop further along the same lines.

As far as the possible use of a new generation of nuclear weapons with low-yield bunker-busting warheads is concerned, there are no bases for these assumptions at all. First, because of the overwhelming operational-tactical and military technical advantages of the armed forces of the anti-Iraqi coalition. Second, even if the United States had warheads more advanced than the new B61-11 gravity bomb, the possibility of their penetrating the earth is limited by the strength of the casing and by the ability of the weapon's internal components to sustain a collision with the ground. It has been established that a high-strength warhead can penetrate at most 12 meters of concrete. Certainly, even a small penetration of a nuclear charge creates a considerably more powerful seismic impact on highly protected underground structures than an air and ground-based nuclear explosion. However, as Project Ploughshare experiments with a series of underground nuclear explosions showed, detonations of even relatively small strength at depths of 100 meters are not free from the ejection of soil into the atmosphere and the radioactive contamination of the area.

Returning to the frustrated forecasts of the operation plans, it is necessary to emphasize that a certain number took into account how the Iraqi regime would learn from the experience of the first Gulf War. It is well known that in that war the massed, concentrated use of armored technology and Iraqi armed forces personnel led, according to pessimistic estimates, to the loss of approximately 900,000 people, who were killed and wounded, and 80% of Iraq's armaments in just a few days of ground operations (thanks to the successful use of Apache attack helicopters to destroy tanks and other armaments). This time armaments were distributed and disguised, to take into account Hussein's earlier sad experience. They bet on focused resistance. However, they could hardly assume that the military leaders of the United States and Great Britain would not provide for this course of events when planning their operations.

The mistaken forecasts of operation timetables to a certain degree are related to the considerably smaller quantity of personnel, aviation and armaments in comparison with the first Gulf War. Experts assumed that for this reason the war might be protracted. However, the increase in the fraction of high-precision weapons and the effectiveness of processing reconnaissance information, making it possible to solve combat missions with a smaller number of sorties and quantity of ammunition, or, in military terminology, by a smaller force list, was not taken into account.

Lessons for the Russian Defense Ministry

In connection with the material presented above, the first conclusion that the leaders of Russia's armed forces must make is the need for multi-variant planning, which requires not only immediate strategic thinking but also the availability of the appropriate computer hardware and software. This planning must be done in peacetime by the General Staff and the staffs of united commands (which do not yet exist in Russia) in advance. Staffs simply must formulate responses for all contingencies and await the decisions of the country's top leadership. One must also have professionals capable of reacting to unpredictable developments under time constraints and make tactical corrections to an on-going plan quickly.

The thesis that managing tactical operations is an art is valid to the degree to which this art of managing troops and weapons in modern and future wars is combined with computer support, making it possible operationally to achieve instantaneous calculations of logistic support, supply, and troop movements, to determine additional requirements for armaments, military equipment, and ammunition, to optimize not only the routes to be taken by one's own army, but also make such calculations for the enemy. In other words, powerful information-computing and managerial systems are needed at various levels.

The next conclusion relates to the problem of the growing technological break between the armed forces of Russia and the West in contemporary and prospective space and aviation reconnaissance systems, target indication, combat control, communications and high-precision weapons. If we do not reduce this gap, then we must at least stop it from growing wider. In the United States, all of this equipment is integrated into a united allweather strike information-control system, capable of ensuring detection and destruction of targets in real time. Our capability of conducting similar military action lags not by years, but by a "whole civilization." The basic reason for this is that the Russian military industrial complex suffered more than other branches from the many convulsions in the country, and was not able to accomplish its basic task of supplying the armed forces with advanced prototypes and weapon systems. At the same time, our scientific and technical potential was not completely destroyed and a number of key technologies still can be reactivated under certain conditions.

Helping the military-industrial complex recover from this crisis requires significant funding and time; however, even now one can certainly select the appropriate priorities to retain Russia's research institutes and design bureaux, which have not yet lost their promising designs.

At the same time, a radical change in Russian military-industrial policy will not occur until the branch's endless structural convulsions, including the erosion of responsibility between the Ministry of Economic Development and Trade, the Ministry of

Industry, Science and Technology, and other federal agencies, are ended, and an administrative body such as a commission for military industrial affairs headed by a deputy premier, who only attends to this issue, is created. This body should be like the one that existed before the collapse of the USSR, which formulated military technical policy on the basis of the objective scientific analysis of gaps in key technologies, and then determined and issued decisions to overcome technological gaps. This military-industrial vertical control mechanism practically acted irreproachably. It is not necessary to be a wise man clearly to see that if the present commission for military-industrial affairs works irregularly, and is headed by the president, for whom this commission is one of ten, then this body cannot operate the way it is supposed to.

Now it is difficult and pointless to assign an executive body in the Soviet Union, including the commission for military industrial affairs, blame for prioritizing the design and mass production of an excess quantity of weapons to the detriment of systems of control and communications, which is far more cost-effective, making a far larger contribution to the effectiveness of the combat employment of a weapon. This may have been done due to the influence of World War II (including on the former ministers of defense, who were Politburo members), what with its enormous losses of tanks, aviation and another technology and need to compensate for these losses by using accumulated reserves and greatly increasing production. During the Cold War, the increased complexity of armaments and military equipment greatly increased cooperation between military producers, each of which grew to many hundreds of enterprises. At the same time, in the sort of large-scale war which was planned for in those years, the dissolving of this sort of cooperation was relatively simple: subcontracting enterprises were located practically throughout the entire territory of the USSR, and NATO would have had no difficulties reaching and attacking many of them. Therefore, the decision was made to create enormous reserves of basic armaments.

At this time the recreation of the commission for military-industrial affairs and the use of its positive experience is more than expedient. This includes the experience, mentioned above, of overcoming technological

gaps in the sphere which was well-known to this author.

Thus, at the behest of the Commission, a multi-track system of programs and procedures of comparative analysis of the level of technical perfection of missile and space technology was developed.

During the Cold War and the arms race, the USSR faced a difficult task creating armaments designs that were not inferior in tactical-technical characteristics to the best models of foreign weapons systems and military equipment. This is why the Commission on military-industrial affairs was entrusted with, and successfully executed, the complex scientific research project «Level» (Uroven'), in which leading Ministry of Defense scientificresearch institutes and industry participated.

The computational methods which were developed made it possible to compare the levels of technical excellence of separate elements, systems, assemblies, rockets, airframes, and missile- and missile-space complexes as a whole, in accordance with a harmonized system of criteria that included technical, operational and effectiveness indices.

These computational procedures and programs were based on the principle, not previously used in this area, of creating "ideal" systems, assemblies, rockets and complexes on the basis of the world's best technical-design and technological solutions, basic components, and materials and their comparison to the performance characteristics of domestic models. For a considerable period of time, the results of such comparative analyses were used to make government decisions on overcoming those gaps that were considered critical.

The authors of these processes believe that the procedures and programs they created not only have not lost their relevance, but are instead even more urgently needed to determine priority areas that must be emphasized in order to overcome technological gaps in the outfitting of the armed forces of Russia and the West. Moreover, the same principles, methods and procedures can certainly be used to evaluate the competitiveness of military and civilian producers.

The Key to Success: Advanced Technology The nature of the military action in Iraq also reconfirmed the significant and ever increasing role of the Navstar Global Positioning System. High-precision weapons systems that have circular error probable (CEP) measurements of just several meters, thanks to this navigation system, can be used outside of the enemy's active air defense sites in any meteorological conditions; dust storms and smoke do not influence them. The contribution of this system to the effectiveness of military action is unlimited, when linked to high-precision armaments. The instrumentation employed by users of this system ensures the faultless determination of flight paths and land routes, sharply increasing the effectiveness of airborne and other reconnaissance. The success of the ground operation is thus enhanced in many respects.

The state of the analogous Russian Global Navigation Satellite System (Glonass) has been described in sufficient detail elsewhere. Here it suffices to note that in Russia, after deploying this orbital group practically simultaneously with the Navstar system, the program to develop and produce equipment for military and civilian users completely collapsed due to the irresponsibility of leadership in the Ministry of Defense and two agencies (the Russian Aerospace Agency and the Russian Control Systems Agency). The funding for the deployment and completion of the orbital group, over 45 billion rubles in 2003 prices, was wasted senselessly. However, Russian high-precision weapons cannot use the ground-based and orbital Navstar system due to access restrictions. In the final analysis, all of this will require, together with the restoration and improvement of the Russian Glonass Navigation Satellite System, the design and mass production of equipment for military and civilian users.

Certain lessons must also be drawn in connection with the use by the anti-Iraqi coalition of electromagnetic pulse munitions. One cannot understate the effectiveness of this type of weapon. Electromagnetic pulses from such ammunition are capable at relatively great distances of disrupting wire-based guidance and communications systems as well as the cables linking antenna systems, also of rendering other kinds of equipment inoperable, including computer systems, by causing the disruption or destruction of digital devices. This type of failure can occur not only during military actions of varying intensity, but also as a result of terrorist acts.

Methods to protect against damage from an electromagnetic pulse are well known and

have been successfully implemented to protect particularly important strategic facilities. These methods include the screening of cable lines and equipment (creation of an air-termination network), with the installation of down-conductors at terminals. But most general purpose force facilities require significant new expenditures of time and resources to create reliable protection from this damaging force.

The third lesson is that we must not simply retain, but "propagate" professional personnel for the armed forces and defense-industrial complex.

The military personnel in the anti-Iraqi coalition are surprisingly different from Russian personnel, not only in terms of equipment, quality of armaments and military materiel, but also in terms of professional preparation, firm discipline and industriousness, as well as comprehension of general and particular combat assignments. The minimization of not just civilian, but also Iraqi military losses was remarkable in comparison to the first Gulf War (when the Iraqi army lost 900,000 killed and wounded in four days). This tactic was used to minimize negative attitudes towards coalition forces on the part of both the people of Iraq and other Arab states, and to affirm the coalition's role as liberators.

Personnel Determine Everything

The personnel crisis in the armed forces is caused by a drop in incentives to serve in the military, as well as by a decrease in the qualifications and social status of the officer corps. The overwhelming majority of army officers leaving the service, using endless and unjustified leap-frogging between divisions, retire early. As a result, the staffing of military units by career officers is steadily reduced, especially in the junior ranks. In some units second-year officers, who themselves require professional instruction, only fill 60% of the posts. The number of officers without apartments is not only not decreasing, but instead growing constantly, and reached 150,000 in 2002. There is no corps housing for junior officers (sergeants).

Due to repeated legislative changes, the fraction of those whom it is possible to call to military service as been reduced to almost one tenth the total number of men of draft age. Together with the continued high degree of behavior that is not in accordance with regulations, and recruits' inability to master even relatively simple technology because of low levels of education, further delays in the transition to a volunteer army may lead to unpredictable consequences.

It is hard to imagine that our rank-and-file draftee is capable of competently using even the personal combat gear loaded with communications and survival equipment, which we constantly see on anti-Iraqi coalition soldiers on our television screens.

To a significant degree, the system of training and educating personnel in the military-industrial complex has been destroyed as well. The rare exception, where personnel have been maintained, is found primarily in those organizations that have foreign orders.

The situation in which Russia finds itself is unique, in that it is for the first time in a thousand years not faced by enemy states representing a military threat. One can take advantage of this opportunity to create the first stage of a prototype contemporary, high-tech army. This is especially true since Russia has the protection of nuclear superpower status.

However, more than ten years that might have been used to reform the army and defense industry have already been lost. Given the increasing unpredictability of the military-political situation, the continuation of a sluggish imitation of military reform is completely unforgivable.

All this does not at all mean that Russia may need modern mission-capable armed forces for a fight with the West. It is more likely that, on the contrary, they will be needed in order to participate in a coalition with the West on an equal basis, against other threats.

International terrorism, frequently cited by the highest military-political leadership of the country as the main threat facing the country today, has necessitated a radical correction of military doctrine and tasks. However, it represents just one piece in an entire system of threats. Regional instability in the belt of totalitarian regimes and the unpredictable escalation of armed conflicts there could lead to the need to carry out armed combat of a scale comparable to that, which occurred in Iraq.

Analysis

MEGATERRORISM: A NEW CHALLENGE FOR A NEW CENTURY

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Terrorism has become international. State borders have literally ceased to exist for it. Cyberterrorist attacks are carried out not only from other countries but from other continents. Terrorist organizations, which previously had nothing in common, have started to interact; organized crime, primarily the drug trade, have become a substantial aid to terrorism. Separatists and extremists hiding behind the slogans of national and religious freedom conduct horrible acts of massacre. It has happened in the Middle East and South Asia; and it continues to happen Afghanistan and Chechnya. More data has become available indicating that many of them are linked together and assist each other, forming a world terrorist network. "Organizations operating in Chechnya... "are an intrinsic part of the international terrorist network... Their actions have nothing to do with interests of the Chechen people", President of the Russian Federation Vladimir Putin noted in his statement after a terrorist act committed by two Chechen suicidebombers in Moscow on July 5, 2003².

The overall picture of international relations, stable for nearly forty years after World War II, has changed dramatically over the last decade. The confrontation of two superpowers and their allied military blocs was replaced by a rather ambiguous and transient world order featuring, on the one hand, a trend of economic and political integration of the world community, and on the other hand, a higher potential for conflicts. National and religious contradictions have become more acute. The development of weapons systems enabled their owners to carry out military operations without being involved in

a large-scale incident and without any threat to their national territories. De facto legitimatization of the use of force against countries with unwelcome political regimes, or "failed" states, has been reflected in the development of certain economic and legal standards, which, if violated, may become a reason for armed intervention.

The tension has mounted, and by the mid-1990s the western world heard a warning about threats it would be facing in the twenty-first century. Experts attributed such threats to the possibility of large-scale terrorist acts or wars with an "enemy without borders". The warnings became September 2001. The Quadrennial Defense Review, published on September 30, 2001 in Washington, DC, stated that because of the terrorist threat and the United States' global military leadership, "the United States is likely to be challenged by adversaries who possess a wide range of capabilities, including asymmetric approaches to warfare, particularly weapons of mass destruction."3 In fact, terrorist acts have transformed into military threats and acquired a new strategic significance that can be proved by the words of President George W. Bush that the terrorist acts of September 11 are "an act of war" against the United States".

Terrorist doctrines are changing. The terrorist organizations' structure is changing. They use the most advanced technologies on a wider scale; acquire new weapons, enabling them to conduct operations comparable with military ones. The prospects of terrorists using the most terrible types of weapons have become a reality.

A new phenomenon comes into view: megaterrorism.

Formally speaking, today "megaterrorism" should be understood as the use (or threat of the use) for terrorist purposes of the most advanced weapons or technologies leading to massive casualties among the population or to sizable (in the scale of a state) economic or environmental damage. Presently, they are the components of weapons of mass destruction: nuclear, chemical and biological (toxin), as well as the means of affecting ecosphere, information environment and human psyche.

The threat of *nuclear* terrorism has been in view for a rather a long time⁴ and mankind has progressed significantly in combating it.

This threat is accounted for in international law and in the laws of many national legislations.

The use of *chemical* poison agents for terrorist purposes is more difficult to deal with. Presently, there are no real mechanisms mitigating the hazard posed by this threat.

Biological terrorism is a relatively recent phenomenon. It moved from hypothesis to reality only in September 2001.

Ecological terrorism is still new and lacking of known examples. However, the terrorism hidden behind the environmental protection slogan has ceased to be a generality.

Information and psychological terrorist operations are of a "preparatory" nature so far. Psychological levers, when in the hands of terrorists, may be aimed at human consciousness.

Information terrorism (cyberterrorism) has recently become a special factor of international life. Its potential targets are key elements of all administrative, economic, transport, financial, and military structures, as well as mass media⁵.

The change in the form of terrorism has caused a change in its paradigm. The views on the terrorist struggle are transformed so as to be accepted by terrorists as a means of achieving their goal.

The international nature of megaterrorism is a complicating factor in combating it. The possibility of preparing an act and taking measures to support it far from its target also complicates the problem. Warfare starts at the moment of the first stroke.

The special hazard of megaterrorism is that due to a high impact potential and hidden source it can become a catalyst of international conflicts, especially, in conditions of tense relations between states.

Still, the nature of terrorism is the same – an unlawful act, a crime; therefore, it should be combated, primarily, in the sphere of law both at national and international levels.

Combating terrorism efficiently requires creation of antiterrorist communities, organizations and task forces as well as development of cooperation between states and the harmonization of national laws.

The issue of combating megaterrorism cannot be solved without wide-scale international negotiations on complex problems related to countermeasures against terrorism and disarmament including non-proliferation of weapons of mass destruction and new types of destabilizing armaments. The necessary condition of having progress in solving the problem is the understanding that such an approach is imperative.

This was demonstrated by the G8 leaders during the Kananaskis (Canada) Summit in June 2002 and the Evian (France) Summit in June 2003. Certainly, no one expected that ultimate solutions would be found. However, the approved documents, in addition to accumulating the history of the diplomatic quest to combat international terrorism, for the first time at the highest level secured the understanding that international terrorism, or megaterrorism, is the main threat to the world and that the world community united in combat against it is an absolute requirement for the further existence of mankind.

"CIA Says al Qaeda Ready To Use Nukes"6, "Chechen Terrorism Mav Become Radiological"7, "Chechen Terrorists Don't Give Up Attempting To Acquire Nuclear Charge, Ministry of Defense Official Says"8. WMD terrorism is rooted in the pages of newspapers and security and military officials' statements. The events of the recent years are undoubtedly clear evidence that terrorists utilizing weapons of mass destruction and other stateof-the-art high technology as a means of influence has become a reality. For mankind to ignore it would be as suicidal as to deny the mere fact of WMD proliferation and the possibility of new types of weapons falling into the hands of individuals or organizations within the international terrorist network. This is stated by experts, leaders of nations and heads of international organizations. This was confirmed by the G8 countries' leaders at their Summit in Evian (France) in June 2003.

Contemporary Terrorism

The large-scale terrorist acts that have occurred recently in various regions of the world and have involved grievous loss of human life force experts, law enforcement, and security officers, individual governments, and all people on the Earth to take a new look at the problem of terrorism. Terrorism today has become a real and serious threat

to the stability and security of the world society and the progress of mankind.

As the G8 leaders noted in one of the documents adopted by the Evian Summit⁹, after the September 11, 2001 terrorist acts in the United States the international community has united in its efforts to fight against international terrorism. However, the document says, the threat of terrorism still remains serious as has been seen in a series of terrorist incidents including those in Indonesia, Kenya, Morocco, Pakistan, the Philippines, Russia, Saudi Arabia, Tunisia and Yemen over the past year.

Evidently, terrorism as a phenomenon came into being simultaneously with the state and the system of political power. By the end of the twentieth century, however, having traveled a complex path of development, it transformed from a local intra-political factor into an international one. In terms of the players and supporting forces as well as in terms of the nature of pursued goals, terrorism has created a serious threat to global security and the vital interests of millions of people, including those who are far from politics.

The features of contemporary terrorism are:

- quantitative growth of terrorist acts, their cynicism and violence;
- large scale of acts' consequences, including massive casualties;
- aggressive attempts to gain possession of WMD for possible use;
- enlargement of arsenals and new means of influence, in particular, information means(primarily, cybernetic), ecological and psychological;
- professionalism and qualifications of terrorists due to their participation in various conflicts;
- increased technical capabilities of terrorist groups;
- extended financial support of terrorist activities;
- the use by various states of certain terrorist groups to expand geopolitical influence:
- expansion by international terrorist organizations of their influence to other regions, intensive attempts to gain control over territories having vast amounts of energy carriers and natural resources.
- international nature of terrorist groups;
- fading of boundaries between intranational and international terrorism;

- establishing firm links between terrorist organizations and transnational organized crime, primarily, the drug industry;
- links with mercenaries.

Recently, the transformation of terrorists' goals has become more prominent. They often commit terrorist acts without putting forward any demands and without acknowledging the responsibility for the crimes committed. Their goal is to cause damage at maximum regardless of casualties; to spread havoc among the society; to shake peoples' belief that the powers are capable of controlling the situation and ensuring the undisturbed and secure life of the citizens. The expansion of sabotage and terrorist activities is viewed by terrorist group leaders as one of the main means of achieving their goals. Terrorist acts are not especially targeted to civilians or facilities but to political interests of a country - that is the main goal.

A serious complicating factor for the fight against international terrorism is that the state powers of a number of countries consider support of terrorist organizations (as a rule, from other states) a significant factor of their politics. The term "state sponsored terrorism" has come into international usage. These are the states, which not only encourage terror as a means of politics but also the states which do not participate in resolving the issues of combating terrorism.

However, setting aside politics, one should acknowledge that the phenomenon of the state support of terrorism actually exists. It is characterized by the following key features:

- 1. Acts of terror planned and carried out by state powers or the terrorist organizations they support in the vast majority are targeted to carefully selected objects and are comparable in terms of their scale and content to the practical political goals pursued by the sponsoring state.
- 2. The large-scale violence on the part of state sponsored terrorism is similar to the violence featured by many conflicts between ethnic or nationalistic organizations and national groups who are preaching social revolution. In parallel, targeted tactics are in use: the acts must discredit institutions of political power, and demonstrate their disability. The violence on the part of law enforcement and militaries also must attract the attention of the world community. The sponsoring

states count on the effects of terrorist acts, therefore the latter are well-plotted in terms of goals, targets, and scale.

Many experts mark terrorism as one of the main threats to national security due to the fact that state-encouraged violence is supplemented by a more dangerous type of terrorism, i.e. religion-motivated terrorism. Its existence is manifested through religion advancing to the first place among ideas and goals of terrorist acts, as well as in an increased number of religion-motivated self-sacrifices in the course of such acts. The new form of religious terrorism, along with former signs (religious fanatic-terrorists certainly existed previously), is characterized by an enhanced technological and operative competence and an urge to acquire WMD, which is necessary, as they believe, to achieve the larger goals of "holy struggle".

The number of religious terrorist groups has sharply increased over the recent years, with the number of victims of their actions proportionally increasing: in 1995 such organizations committed 25% of known terrorist acts in the world; in 1998 – 76%; and today over 90%.

Terrorists driven by religious ideas believe that they struggle for restoration of "the golden age of religious beliefs and practices". They raise political problems and their struggle to the rank of solemn duty and in turn attach the outmost significance to them. They challenge the modernity by engaging in active confrontation with "internal and external enemies". This confrontation is based on purely religious goals of moral renaissance. In this context the militants believe that their struggle is blessed by Allah himself and acts of violence are its necessary elements. Therefore the scale of violence cannot be limited.

Historical development has made more prominent the Islamic trend of religious motivated terrorism. Its proponents, using the banner of jihad, aspire to establish the world dominance of their faith. Previously, similar goals were pursued by the Catholic Christians who were trying to implant the "true faith" through crusades and missionary activities. In doing so, no one counted the number of perished infidels. Also, the death in such a mission was taken as a deed in the name of faith. It is quite sufficient to remember the "child crusades" to understand

the degree of the Christian fanaticism of those times. Still, even in the Dark Ages there were political forces which were using this social phenomenon for their self-seeking interests¹⁰.

According to "jihadists" the creation of a Caliphate in the context of today's world includes the suppression or elimination of infidels, the acknowledgement of the Koran as the only legitimate standard of rule and of social life, and the condemnation as abjurers those Muslim leaders who do not struggle for restoring the supremacy of Allah on the Earth.

Muslim terrorist organizations have broad capabilities in carrying out acts of violence because they have reliable financing, effective organizational structures, vast experience in warfare, good technical bases, a well-developed system for educating and training militants, and the capabilities for their fast movement. Generally, the militants in the groups know each other through training camps or visiting the same mosques. The groups feature both the mastered vertical (between the members of a group and leadership) and horizontal (between the groups and individuals within a group) links. This facilitates fast re-establishment of the group's operative leadership and control and hinders destruction of such groups or termination of their activities. A network-type organization grounded on faith and sealed by it makes it difficult to identify members of such groups, to penetrate into them and to ruin them.

Muslim terrorist organizations stick to a non-formalized system of recruitment. They use many volunteers – engineers and cybernetists. They create rather effective covers for their activities, in particular, export-import companies. The latter enable terrorists to use international telephone, facsimile and computer communication lines, facilitate movement of militants and acquire money, equipment and armaments. This creates the basis and prerequisites for acquirement and use of any types of arms, as well as additional capabilities for propaganda and recruitment of new members. Terrorists demonstrate good skills in conspiracy, illegal activities and preparation.

Though "jihadists" are considered the most threatening, terrorist-adherents to other faiths and radical sects who also pretend to operate "on the world scale" are of serious concern. They include the Christian Patriotic Movement of the USA, the Messianic Jewish Movement, the Japanese sect Aum Shinrikyo, IRA (Irish Republican Army), etc. The Christian Patriotic Movement fights to eradicate Jews and free masons and to establish a religiously and racially "clean" state. For the Messianic Jewish Movement the perfect state existed in the II century B.C. when the Jews controlled both banks of Jordan belonging to ancient Judea. Aum Shinrikyo is designed to facilitate the coming of Apocalypse where the corrupted world would be destroyed with only the sect members surviving.

Terrorism develops with the world. Terrorists work out and phase in new approaches to solve their strategic tasks. Religious terrorists of the new generation proceed from the fact that the desired effect can be securely obtained only when a state-of-the-art means of mass destruction (chemical, biological or nuclear weapons and new, primarily, information technologies) are used. In 1995 the Japanese sect Aum Shinrikyo, by using home-made sarin gas in a Tokyo subway system, crossed an important psychological barrier: the use of WMD for terrorist purposes. Given that US intelligence information is correct, Osama bin Laden's financing of chemical weapons production (VX nerve agent) in Sudan proves that al Qaeda is also trying to acquire chemical weapons. The same US sources convince the world that bin Laden communicates with Pakistani nuclear scientists and that the Taliban plotted the creation and use of a "dirty bomb". This indirectly proves al Qaeda's aspiration to acquire nuclear weapons.

In a sense, it is possible to speak about the natural course of events. Terrorists use the same weapons, which are offered by the level of armaments' development in the world. Since there are no borders for terrorists, there are no borders for those who supply them with weapons. There are known cases of terrorist attempts to seize submarines, nuclear explosive devices, a communication satellite, and development of chemical and biological weapons. Now the terrorist organizations' arsenals house information weapons. What is next?

One of the serious problems facilitating spread of terrorism is the migration of thousands of well-armed and well-trained militants who do not want to adapt to a peaceful life. Some experienced Yugoslavia, some – Chechnya, some – Afghanistan and Central Asia where they took part and continue take part in warfare along with terrorists who came from other countries.

Therefore, executive and legislative powers practically in all countries are facing the challenge of adopting integrated counterterrorist measures. Measures should be comparable with the degree of the terrorist threat and variety of its forms. In this context it is evident that there is a pressing necessity to involve in combat all legal, social and political institutions.

It is known that the approaches of different countries to specific manifestations of terrorism sometimes differ greatly and the differences in assessments of terrorism and terrorist threats are difficult to distinguish. International politics is often superceded by momentary circumstances and a desire to use a double standard. Evidently, that is why a unified international legal definition of terrorism has failed to be developed so far.

The lack of a unified approach, however, should not be grounds for inaction or delays in adopting coordinated practical measures to combat international terrorism and its accompanying negative effects, including illicit weapons and drugs trafficking, organized crime, money laundering, and illegal migration.

The course of events following September 11, 2001 has shown that the challenge of maintaining in the world community the position of active resistance against terrorism becomes more acute. It is important to strip terrorists from the mythical halos of "great martyrs fighters" against oppression and violence, bearers of the ultimate philosophical and moral truths, "fighters for faith". It is necessary to take practical steps to form in the individual and collective consciousness the understanding that any terrorist act or a threat of it, whatever motivation might be, is a grave offence to be severely punished both nationally and internationally. This leads to the importance of creating a coordinated legal basis for combating international terrorism where international terrorism is attributed to a special category of offences against humanity.

In this connection the work being done by the UN to strengthen the international legal bases of the anti-terrorist cooperation is of special importance. It is necessary to broaden the circle of parties to the already adopted conventions on combating terrorism and to encourage development of new agreements in this area. UN achievements in this area include the International Convention for the Suppression of Terrorist Bombing of 1997, Convention International for Suppression of the Financing of Terrorism of 1999. Upon Russia's initiative the UN Security Council adopted Resolution # 1269 (1999), which has become a kind of anti-terrorist manifest of the UN SC to maintain peace and security.

On September 28, 2001 the UN Security Council adopted Resolution # 1373, which, on the one hand, incorporated the main provision of Resolution # 1269 and, on the other hand, determined a set of measures to isolate terrorists, ruin their infrastructure, and create legal and organizational prerequisites for terminating any forms of external contribution to terrorism. Resolution # 1373 envisaged a mechanism of control (by the Security Council Committee) over the factual terrorist activities, which provides for the creation of an entirely new cooperative structure to combat terrorism. The Resolution determines a wide range of measures to terminate the external make-up of international terrorism to be implemented under the UN auspices in an agreed manner at the national, regional, and universal levels. Such measures are binding and a failure to follow them may lead to imposition of sanctions by the UN Security Council (the Resolution deals with Chapter VII of the UN Charter where the acts of international terrorism are classified as a threat to the international peace and security).

Russia's interaction with the UN in the area of combating terrorism has become regular and facilitates the creation of a broad political and legal basis for international anti-terrorist cooperation. At present, a process is under way to match all disagreements on the Russian Draft International Convention for the Suppression of Acts of Nuclear Terrorism and in parallel work is being done on the Draft Comprehensive Convention against International Terrorism.

On July 4, 1999 in the CIS framework Russia signed the Treaty on Cooperation between the CIS Member-States in Combating Terrorism. The Program on

Combating International Terrorism Other Manifestations of Extremism, developed and adopted in 2000, as well as the decision to set up the Antiterrorist Center of CIS Member-States, may be considered a striking example of the anti-terrorist cooperation of the CIS member-states. Eventually this decision was supplemented by an agreement to open an office of this center in Bishkek to coordinate specific measures to combat international terrorism in Central Asia. The Center's activities are to be supthrough, others, ported among Committee of Secretaries of Security Councils of Collective Security Agreement¹².

In Russia there is a legislation package regulating various aspects of anti-terrorist activities. The Federal Law "On Combating Terrorism" was adopted on July 25, 1998. In January 2001 Russia ratified the International Convention for the Suppression of Terrorist Bombing and in June 2002 - the International Convention for the Suppression of the Financing of Terrorism, thus becoming a party to eleven out of twelve anti-terrorist conventions adopted by the United Nations.

Russia respects and monitors the lawmaking activities in this area in other countries. The law of the Kazakh Republic "On Combating Terrorism" raised a great interest. The legislation adopted in Great Britain is another prominent example to follow. It provides for the prosecution of organizations and individuals for terrorist acts committed not only in UK territory but also outside the country, as well as for acts committed against administrations and populations of other countries.

The European Union, in view of the terrorist acts in the United States, adopted on September 21, 2001 an extensive international terrorism combat program which was approved by the EC leaders of states and governments at the Gent Summit on October 19, 2001. Its content in many aspects echoes the positions of Russia and CIS countries. This opens new opportunities for our cooperation on the anti-terrorist front.

The European Convention on Computer Crimes, developed and opened for signing by the European Union, may be considered a very important step to prevent cyberterrorism.

On October 3, 2001, based on the EU-Russia Brussels Summit, President of the Russian Federation Vladimir Putin and the EU leaders adopted a joint declaration on combating international terrorism and agreed upon a mechanism of active bilateral consultations on this subject. Further consultations were focused on the necessity to work out a unified definition of terrorism that is actively pursued by the EU. In doing so, all forms of terrorism are meant to include those which use weapons mass destruction and state-of-the-art information and psychological technologies. This was confirmed in the documents adopted by the G8 leaders in June 2002 in Kananaskis, Canada.

cannot develop Contemporary terrorism without financing, because aspirations to acquire and use high-tech means of massive impact and WMD require enormous expenditures. Therefore, it is very important to cut off financial flows. Russia attaches great attention to its coordinated participation in the international efforts to terminate financial assistance to terrorist organizations in accordance with UN SC Resolution # 1373 of September 28, 2001. In this context, one may consider the unification of customs' regulations and border crossing procedures including export of capital, intensification of relevant information exchanges. In other words, the above should be pursued not only by intelligence agencies, but also central banks and other financial institutions.

The illegal drug trade is one of the most important channels of financing for terrorists. It is not a secret that the major part of cash raised through drugs sales is spent to finance militants' activities and infrastructure of various terrorist groups, especially in the countries of the "arch of instability" which expands from India to the Caucasus. This involves the whole civilized community in the combat against the illegal drug industry.

The Chechnya situation cannot be left behind while analyzing the issue of combating the international terrorism. Recently, this territory within the Russian Federation housed an uncontrolled enclave of international terrorism, extremism, and illicit drugs trafficking. There is proof of WMD, in particular radiological weapons, use in the region. Components of information weapons are also in active use. The country's admin-

istration was forced to terminate these unlawful activities by using force.

The presence of Chechen separatists in Georgia, Turkey and some other, primarily Islamic, countries cannot but raise concerns. These countries' territory is used as a recreation and convalescence site for Chechen militants and mercenaries from other countries and also for trafficking money to Chechnya.

It should be noted that the understanding of Russia's position towards Chechnya has recently grown within the international community including the leading western countries. The discussions of Chechnya related topics by presidents of Russia and the US in Washington D.C. and Texas during the 2002 Russia-US Summit is the dramatic confirmation of that.

Russia can rightfully count on the world community, including authoritative international organizations, not only contributing to combat against international terrorism in Afghanistan but also facilitating the termination of external support of Chechen terrorists. This could become an important milestone on the path to overcoming the dual standard policy in regard o the extermination of the terrorist threat on our planet.

Recently, many of the world's countries have been developing and adopting legislation where terrorism is classified as a grave crime. These countries have worked out and practiced methods to combat it. They have also allocated responsibilities, rights and authorities in specialized anti-terror governmental agencies, as well as in the police, prosecutor's offices, relevant civil ministries and agencies, intelligence and foreign offices. They have specified and toughened sanctions for participation in terrorist acts and support of terrorists.

Anti-terrorism experts believe that today the issue of social and political roots of terrorism is most acute. Recent events have demonstrated that the exclusively repressive measures to combat it do not pay off. Therefore, the international circles, in particular, the UN system highly estimate Russia's approach. Russia was one of the first countries to raise the issue of undermining the social basis of terrorism during the 56th Session of the UN GA. At the same time, many experts justly stress the danger of a cursory or inadequate interpretation of this aspect of anti-terrorist

interaction. They refer to a good example of gradual fading of comprehension of such factors of terrorism as poverty and illiteracy, harsh contrast in revenues of rich countries of the North and poor countries of the South. The aphorisms of Proudhon ("Property is theft")¹³ and Heisterbach ("Any rich is thief or thief's heir")¹⁴ experienced and rejected by the European sophists have reincarnated in the North-South confrontation.

There is a complex of other causes of terrorism which are rare to mention since they may seem politically impolite or have not been clearly formulated so far.

In regard to the above, many experts, especially from the third-world countries, give the top ratings to the behavior of the most developed countries, primarily to the United States. The Americans by their unilateral actions in various areas of international relations succeeded in poisoning the public opinion against themselves not only in the majority of developing countries but also in their own country¹⁵, U.S. allied countries including NATO member-states, and in Russia¹⁶.

National abasement is called another important "pro-terrorist" factor. This, rather than lack of material welfare, often facilitates ingress of new recruits to extremist organizations. It is not accidental, for example, that often before aggravation of the Middle East conflict there were calls "to inventory" measures directed against the Palestinians by Israel to ensure its security and to abolish the most odious of them.

Lastly, economic and political isolation plays no small role in planting terrorism. States, which are not integrated in the system of active international relations or are being pressed out of this system are less inclined to view terrorists as their enemies.

These factors are deepened and fostered by the continuous arms race. The aggravation of the non-proliferation situation facilitates new types of armaments falling into the hands of terrorists, where creation and proliferation are not regulated by the international law. New types of armaments are a new technological level of international terrorism.

With all variety of opinions, the majority of experts agree that contemporary international terrorism has acquired a new quality of megaterrorism (September 11, 2001 events, in spite of the whole tragedy of what happened

are just a local manifestation of the trend) and therefore requires a determined and non-traditional approach. One of the key means of ceasing megaterrorism is the understanding of its causes.

New paradigm of terrorism

In spite of the fact that the issues related to the ideological motivation of contemporary terrorism are often left behind by experts in favor of attention to the analysis of direct threats created by this phenomenon, it is impossible to consider the transformation of terrorist activity without studying its doctrines and ideological prerequisites. And if the motivations for terrorism do not have a value for operative objectives, it is difficult to overestimate their significance for predicting the situation and long-term security measures

In the context of an analysis of contemporary terrorism, one should acknowledge the three basic paradigms of terrorism: terrorism as a means of coercive diplomacy; terrorism as war; and terrorism as a precursor of the "new world"17. Until recently, the coercive diplomacy paradigm played the main part. The change in organizational structure of terrorist groups, however, has led to a change in their strategy and tactics. In particular, the taking of hostages to compel this or other government to cater to terrorist demands is replaced by actions resulting in large damage and multiple victims among members of the public. If until recently terrorist acts had served to evoke a significant political and social response, now they have transformed into a direct means of achieving the goal. The goal of a terrorist act is known only to the terrorists themselves.

The great majority of analysts believe that the deviation from the "coercive diplomacy" paradigm is due to the following causes:

• inability to head-to-head fighting with well-equipped armies, especially, of the highly developed states and, as a consequence, a necessity to seek new means of warfare, i.e. a transition to the "terrorism – war" paradigm. In this case terrorism gets pretty close to the notion of the asymmetric war and its guerilla methods. The examples are the extremists' activities in Chechnya, radicals of the *Irish Republican Army* (*IRA*) in Northern Ireland and the Palestinian intifada.

• impossibility to "modify" the current political system to the terrorists' model and the urge to completely destroy the world to create a new, more just, as they think, world order (a transition to the "terrorism as a precursor of the "new world" paradigm). This goal was pursued by the Aum Shinrikyo sectarians.

The most well-known radical terrorist groups of the from 1960 to 1980, such as the Red Brigades, Japanese Red Army, etc. made their goals hijacking, taking of hostages, and explosions to manifest their views and compel governments to meet their demands. The dawn of classic ideological "coercive diplomacy" terrorism is linked to the decline, after the Cold War, of the leftist sentiment brightly colored by Marxist and anti-capitalist shades. At the same time, according to Neal Pollard, the Co-Director of the US Terrorism Research Center, the "depolarization" of the world that followed exposed old-time ethnoreligious conflicts, which had been hidden before¹⁸. Though this type of terrorism became massive in the 1990s in many regions of the world, however, it cannot be a pattern of the new form of terrorist struggle.

Another form of terrorism has appeared recently and does not possess a clear-cut dominant course of action. For different, scattered communities, a uniting element is the negation of the current world order as such. Different groups and even ethnic or religious fractions that act remotely from each other are coordinating efforts, exchanging information and providing direct assistance. The ties between Talibs in Afghanistan and separatists in Chechnya or contacts between IRA representatives and radical Palestinian organizations¹⁹ may serve as examples of such international terrorist "collaboration". It is quite obvious that the links between such organizations cannot be close. In terms of organization such groups represent a classical example of an all-channel network or celltype structure. The decentralized structure of the terrorist community in combination with ideological radicalism makes the negotiation process impossible, because the formal leader of radicals loses his profile and ability to influence and the militant groups do not depend on him in regard to planning and conducting operations²⁰. At the same time, such form of organization increases sharply the effectiveness of actions of small-size and relevantly weak groups²¹ whose isolated activities would not pose any hazard by themselves. There is a sense of considering this terrorist direction in the context of the "terrorism as a means of achieving the "new world" paradigm.

This approach makes the coming into being of so-called "covert terrorism" natural and clear. This term was introduced earlier to define terrorist acts, which "appear as natural disasters or accidents and which are skillfully plotted as having nothing in common with terrorism"²².

Covert terrorism in the context in question represents a campaign of several stages which are taken for a chain of unlinked, chaotic, random events which are not even attributed to a certain locality but result in negative consequences. The goal of covert terrorism is to spread panic and despair. In pursuing it, low-technology operations are highly effective, leading to destruction of various facilities as well as to creation of an advantageous, for terrorists, socio-political situation in a country or region. This situation could be used as a means of committing actions capable of posing even a strategic threat. In this regard, the effect of a covert terrorist attack should not manifest itself immediately, rather the country which is slowly being destroyed by terrorists would be the victim of a weaker adversary. Agriculture quite naturally can be a possible target of the covert terrorists. They, by using genetically engineered biological agents or natural pathogenic microorganisms, could make a weapon to attack animals and plants. The outbreaks of foot-and-mouth disease in the Great Britain in 1967 and 2001, when hundreds of thousands of animals were eliminated, can be representative of the scale of negative consequences resulting from such scenarios. By anticipating the course of events, it is easy to predict extremely negative results: huge economic damage, panic on the market, destabilization of the social situation in the country.

Therefore, the change in terrorism doctrines speaks on its emerging pattern: terrorism of action. In this context, the most dangerous is the transition from isolated actions to targeted terrorist campaigns (or "campaigns of violence"), which often are not constrained by the activities of one group and are of an integrated nature. This further complicates

counterterrorism, especially in combating this form of megaterrorism.

Information-oriented terrorism

Substantive change in the global information space has become the key factor of contemporary civilization's progress. The main direction of societal development was identified in the late twentieth century as transition from an industrial to an information community. The global expansion of information technologies produces a significant influence on the international and political situation and future of every country. This expansion influences the development of transport, financial and technological spheres, the rate of economic and social development and thus the country's place in world industry.

Still, the development of information technologies brings about a set of negative international and political consequences. Primarily, this is an acceleration of the world's polarization, the widening of the gap between the rich and the poor, between the technologically backward and advanced countries in all fields, and an increase in the number of marginal countries as well as so-called "collapsed states". This polarization is a main source of instability well as and current and future conflicts, including those that could progress on a global scale. The increased military potential of scientifically and technologically advanced countries changes the global and regional balance of forces. This imbalance may provoke concerns and even the hostile reaction of the "backward" countries, thus creating new islands of confrontation.

In other words, the development of information technologies is not only speeding up the development of civilization, but it is also bringing about new threats to national, regional and global security.

In 1992 John Arquilla and David Ronfeldt, experts at the RAND corporation, proposed the cyberwar concept as a pattern of future conflicts. In a cyberwar the key role is to be played by information-related operations with the military units being network-structured rather than hierarchically. This, as the authors designed, should give them a higher degree of independence and freedom in decision-making under the rapidly changing conditions of contemporary warfare. In parallel, the same authors worked out the netwar concept²³ to describe less intensive and less militarized conflicts. The main players of a

netwar were terrorist communities, criminal and radical groups which, already had an internal network structure and also could have carried out remote actions coordinated between the performers and managers using communications technologies.

Therefore, the described phenomenon could be correctly defined as information-oriented terrorism, or the formation of flexible structures of terrorist communities having less formal but close internal ties. Also included in this definition is the broader use by terrorists of the products of technology, made possible by information technology development.

The necessity of conceptualization of the new image of terrorism has greatly increased after the terrorist acts in New York and Washington D.C. on September 11, 2001. Some features of this terrorist operation:

- large-scale actions (hijacking of several airliners and successful attacks upon three targets with collapse of two of them) and massive numbers of victims;
- perfect coordination and harmony of actions;
- professionalism and absence of information leaks from terrorists;
- strong commitment of terrorists to sacrifice themselves to achieve the set goal;
- getting mass-media to solve the task of wide coverage and propaganda²⁴.

These features demonstrate that it is necessary to pay more attention to the issues associated with the transformation of the organizational structure of terrorist communities, their doctrines and ideological directives, as well as to the role which is played by the state-of-the-art information and communications technologies in contemporary terrorism.

New organizational structures of terrorist communities

Organizational structures, which are qualitatively different from classical hierarchies, have been coming into being over the lager part of the human history. In fact, all guerilla movements can be attributed to such organizational forms where the significance of hierarchy recedes to the background. Despite the fact that often these movements were triggered and controlled by the state (for example the Soviet guerilla movement during the WWII), the horizontal links between separate guerilla groups produced a signifi-

cant effect for the general success of the conducted operations.

As information technologies develop, network-based organizations gain a new impetus for development since to make their actions effective it is necessary that speed and quality of information exchange be much higher than that of the hierarchy-based structures. It may be stated to a certain extent that such information exchange is the binding element capable of replacing vertical command in hierarchy-based communities. Since governmental institutions are more conservative by nature, the network-based organizational forms are primarily used by non-governmental players. Moreover, in the current situation where geographic distance is less important, network-based organizations can be not only of national but also of transnational nature.

A network organization is based on the three fundamental principles:

Firstly, the interaction within the organization is informal. Each member of the group can play a part that corresponds with the tasks set for a particular moment. The structure of organization becomes flexible, capable of adjusting to specific tasks. Horizontal links acquire more significance then vertical ones.

Secondly, the internal organizational network is supplemented with informal links between organization members and individuals beyond the organization who can be involuntary involved in the network terrorist organization's activities. In other words, members of the network organization who have a certain place in the social and governmental hierarchy can use this circumstance to carry along or use other persons (for example, officials).

Thirdly, internal and external links are not regulated by formal frameworks and responsibilities; they are based mainly on general values and behavioral standards shared by the individuals involved with the group. Activities within organizations are carried out by self-controlled groups while the external links may be built within the generally accepted social standards and even in compliance with the legislation of the countries where the organization functions. Therefore, the formal signs of a terrorist or criminal activity may be absent until the moment when the organization starts to actively manifest itself.

Both individuals and independent groups in which where relations may be also of subordinate (hierarchical) nature may be considered as elements of network structures. Despite the fact that this circumstance significantly complicates the general picture, still one may speak about availability of several baseline network patterns.

- "Chain" or linear network a criminal chain of individuals where products (items) or information are transferred to the end user indirectly, through intermediate nodes while the mediators sometimes are even unaware of the total number of links, points of dispatch, and destination. Such structure is widely used by criminal communities involved in smuggling and transport of drugs.
- Lateral structure or "star" an arrangement where the different nodes (individuals or groups of individuals) are tied to the central node (a concrete individual or a group). The main task of the central node, unlike the hierarchical structures, is mediation activity rather than management and command. The lateral structure is widely used by criminal communities primarily acting in the field of finance, for example, in money laundering.
- All-channel structure or "complete matrix" - an arrangement, which is used by terrorist and militant structures. All elements of such an organization (individuals or groups) interact with a general ideology, religion or ethnicity being the uniting constituent. The network as a whole (not necessarily each of its elements) contains little evidence of hierarchy and may have several leaders or no leaders at all. Therefore, the decisionmaking and conduct of operations are decentralized, i.e. there is a wide opportunity for initiative and independence. This type of network is the most complex and difficult to maintain due to a necessity to provide for a stable and prompt communications between the elements. However, it gives significant advantages since the lack of a central element excludes a possibility of its extermination and, thus, extermination of the whole organization. An example is the Caucasian wars of Russia. If in the nineteenth century the Chechen war ended with the capture of Shamil, in the first campaign the extermination of Dudayev,

Arbi Baraev or the arrest of Salman Raduev did not lead to cessation of the war.

The clear distinction between hierarchic and network forms is demonstrated by Mideast terrorist organizations. The majority groups created in the late 1960s - early 1970s had close ties with the Palestine Liberation Organization. In spite of the fact that their structures included separate independent cells, the general command was exercised within a routine bureaucratic hierarchy and their lengthy existence was possible only due to support by the third countries (Libya, Syria and Iran). Unlike terrorist groups forming around the Palestinian Liberation Organization, Hamas, Hizballah, Palestine Islamic Jihad and a number of other organizations fundamentally have the decentralized network structure with religious and ideological (to a lesser degree political) motivation. It is interesting to note that as Israeli-Palestinian relations worsen these organizations become more active.

One may note that the difficulty of making strategic decisions requiring consolidated and coordinated actions is a deficiency of the network structure. The Chechnya example demonstrates that the scarce militant groups (where relations are of the hierarchical nature) may even confront each other. Still, that does not lead to the end of war with separatists. A similar example was demonstrated by the *Northern Alliance* in Afghanistan, where waging a rather consolidated war on the *Taliban* included separate elements feuding with each other.

Definitely, the patterns listed above are perfect schemes and a real organization may feature traits of some of them and even has some elements of classical hierarchies. For example, the militant groups arranged to the all-channel-type network receive weapons through the "chain" arranged channels, although a third state is their end contractor, i.e. a case of classical hierarchy.

In the course of its development a network organization arrives at the so-called SPIN structure (segmented, polycentric, ideologically integrated network) – a cell-type structure consisting of several groups with different leaders or a different polarity. These different leaders may unite or cooperate to solve common tasks. Such structure can exist only in the conditions of a society that has a sound

information standing. It is a highly dynamic system that rapidly adapts to the changing political situation. Evidently, organized international terrorism should be considered in this particular context.

Role of information technologies in contemporary terrorism

The most important factor in the emergence of information-oriented terrorism is the accessibility and wide use of information technologies, which allow for terrorist organizations to improve the effectiveness of their activities in the following key areas:

- coordination of activities of scarce terrorist groups and exchange of information to solve common tasks on the global scale while providing for a sufficiently high degree of anonymity;
- reduction of communications costs which increases the effectiveness of previously marginal organizations, which do not have sustainable sources of finance;
- exchange of complex, integrated information including visual information (for example, maps or technical documentation).

Since terrorist organizations turn out to be more flexible than governmental institutions in regard to issues of implementing technical innovations, they gain obvious advantages for conducting well-coordinated complex operations. For their purposes they use off-theshelf technical means and the information infrastructure objects of the country of their stay. In this connection, a special concern is raised about a possible use of information infrastructures for terrorist proposes in the states supporting terrorism. This, in particular, is linked to the fact that at present there is no a system of assessment of how information technologies are used and developed in the Arab states, in spite of the fact that the majority of the Middle East countries are serious in their considerations about a possibility of the asymmetric impact to the information sphere of the potential enemy. This is fully true in regard to many non-governorganizations including extremist mental ones. In regard to this problem, the United States, Israel and international organizations are not able to stop or even control the circulation of information and information technologies at the Middle East.

In particular, Hamas widely uses Internet capabilities for communication and transmission of operative information. According to Israeli experts, Hamas activists in the US coordinate activities of militant groups in the Gaza Strip and west bank of Jordan by maintaining communication with them via electronic mail or web-chats. The use of capabilities of the basically open information network (Internet), however, provides for the necessary level of security. It is acknowledged that the Israeli security service fails to trace and decipher Hamas information traffic in a timely manner. This is due, in particular, to the availability on the legal market of information encryption software. Attempts to constrain sales of encryption software featuring lengthy keys, which create the highest degree of encryption protection, were not welcomed by businessmen. The decision on the constraints, which were being prepared by the Clinton administration, was not made²⁵. And the proposal to do this under the Wassenaar agreement after the aforementioned Clinton initiative made no sense.

In addition, information technologies allow for substantial improvement of the intelligence capabilities of terrorist organizations and not only for collection and analysis of critical information (for example, flight schedules and air corridors of civil aircraft) but also direct allocation (the use of the global positioning system GPS)²⁶. The latter circumstance suggests, at least in theory, a possibility of precise guiding of weapons of mass destruction on a target should they fall into terrorist hands.

If terrorist groups had the possibility of conducting information assault operations, these would pose serious threats in future as the dependence of governmental and public institutions on information and communications grows. There three main classes of such operations are distinguished.

Operations involving impact to perception of events and consciousness. Since the effect of propaganda and the creation of an atmosphere of fear and terror in society or certain political (religious, ethnic) strata is one of the main goals of terrorism, the mass-media become to a great degree a tool of the terrorist struggle.

Traditional information dissemination channels such as TV, radio and print are widely used by different terrorist groups. Some groups have TV and radio stations of their own, which ensure direct impact to those public strata they may find leaning towards their goals and ideas, and (potentially) used for recruiting new proponents. For example, Hizballah has TV and radio studios as well as a press center, which regularly and professionally supplies necessary information to foreign journalists. Often, TV operators are enlisted in militant groups of this organization. Then, the shot videos are made public in Lebanon and, peculiarly, often retransmitted in Israel.

However, this strategy of propaganda and public opinion building works only when a terrorist organization is interested in a kind of "self-advertising". Groups that choose the methods of direct, anonymous terror use another efficient strategy. That strategy is to make terrorist acts large-scale and pretentious. A series of apartment house blasts in Moscow and Volgodonsk in the fall of 1999 and the terrorist acts of September 11, 2001 in the United States are attributed to strategies of this kind. In the latter case, the national news agency CNN did a live broadcasting from the moment the aircraft collided with the towers until they collapsed completely. Therefore, terrorists, while retaining anonymity, succeeded in propaganda that is incomparable with anything.

The construction of web-sites by terrorists is a relatively new form of influencing consciousness. However, according to the Institute of Complex Sociological Studies of the Russian Academy of Sciences (ICSS RAS) studies²⁷, the Internet is considered basic source of political knowledge by only 3% to 4% of the adult population. However, this segment of society is also the most active part of it and plays a leading role in the political structure of the society.

The information placed on a site is differentiated according to the audience subject to the information's influence. Thus, information of propaganda nature is transmitted when the anticipated audience will include potential terrorist supporters or sympathizers. Sites of the Islamic extremist groups, for example, Islamic Brotherhood Movement (Egypt-based), Hizballah (Lebanon) or Hamas Palestinian Autonomy), are primarily listed among such wed-editions. This information, directed to demoralize and form the public opinion of the enemy, is the most efficient

when the targeted audience is "information-hungry". A typical example is the site of the Chechen separatists *Kavkaz-tsentr* (the *Caucasus-Center*) created by Movladi Udugov. It is confidently known that one of the information servers was located in the US territory. When official Russian structures and mass media developed an information policy and catered to information demands in regard to the Chechen issue, *Kavkaz-tsentr* ceased being popular and lost a major part of its audience.

Subversive operations. Generally, these operations are of a supportive nature and targeted to temporary disable the infrastructure (physical examples, including electricity transmission lines, virtual communications lines web-sites, electronic mail systems, etc.). Communications lines can be disabled, for example, by electromagnetic disturbances or physical destruction. Information networks can be broken down by information bombs, spam of electronic mail and facsimile communications or readdressing web-sites. Such operations in themselves are incapable of a significant damage but they can be used as a background for larger scale terrorist acts. Also, their consequences could raise chaos and lead to serious economic loss²⁸.

Targeted operations. Direct impact operations include terrorist acts targeted at the elimination of facilities (or information systems). The most known recent terrorist acts are:

- attacks on the American embassies in Kenya and Tanzania in August 1998;
- blasts of houses in Moscow and Volgodonsk in September 1999;
- blast of the *USS Cole* destroyer by suicide terrorists on October 12, 2000;
- aggravation of terror in the Palestine Autonomy in 2000-2002;
- terrorist act in Kaspiisk on May 9, 2002;
- attack on WTC Towers in New-York and Pentagon in Washington D.C. on September 11, 2001 by hijacked airliners;
- dissemination of anthrax causative agents through postal service in the USA in the fall of 2001.

The outbreaks of acts like the above in the late twentieth, early twenty-first centuries demonstrate the change in the terrorism paradigm that has already occurred. Though the above listed examples are difficult to attribute to "high-tech" terrorist attacks, two aspects deserve attention. Firstly, despite their anonymity (only the Palestine militant groups

in some cases took responsibility for acts of terror), all of them resulted in a significant psychological effect, i.e. they belong with the operations aimed at influencing perception of events and consciousness. Secondly, the two latter cases can be attributed to terrorist acts where weapons of mass destruction were used. In doing this, the terrorists used complex technical systems (airliners, navigation systems, communications systems) or biological weapons, while lacking access to technologies and production capabilities for such weapons. Therefore, the effect of the use of complex technical means, including information systems, by terrorists translates from a possibility to gain access to production technologies into the direct use of technical means and information.

Lastly, technical progress creates new areas for terrorist activities. They include physical destruction of information systems' components, degradation of their performance or acquisition of data through tampering software, the control of information systems to disable large-scale industrial, power generation and other facilities (nuclear power plants, chemical plants, etc.). Such acts have not come into practice yet²⁹.

State terrorism

There are several viewpoints on state terrorism³⁰ elaborated in different countries. First, the emergence of rough totalitarian regimes accompanied by suppression of civil rights and freedoms in a country may be considered a manifestation of state terrorism. The second point of view deals with the state support of terrorist organizations acting against a third country. This perception corresponds with the US term "state sponsored terrorism". And, lastly, the third interpretation of state terrorism is the unjustified and unlawful use of force by one country against another, as well as a threat to use force as a blackmail to have the political decisions made in their favor³¹.

A strong state has advantages that are quite evident. The fact that a weaker enemy also has an opportunity to win a conflict is based on three key provisions formulated back in the mid-1970s:

- considerable military power presupposes considerable interests;
- considerable interests mean considerable political vulnerability;

• considerable vulnerability means that a stronger enemy can be outfought.

This quite evident causal connection becomes the question of interest because of the following reasons:

- geographic factors lose their initial significance because of the development of means of communications and globalization processes;
- in order to have weapons capable of threatening the interests of a stronger state, it is not necessary to have a technological basis for the production of those weapons;
- a weaker enemy may not use any armaments at all (in a traditional sense), however, the result of its actions could be quite damaging;
- uncommon methods of warfare allow not only for clandestine preparation and attack against stronger enemy, but also for remaining anonymous later.

In fact, a step-by-step progression of new technologies and, what is more important, technical devices made by these technologies has reduced the gap between strong and weak enemies and poses a serious threat of asymmetric actions against highly developed states. Therefore, terrorist methods are viewed by different states as effective and, sometimes, the only tools available to reach strategic goals.

The circumstance that a number of "hostile" states can use information infrastructures (in the aforementioned way or in others) has led to emergence of a strategic information warfare doctrine. Rather than the use of information technology to support traditional combat operations, strategic information warfare is understood as action against national information infrastructure segments, the disability of which could bring about consequences comparable to that of conventional warfare (e.g. political and economic collapse, shutdown of power generation facilities, disruption of transport, etc.). Many analysts are inclined to believe that rather than attempting to disrupt the functioning of information networks as a whole, terrorists would rather be interested in keeping them operable. This would allow them to coordinate their activities in a better and more efficient way and receive information promptly. In addition, the Internet is a very good setting for cover-up acts of cyberterror and the promulgation of new information. Therefore, an open information infrastructure is potentially a danger, since it can be used by terrorist groups.

Since modern communications technologies allow terrorists to operate practically from any country of the world using the national information infrastructure of such countries, some analysts, like Michael Zanini, draw a far reaching conclusion that the terrorists depend on a certain kind of state sponsorship. This statement could have been considered an oddity, if only top ranking US officials had not made similar statements.

Similar statements are the elements of a targeted campaign to transform the system of international law and to increase the opportunities to use or threat to use force on unwanted regimes under the pretext of combating international and national terrorism.

On January 29, 2002 US President George W. Bush, in his annual State of the Union Address, speaking on goals of combating terrorism, noted that if the first goal were to "shut down terrorist camps, disrupt terrorist plans, and bring terrorists to justice", the next goal would be to "prevent the terrorists and regimes who seek chemical, biological or nuclear weapons from threatening the United States and the world". President Bush marked North Korea, Iran and Iraq as the state sponsors of terrorism and said that they and their "terrorist allies" comprise the "axis of evil". Moreover, Bush stated that "some governments will be timid in the face of terror. And make no mistake about it: if they do not act, America will". These statements can be formally taken as elements of statelevel blackmail and termed as manifestations of state terrorism. However, as it was noted above, the main feature of contemporary terrorism as a phenomenon is the affinity of counterterrorism and state-level terrorist acts.

Even in 1998, after the attacks in the Tokyo subway system, Yonach Alexander, the Director of the Terrorist Studies Program at the George Washington University, stressed³² that that event and the 1993 WTC bombings are the foreword to a more dreadful event he termed already at that time as megaterrorism. In doing so, he stated that there were prerequisites for megaterrorism to grow:

- terrorist acts resulting in havoc and a great number of victims are also an efficient means of affecting public opinion and the stable functioning of the main political and economic institutions in the country;
- on the whole, it is quite realistic for terrorist groups to maintain stable and protected communications, finance, and to possess the capabilities for large-scale terrorist acts;
- the existence of widely spread international networks, which include as terrorist groups individual states, substantially facilitates coordination during megaterrorist acts. Having direct or indirect side support, even small terrorist groups are capable of conducting large-scale terrorist acts.

In this particular case, Alexander listed the main features of information-oriented terrorism and in fact equated it with megaterrorism. He also stated that the traditional types of megaterrorism (nuclear, chemical, biological) may be added with cyberterrorism as a means of affecting physical elements of infrastructures through intervention into their controls using communication and information networks for such intrusion.

The terrorist acts of September 11, 2001 confirmed these ideas of megaterrorism. Firstly, the civil aircraft were selected as a high precision weapon of mass destruction (cruise missile). Secondly, these acts clearly show the features of information-oriented terrorism, notably: the new paradigm of terrorism and the high-tech aspect, however, one cannot state unambiguously what political force is behind it.

The transition from traditional, politically constrained terrorism to targeted terror campaigns, from declarative terrorism as a means of blackmail to anonymous terror as a direct means of achieving set goals is the starting point for a modern understanding of megaterrorism.

New Forms of Terrorism. Real Megaterrorism

In the context of the above, megaterrorism is understood as the use (or threat to use) for terrorist purposes the most advanced armaments or technologies resulting in massive numbers of victims among the members of the public or substantial (at the state level) economic or environmental damage. Today, they are the elements of weapons of mass destruction: nuclear, chemical and bacteriological (toxin) means as well as a means of affecting the ecosphere and the information space.

Previously, terrorism was mainly associated with weapons of mass destruction (WMDterrorism). The first discussions of WMD-terrorism started in the 1960s when the outburst of leftist political terror forced the discussion of possible use of nuclear, chemical or bacteriological weapons by radical terrorist groups as quite realistic acts. In the West WMD-terrorism discussions gained a second wind after the disintegration of the Soviet Union, when concerns were raised on the possibility of the proliferation of the former USSR's munitions stockpiles and of the sale of critical technologies to terrorist organizations. In spite of the clear political context of megaterrorismrelated many aspects, megaterrorism itself acquired a new quality reality - after the events of September 11, 2001.

Nuclear terrorism

The first proposals to adopt international legal action to facilitate minimizing the threat of nuclear terrorism were made in the UN as far back as the 1960s. The International Atomic Energy Agency (IAEA) was charged with the development of corresponding documents. As a result, 68 countries signed the IAEA-developed Convention on the Physical Protection of Nuclear Material in March 1980.

The signing was "pushed" by over 150 incidents that occurred during those two decades and demonstrated an increase in the degree of hazard in this arena. This number includes blasts in the vicinity of nuclear facilities, intrusion attempts, kidnapping and murders of nuclear physicists, theft and smuggling of various fissionable materials, etc. In 1961 a group of French right-wing generals unhappy with President de Gaulle's policies had intentions to seize a nuclear explosive device at the Sahara test site to deliver a kind of political ultimatum to Paris. The French government, conscious of the reality of the threat, was forced to take firm measures to expedite preparations for a test explosion, which was done long before the preset date. In 1975 in Boston (USA) a group of plotters demanded that authorities

pay a large amount of money in return for stopping a supposed nuclear timing device. The danger was so serious that the president was notified of the event. This incident uncovered the fact that the state authorities of the country were completely unprepared to neutralize such threats. Thus, after the incident had been settled, the US set up a special team equipped with the means of detection of nuclear explosive devices and radioactive materials.

The imperfection of the system of control over fissionable materials and the lack of antiterrorist legislation in nearly all countries created encouraged the expansion of criminal and terrorist groups' spheres of activity. This expansion increased the probability of nuclear weapons getting into hands of terrorists. The situation was getting even worse due to the fact that hundreds of thousands experts and support personnel were involved in the nuclear sphere. This substantially increased the vulnerability of existing protection systems.

It should be noted that the weakest link in the nuclear security system is the human factor. US publications describe a case where a mentally sick USAF sergeant tried to "hand in his checks with a bang" by shooting a hydrogen bomb with a pistol. In this regard Russia has its peculiarities which could facilitate terrorist acts. For instance, recently the guard force at many military facilities were composed of soldiers originating from the Caucasus where separatist and extremist ideas are very strong nowadays. Therefore, many Caucasians (including Chechens) who did their military service at nuclear facilities are well familiarized both with their security systems and various "holes in the fence", which provide a possibility of an unauthorized access to these facilities.

Nuclear weapons, which have been lost due to this or other causes, could become a serious danger. There is a plenty of such lost weapons in the world. For example, in 1958 a US bomber "accidentally dropped" a high-power thermonuclear aerobomb near the Spanish coast. Two nuclear bombs were dropped from the US plane due to an engine failure and are still on the Atlantic Ocean seabed near Cape May (New Jersey). Two more American nuclear aerobombs are residing in the Pacific region of Puget Sound (Washington) and near Eureka (North

Carolina). In 1986 in the Atlantic Ocean a Soviet nuclear submarine with nuclear missiles on board sank. In 1989 the Russian multipurpose nuclear submarine Komsomolets, which was carrying nuclear warhead torpedoes, sank in the Norwegian Sea.

All the above facilitates, however indirectly, the emergence of nuclear terrorism. It may have various forms, though, only three are theoretically distinguished so far.

Detonation of a nuclear device. This option presupposes the availability of a nuclear explosive device to the terrorists, which has been "home-made" or acquired from a third party or a mediator. Today there are no direct indications that any terrorist organization has got nuclear weapons or works to create them. At the same time, western experts believe that the danger of acquiring plutonium, which is a by-product of commercial reactor operations, by terrorists can increase.

Since it is unlikely that a terrorist organization or "outlaw country" could create a highyield hydrogen bomb, it is reasonable to consider a possible use of a small-size nuclear device by terrorists comparable, in terms of vield, with those used by the United States in Hiroshima and Nagasaki. When detonated in a city, the wounding range would be 1.5 to 2 kilometers with the number of victims exceeding 100,000. For survivors in the city and the affected country the physical, economic, social, and political consequences of such a catastrophe would be horrible. The only chance to prevent or mitigate huge casualties, if the explosive device were not to be disabled, is to timely evacuate the population from the possible destruction area. This is extremely difficult or even impossible in case of an unexpected attack³³.

Recently, it was thought that special knowledge and a high level of technological development were necessary to create a nuclear bomb. Today, the more difficult problem, however, is the storage of radioactive materials. A nuclear explosion yield is not as important to terrorists as the psychological shock resulting from the act: it will be much more significant than the physical consequences of the explosion. Therefore, the use of small-size nuclear charges and radiological weapons by terrorists should be expected and analyzed.

In this sense, devices capable of explosive power of 10 to 20 tons TNT yield could be attractive for terrorists. It should be noted that fission of one gram of a radioactive substance produces energy equal to the blast of 17 tons of conventional explosives. Terrorists, however, could use a crude nuclear device where the explosion occurs "prematurely". Such an explosion reduces nuclear substance decay, the total yield of the nuclear explosion, and its negative destruction consequences.

To produce a home made nuclear device, terrorists could be expected to seek to acquire reactor-grade plutonium, since weapons-grade plutonium and uranium are guarded more securely and are practically inaccessible for criminals. Until recently, however, the development of such an explosive device (let alone nuclear weapons with a relevant means of delivery, control and monitoring) by a terrorist organization had been unlikely because of the improvement of non-proliferation regime efficiency on the whole and IAEA activities in particular. The seizure of a ready-made nuclear charge ready for use is also considered nearly impossible. It is more realistic that a state pursuing a clandestine nuclear military program would create a nuclear explosive device. Still, the direct involvement of a state, even an "outlaw country" in a nuclear terrorist act would be a very risky move, which would threaten such a state with complete extermination if such act had been committed against a nuclear power. However, considering the changes in the form of terrorist activities outlined above, one should not rule out the possibility of an anonymous terrorist act by an "outlaw country".

Sabotage or its threat at a nuclear power plant. One does not need special knowledge in nuclear physics to commit sabotage. This can be done by terrorists who have completed conventional military training. Even if an act of sabotage does not result in an explosion of the nuclear reactor or radioactive contamination of the territory (e.g. due to low power or reactor design features), such actions would have a drastic psychological effect. Measures to protect nuclear power facilities are not capable of preventing terrorist acts that use unconventional means. Thus, it is assumed that one of the targets for the September 2001 hijacked aircraft was the nuclear power plant located near

Pittsburgh. As far back as 1973 a terrorist group seized a nuclear reactor in Atucha, Argentina, which was under construction at that time. In 1975 two blasts were committed at two French nuclear power plants (NPPs): in Fessenheim and near the d'Arret mountain. In 1982 in France ecological terrorists threw mines into the NPP Phenix (Iser)³⁴. facility Creys-Malville in December 1995 in France during waves of protests against the operation of the Le nuclear power plant extremists attempted to destroy the cooling circuit of one of the facility's power units.

Many terrorist groups have threatened to sabotage nuclear power plants. For example, in 1980 Puerto Rican separatists threatened to blast US nuclear power plants. Similarly, during both Chechen wars Chechen militants threatened to sabotage Russian nuclear power plants. The realism of such developments was manifested in 1995 at the Ignalina NPP where terrorists, acting in revenge for the 1994 execution of a group member, tried to alter, through an insider among the maintenance personnel at the plant, the reactor refueling control computer codes. If it were not for the correct actions of the plant operating personnel, an explosion could have been unavoidable. It should be noted that in spite of the attractiveness of NPPs as a terrorist target, not a single act of sabotage has been committed so far.

The use of fissionable materials. Even low enriched materials can be used to create a so-called "dirty bomb" capable of causing large damage due to radioactive contamination of vast territories in a densely populated area. In pursuing so, a device with a conventional explosive³⁵ is used. A radiological weapon that does not yield a nuclear explosion can spread radioactive substances as aerosols. Since it is much easier to develop this type of weapon rather than even the most primitive nuclear device, it is likely that terrorists would use it.

Terrorists, for example, could be able to access a nuclear reactor used for research and charged with uranium-235. Such a reactor produces a significant amount of radioactive strontium, cesium, and plutonium. If such a substance is put in a home-made explosive device and detonated at a 100 meter height, the contaminated territory would be about 100 to 120 square kilometers³⁶. This weapon

could contaminate a large territory, at great cost for decontamination, and its use would unlikely bring about mass casualties (this would require a great quantity of radioactive materials, which, among other difficulties, pose a significant risk to life and health of the terrorists themselves). Experts foresee the highest degree of danger associated with the use of radiological weapons to spread the fear of radiation. A radiological attack can provoke havoc and socioeconomic instability that are incomparable with the real destructive power of this type of weapon.

Isolated acts of radiation terrorism may not produce a large impact. In 1995, for example, Chechen militants planted a cesium-137 radioactive isotope container in a recreation park in Moscow. Still, this did not bring about any panic. Only a series of terrorist acts may produce a large-scale effect, acting as a catalyst of tension and hysteria in the society. The "white powder" dissemination campaign in the United States turned out to be very effective in terms of the psychological impact.

Therefore, one should consider the use not only of nuclear but also radiological weapons for terrorist purposes.

The seizure of nuclear power plants to detonate nuclear reactors could also result in contamination of the territory with radioactive substances. Sabotage at nuclear facilities (NPPs, nuclear material storage facilities, etc.), contamination of air with aerosols containing radioactive substances, or radioactive contamination of water supply sources could lead not only to massive human casualties but also to an ecological catastrophe with long-term consequences.

Also, it should be understood that science, technology, and medicine use ionizing radiation sources, e.g. cobalt or strontium-based. If 100 to 1,000 such sources were to fall into the wrong possession, their total potential hazard would equal that of the spent material unloaded from a nuclear reactor. Therefore, the possibility of radiological weapons, which could be made from commonly used radiation sources, getting into the hands of terrorists should not be ruled out.

Chemical terrorism

Chemical weapons are very attractive to potential terrorists due to several reasons:

- Easy access, low cost and possibility of quite legal acquisition of chemical weapon components (western experts even term it as "fertilizer-weapon").
- Capability of delivering the weapon components to the scene without evoking suspicions on the part of the law enforcement.
- Accessibility to information (also due to information networks) which enables fabrication of chemical weapons by those who are not experienced in such work.
- High damaging power of chemical weapons used for terrorism, especially in a large metro area.
- High "psychological impact" accompanying the use of chemical weapons and producing havoc and fear among a wide societal strata.

These features of chemical weapons facilitate the growth of chemical terrorism in present-day conditions. The growth of this hazard is aggravated by the expansion of the terrorists' capabilities by the acquisition of industrial chemical agents and their use in acts of terror. Hazardous chemicals can be seized during their transport, production, or storage. In addition, powerful terrorist groups can engage experts to develop combat chemical agents using chemicals available on the market³⁷.

Chemical plant accidents may illustrate the scale of the threat of chemical weapons if used by terrorists. The release of about 40 tons of methyl cyanide at Union Carbide's chemical plant storage tank in Bhopal (India) resulted in 500 immediate deaths and 2,500 more (other data estimate as much as 16,000) afterwards with the total number of affected being 60,000.

The Aum Shinrikyo sectarians' gas attack in the Tokyo subway system (where a sarine-type gas was used) may serve as an example of the effective application of chemical weapons for terrorist purposes. Though the number of victims turned out to be smaller than could have been expected, the psychological effect was enormous. This event demonstrated the poor preparedness of special services to eliminate threats of chemical pollution. The Japanese rescuers who arrived at the scene were poisoned. They were even nicknamed "blue canaries" (similar to the birds used to detect presence of poisonous gases in the atmosphere).

The Tokyo subway tragedy evoked a lasting anxiety in all countries. It demonstrated that the threat of chemical weapons and other WMD, of which intelligence agencies of many counties have been warning about, had become a reality.

At present, terrorists are becoming more adept at accessing chemical weapons production technologies. Free trade agreements, the imperfection of export control, the expedient dissemination of new chemical technologies for the needs of growing industries, the availability of a large number of "chemical secrets" on the internet, and the internationalization of crime all make it easier for terrorists to acquire the knowledge and materials need to produce chemical weapons. So far, it is difficult for terrorist groups to fabricate, steal or just buy necessary nuclear munitions on their own. It is much easier to acquire legally the necessary materials and produce chemical agents or hazardous chemical compounds. According to different estimates³⁸, about 300 kg of tabun or sarin or 300-350 gram of ricin would be quite sufficient for an act of terror to poison humans and animals within 1 square kilometer area. The accessibility of toxic substances, the lethality of small quantities, the variety of target options, and the difficulty of timely detection of and protection against a chemical attack afford terrorists and criminals a certain degree of protection in conducting these operations.

In 1975 the Baader-Meinhoff-Group intended to commit a terrorist act using yperite gas (mustard gas) which had been stolen from military storage in France³⁹. A part of the group did training in handling biological agents in Beirut. In 1975 in the United States a neo-Nazi group was arrested with 115 kg of cyanide. The agents were intended to poison the New York and Washington, DC water supply systems⁴⁰. In 1993 the Federal Bureau of Investigations arrested a US citizen who tried to ship 120 grams of ricin to the state of Arkansas⁴¹. And lastly, in 1995 Aum Shinrikyo's terrorist act was committed. The investigation found out the sect was seriously pursuing the possibility of producing sarin, tabun, soman and V-gases, which are the most dangerous chemical agents⁴². The sect created their own science and productions facilities to meet its needs where it replicated the military chemical agent production technologies developed in

the West during the Cold War. Materials and equipment were purchased both domestically and abroad. The sect also tried various means of using agents, including the use of a multi-store residential building ventilation system to harm its tenants and the use of chemical agents within closed and semi-closed premises like subway systems. A member of the Japanese military was involved as a consultant to the sect on chemical protection⁴³.

Earlier, on December 6, 1991 the Chilean newspaper La Epoca reported on investigations of cases involving the probable use of sarin-charged aerosol spray cans by Chilean secret service officers. As a result, the newspaper reported, three individuals died⁴⁴. In 1995, nearly simultaneous with the Aum Shinrikyo act of terror, a Chilean right-wing extremist group threatened to spray sarin in the Santiago subway if General Contreras, imprisoned by a court of law for crimes committed during the 1973-1990 dictator-ship⁴⁵, was not set free.

Regretfully, Russia has not escaped cases of he use of chemicals for criminal purposes. In addition to the clearly criminal cases, there were reports of threats to poison the Krasnoyarsk city water supply system with mercury⁴⁶. Also, a gas attack case in public areas in Pertopavlovsk-Kamchatski⁴⁷ was reported.

Many experts believe that the terrorist act in the Tokyo subway has increased the danger of chemical terrorism. New forms and methods of terrorist acts are expected to emerge where human casualties will be massive. Such forms and methods include poisoning of foodstuffs, water supply sources, and pharmaceuticals. Additionally, the application of chemical and bacteriological warfare methods, including the pollution of air inside buildings, underground constructions and means of transport, and the pollution of air over settlements, as well as the direct poisoning of people, are feared.

Dangerous chemicals can get into hands of terrorists through various paths. They can be stolen from military storage, as well as from different organizations and enterprises involved in chemical production, survey, research and other legal activities. They can also be bought or stolen from hazardous chemical (rodenticides, pesticides, pharmaceuticals, etc.) production, distribution, storage,

and trade sources. They can be covertly fabricated in chemical laboratories (both legal and illegal).

In 1984 a special CIA report acknowledged that "the clandestine production of chemicals for various attacks is not hindered as is clandestine drugs production"⁴⁸.

As a rule, experts are required to select a toxicant or compound, prepare it for use, and, possibly, for a terrorist act. According to Tokyo police data⁴⁹, plastic containers containing chemical agents were planted in the Tokyo subway cars by sect members who had special medical and chemical training. A chemistry expert synthesized the sarin, and the administration of the gas was guided by a medical doctor and an expert from the science and technology section of the *Aum Shinrikyo* community. It was not for nothing the sect recruited its members primarily from youth with a good science and technology background.

Bribery of professionals in this field is the most attractive way for terrorists to acquire chemical weapons. For instance, an expert, having access to a chemical or biological laboratory, could be able to produce feed material for a lethal chemical.

The adoption and institution of the Convention on the Prohibition of Chemical Weapons can solve the task of prevention of chemical terrorism only partially, since its content deals mostly with intergovernmental relations. Issues of intra-nation control are only noted in the Convention. To combat chemical terrorism, it seems expedient to adopt a special legislation that could concentrate efforts in combating the phenomenon.

Preventive activities should play the major part in stopping chemical terrorism. They include many aspects. Primarily, the protection of production facilities handling dangerous chemicals should be ensured. Many of these use obsolete equipment which does not meet process requirements. This represents a potential source for chemical hazard. This equipment should be not only be replaced – and this will require certain funds – but a reliable guard should be created to secure such facilities against criminal attempts or intrusion.

It is no less important to restrict criminals and groups' access to hazardous substances and technologies through organizations involved in research and development in the fields of chemistry and pharmacy, as well as those involved in commerce in this field. Safety of operations in such organizations and their compliance with the law must be certified. The practical activity of a certified organization can be started in a certain locality only after a local administration issues the relevant license. In pursuing so, there should be a recruiting procedure for organizations and enterprises to ensure that they are reliable in regard to counteracting terrorism. Possibly, the organization's administration or special authority should issue work licenses to those who are involved in handling hazardous chemical or biological substances. Detonation experts have been given such certificates for a very long time.

Demand to de-classify chemical weapons information seems extremely dangerous. Even after the Convention on the Prohibition of Chemical Weapons and the complete elimination of chemical weapons, chemical agents and the means of their use will not cease to be a weapon of mass destruction. Should its production secrets get into hands of terrorists or simply insane individuals, this could lead to many deaths. And at present, when Russia takes on a commitment not to facilitate global proliferation of chemical weapons, the declassification of information could damage the national security of our country and other nations of the world.

Biological terrorism

Biotechnology methods have created opportunities for obtaining not only biological agents with advanced performance characteristics, but also for creating new classes of biological weapons (BW). Biological aerosols with enhanced stability during storage and transport have become a reality. Recent achievements in genetic engineering allow for change in the duration of incubation periods of biological agents, an increase in their toxicity and pathogenic effectiveness, the enhancement of resistance against pharmaceuticals, and improved protection from detection and identification. Biotechnology provides for expediting production of biological agents and toxins in large amounts while using small equipment similar to that applied in pharmacy to produce vaccines.

Military biology has rendered new opportunities for the development of biological weapons. Genome technologies can now be

used to develop new types of biologoical weapons. Such types of biological weapons may include various bio-regulators, which affect vital functions and systems of an organism. An "ethnic weapon", which works using genetic and immune features of different ethnic groups of people can work in the same way. The decoding of animal and plant genes combined with information on biological variety of specific regions can result in the invention of a way to damage economically essential breeds of animals and vegetation.

Bioterrorism in many ways is similar to chemical terrorism, however it has been previously assumed the probability of acts of bioterror were much lower due to a difficulty of acquiring bacteria culture or producing them. The dissemination of anthrax spores in the United States in the fall of 2001 partially refuted this opinion. The effect of this act is explained by the means of delivery of the biological agents rather than their mere use. The fact that the postal service, which is a major means of communications, was chosen as the means of delivery indicates the information and psychological pattern of these acts. The anthrax skin form is a relatively slight disease; it could not lead and did not lead to multiple human victims. However, it seriously complicated the work of the postal service and dependable governmental and economic institutions for a prolonged period of time. Also, it increased uncertainty within the society.

Even before September 11, 2001 sizable steps had been taken to prevent bioterrorist acts, primarily in the US. In 1996 the US Congress adopted legislation on anti-terrorism providing for an enhanced control over microorganisms and toxins that could be used as BW agents. The Center for Disease Control (CDC) was charged with establishing controls and compiling a listing of biological agents pertaining to this category. The listing, which included 30 pathogens - viruses and microorganisms - and 12 toxins, was put into effect as a supplement to the legislation in 1997. In 1998 President Clinton made a decision to further develop programs to combat possible manifestations of bioterrorism. The decision created and renewed vaccine stockpiles and other means of medical protection. In 1998-2001 a set of presidential directives were released to strengthen administrative and medical measures to prevent, combat and eliminate consequences of possible BW terrorist acts.

Funding was increased for research organizations (both military and civil) involved in work on bioterrorism issues from US\$ 91 million in 1998 FY to nearly US\$ 340 million in 2000. The US Department of Health, responsible for national health institutions and the Center for Disease Control received in 1999 an additional US\$ 158 million and in 2000 this amount was increased by US\$ 72 million.⁵⁰

In parallel with the bioterrorism threat prevention campaign, the United States carried out another large-scale campaign to vaccinate all troops against anthrax. This decision was made by Secretary of Defense Cohen in December 1997. The process started in 1998, and by 2004, 1.4 million troops and about 1 million of national reservists are expected to undergo this procedure⁵¹.

In fiscal year 1999 about US\$ 25 million was allocated for fundamental research, which constituted a scientific basis for development of vaccines and preparations. The major part of those funds was distributed as grants to outsourcing research institutions involved in the studies of genetic features infection pathogens, in particular, anthrax, smallpox, plague, and tularemia. The research objective is to obtain information on the structure of genomes and use it as the basis to identify targets for new vaccines and pharmaceuticals.

At that time the US Administration realized that the threat of bioterrorist acts associated with foodstuffs and agricultural products, including crops and livestock, was growing. In April 1999 the government under the auspices of the National Security Council set up a special group with the participation of the US Department of Agriculture charged with implementation of the antiterrorist measures program. Its funding was US\$ 2.8 billion.⁵²

At present, research centers within the US Department of Agriculture conduct research over 500 topics annually devoted to studies of infectious animal diseases. However, the Department's experts consider the agriculture protection system vulnerable. Analysts believe that terrorist acts to damage food stocks, crops and livestock are likely to be committed by bioterrorists guided by regimes adver-

sary to the US, militant religious sects, and other extremist groups.

Regretfully, these years have demonstrated quite different developments in regard to bioterror countermeasures in Russia⁵³. Today, previously existing "epizooty" counteraction capabilities have been lost. The regretful fact is that the ordinance for keeping infectious materials, which in the USSR was under control of the law enforcement force and KGB, has also been lost. This has created conditions for terrorists to acquire viruses and to use them as a biological weapon component. Recently, the situation has started to change. A chemical and biological terrorism counteraction concept is under development. There are plans for creating a wide network of diagnostic laboratories. In the past, our public health system showed that it could work for prevention. For example, in 1957 about six million people were vaccinated during preparations for Moscow's World Youth Festival.

The problem of so-called agriculture terrorism still remains more than pressing. Estimates show that the possible use of lethal viruses by terrorists to spread infectious disease in agriculture are manifold. There have been cases where leaders of some states declared animal infection as acts of subversion. However, in such situations it is difficult to provide for an unambiguous answer whether the epidemic was due an evil plot or due to an unlucky train of events. For example, there is a viewpoint in Europe that the 2001 foot-and-mouth disease episode was a demonstration of the terrorist use of biological weapons. Still, even a version that criminals intentionally spread the infectious disease is not grounds to attribute the offence to a terrorist act. There was possibly a commercial background to such actions. Most likely, there was no vicious plot at all. A virus does not apply for an entry visa. Another matter is that Great Britain was at least two weeks late to diagnose the disease, and that resulted in large-scale negative consequences.

One has to bear in mind that biological terrorist attacks on agriculture are impossible for a solo terrorist. There needs to be thorough plotting and well-coordinated activities of many people.

Modern technologies create conditions where the hazard and scale of negative consequences of "epizooty" proliferation grow. This may happen when a well-established food supply is disrupted or unauthorized disinfectants, rodenticides, or other agents are used. In any case, an attack results in the lost of confidence in a population, the aggravation of social tension, and thus, the social and political consequences of the offence are manifested. After this the offense can be considered an act of terror.

Many experts, including American experts⁵⁴, believe that the vulnerability of contemporary technological society to "agroterrorist" attacks is based on the following factors:

- limited reserve of food in many cities and regions (e.g. large cities generally have a three-day reserve of food);
- long distance for delivery of food from a producer to consumer (2 to 3 thousand kilometers):
- significant expansion of food producers (in the US 97% of pork is supplied by five large companies with three companies being the main suppliers of poultry);
- limited genetic selection of livestock capita:
- high degree of food import with complex delivery chains from abroad;
- large amount of products at any food processing line; reduction in assortment of the major crops (50% of the Earth's population is "tied up" to rice).

The following circumstances may be considered as favorable for agroterrorism:

- preparing and committing an act of terrorism is technically easy (the necessary biological agents are easily accessible and the spread of virus can start as soon as a couple of infected eggs get into a truck delivering poultry);
- an effect of the use of biological weapons cannot be detected promptly but days and even weeks after, while criminals have time to hide securely from the law enforcement agencies' pursuit;
- terrorists are potentially invulnerable and stay unpunished, especially when the criminals and the infection source are beyond the jurisdiction of the affected state;
- the moral constraints are less in regard to killing animals rather than plotting an attempt upon the life of someone.

The most vulnerable to terrorist attacks are the countries pursuing single-crop options, seeking to produce "clean" products, having large crop areas, lacking capable veterinary units, as well as those neighboring "adversary" states.

Today, the spread of foot-and-mouth disease and cholera pork and plague and mad cow disease in cattle may be considered the most dangerous in regard to negative consequences.

A virus attack in agriculture is always unexpected and its source is difficult to detect due to the above causes. In addition, it is difficult to determine confidently whether the virus spread was by chance or a result of a terrorist attack. In October 1973, during the "Newcastle" virus outbreak in Ireland 79 initial foci were detected. The source, however, was not found, since the versions included infection through water and the use by terrorists of the chain of animal feed supplies (there were 15 suppliers in total). No one assumed responsibility for the virus proliferation and no recurrence was recorded. The cleanup costs were 2.3 million pounds sterling (today this number would double).

The question may arise: why criminals rarely use acts of agriculture terrorism since such attacks are easy to commit and escape is easy. The following grounds can be provided for this account. Contemporary terrorists often manifest themselves in large metro areas. This is explained by the fact that ideologists and organizers of terrorism reside there, and by the fact that it is easier for them to escape the law in large cities. An act of terror committed in cities where the larger part of population lives will bring about a larger social response. Besides, the rural estates and farms are well guarded and any stranger will be immediately noticed by the local low enforcement.

Terrorists plotting such an offence should have certain special training (at least not to get infected themselves with a lethal virus) and be psychologically charged to use the virus in agriculture. Though it is difficult for terrorists to get such knowledge and experience, the world community must be prepared for such attacks. Moreover, the infectious viruses were taken from some terrorist organizations. For instance, biological weapon components have been detected with the Aum Shinrikyo sectarians. The possibility of

the use of biological weapons by Chechen terrorists cannot also be excluded.

There are a large number of infectious microorganisms in nature with only a small part having been studied by scientists. Therefore, the task of today is to reveal new dangerous viruses and exchange information in this area. The key aspect in the process of improving biological terrorism threat counteractions must be the improvement of preparedness of the public health system to detect timely the outbursts of viruses and promptly respond to them to minimize possible negative consequences. The inability to identify expediently the nature and source of the disease could lead to catastrophic consequences. For example, in Yugoslavia there was a case of trafficking of latent smallpox by a monk on a pilgrimage. The disease was detected when about 170 individuals caught smallpox. As a result, a great number of people had to be vaccinated to including Yugoslavian citizens and also other nationals.

Ecological terrorism

In the outburst of terrorism during the three recent decades the emergence of a new terrorist activity - acts of terror committed under a pretext of environmental protection was left somewhat unnoticed. This trend formally manifested itself as an individual type of terrorism in the form of protest of environmentalists against nuclear tests. In 1972 activists of a small environmentalist group Don't Make a Wave, which transformed eventually into the influential international organization Greenpeace, were on board the Greenpeace III ship near Muroroa Atoll (in the South Pacific) where France was conducting nuclear tests. This act disrupted France's plans to develop a nuclear military potential of its own. Since then, mass media have reported on many manifestations of anti-nuclear activism, demonstrations and rallies against construction of nuclear power plants, the building of roads, cutting of forests, and urbanizing of rural areas.

Since the late 1970s in western countries organizations and groups have come into view which, while hiding behind slogans of environmental protection, chose tactics of "active action" and resorted to violence and terror. A unique type of terrorism has emerged – ecological terrorism (ecoterrorism) or single issue, special interest-terrorism, as it is known from the western mass media.

In spite of multiple publications on the topic, there is no definition of ecoterrorism or its differences from other types of terrorism and from ecological activism. Meanwhile, among other terrorism subjects ecoterrorism posed, especially in the mid-1980s, and still poses a real threat not only to the developed but also to developing countries. The mere name hints that this type of terrorism manifests itself in the area of ecology, protection of the environment and wild life. Therefore, human activities damaging to the environment has become a target of the ecoterrorists' invasion. They stand for both wild and domestic animals, which are "mercenarily exploited" by people. However, the noble ideas of the radical environmentalists turn out to be violence and terror in practice. Apart from the revolutionary terrorists or nationalists, they do not charge themselves with a direct goal of overthrowing the existing political system or seizing the power. They protect the environment. Still, as representatives of the radical trend of ecological activists who are well-known because of their fussy "green" campaigns (for example, protests against oil survey in the North Sea, mass protest rallies in March 2001 in France and Germany against spent nuclear fuel transport and storage), they ultimately pursue political goals: apply pressure on the government through wide public protests or draw additional attention to "green" issues in parliaments.

The growth of interest in environmental issues and the politicization of the environmental movements was mainly due to the fact that the population in the western countries has realized that the cause of the most important problems of modern times (ecological crisis, exhaustion of natural resources, threat of nuclear weapons proliferation, overpopulation) can be found in the development of industrial society. In regard to environmental protection, capitalism has appeared as an unjust and imperfect social system. In the long run this predetermined trends in activities of "green" parties and organizations, emerging from the environmental movement and opposed to the existing system. Ecologists have actively joined the protest movement primarily against the development of nuclear power. German sociologists believe that the anti-NPP movement, which reflects a negative attitude to large capitalist companies, attracted to the ecologists' ranks many of those who did not place the environmental protection issue among political priorities⁵⁵.

Disappointment of many individuals in parliamentary democracy institutions and the discrediting of traditional parties' activities have motivated new political forces to declare independence from the old political parties and the state. In these conditions the ecological "green" movement became a uniting basis for many proponents of alternative society. Since the late 1970s ecologism has become an ideological background for various protest movements.

The growing popularity of the "green" movement was explained by the fact that it reflected mass attitudes: discontent with the technocratic system, critical attitude to traditional political programs and organizations, and antagonism towards bourgeois ideals and standards. The "greens" put on the agenda issues of global and human importance. As a result, the movement has started growing due to inflow of participants of antiwar, women's, and youth movements protesting against nuclear power, arms trade, and for broadening assistance to developing countries to overcome economic backwardness.

"Greens" ideologists believe that "industrialism" has fulfilled its historical mission and has brought significant material comforts to mankind, but today has reached the point beyond which further development would do harm rather than good, "gradually and unnoticeably transforming into anti-development". The modern industrial society, as stated by the western "greens", suffers from heavy disease that is debilitating economic, social and political systems and crippling people physically and spiritually. By negating the industrial society, critically revising scientific and technical progress, "greens" logically draw political conclusions: negation of the current political system. At the same time, a high percentage of ecologists are rallying to come "back to nature", to the natural economy. The point of view that the creation of an ecological society is to build a new, ecologically acceptable society but not to destroy the industrial one, is gaining adherents. To radically resolve ecological problems it is necessary "to change the existing system rather than to adjust to it". One of the American "green" leaders - Guy Chichester - when representing them at the Stockholm conference stated that "the ecologists' core in the US has become more radical".

It should be considered that in near future in many industrially developed countries disagreements will remain between the governing circles and citizens regarding such issues as the development of nuclear power, the use in the food industry of insufficiently tested and possibly hazardous chemicals, and the ways of resolving environmental issues at the local level. These factors, in combination with the existing social tension and conflicts, will create real prerequisites for further existence of "green" movements. At this, the expansion of the ecological crisis to all regions of the Earth will facilitate a buildup of new regional "green" formations who will inevitably introduce their national traits and peculiarities into the movement. "Green" parties have a future also because of the fact that their major activities - prevention of environmental pollution and threat of nuclear conflict are at the same time the key problems of modern times.

Great Britain became the first country where the extremist environmental movement emerged. In the 1960s overt actions were started by representatives of The Hunt Saboteurs' Association who physically punished hunters, "liberated" animals from research laboratories and then shifted to setting pharmaceutical laboratories ablaze. The Animal Liberation Front (ALF) created in 1976 became the heir and successor of the most radical methods of the association. It was acknowledged as the most dangerous extremist environmental organization in Great Britain and other countries.

The most common tactic of the ALF is the animal "liberation" raid. ALF also uses combustibles to destroy or damage buildings and vehicles. In addition to the common terrorist methods of direct violence and threats, ALF poisons foods and spoils food preparation. In 1986 ALF started planting bombs in cars for the first time. It carried out 11 such acts within five years (1986-1990).

In 1982 ALF for the first time used bombletters, sending each leader of the four key political parties in the U.K. such a letter. And if until 1993 there were sporadic cases of letter-bombing, this method was in the wide use in 1993-1994. Three options were employed: a bomb in a parcel, a bomb in a video or audio cassette box, and a bomb made as a mechanical mouse-trap-like injuring device stuffed with razors. Over 120 bombs of these types were sent within 18 months. In 2001 ten explosive postal deliveries were sent to the northern part of England, Wales, and central counties of Great Britain. Five bomb-letters were delivered to the addressees and three persons were injured with various degree of severity.

It should be noted that ALF activities are not limited to U.K. territory. Its activists are present in the United States, Sweden, Poland and Finland. In countries such as France and Italy ALF activities are spontaneous, the responsibility being taken on by different groups. Evidently, this speaks of a lack of a centralized or long-acting organized ALF structure. Over 20 organizations have taken responsibility for ecocrimes with the majority of them linked to ALF in one way or the other.

In the late 1990s the American organization Earth First! declared its readiness to protect the environment with all means available including violence. The organization has affiliates in other western countries, in particular in Great Britain. It issues a magazine bearing the same name where it publishes recommendations on sabotage and terrorist practices to protect the environment⁵⁶. The activist tactics developed by ALF were inherited by Earth First! and are effectively used in its operations.

Presently, in Great Britain the development of genetically modified foods has become another cause for protests. The *GenetiX Snowball* organized in 1997 is the most noticeable group in this field.

Since 1980 the USA has suffered, at least, 100 large-scale fires, bomb plants and acts of sabotage committed in the name of saving the environment, with the material loss being US\$ 40 million. The scale of the ecoterrorists' acts is so large that the authorities were forced to involve the FBI to investigate them. However, by the late 1990s only 20% of cases in process were solved. There was only one case where the police caught ecoterrorists red-handed. In other cases they remained anonymous. In one case, however, they disclosed the name of the group to attract attention to the committed crime⁵⁷.

It should also be stressed that environmentalists' actions, as a rule, find support with

the public. Such liking is often expressed toward the radically inclined environmentalist section. They are provided with a shelter, if necessary, and moral and material support. Additionally, their numbers are replenished by radically inclined environmentalists.

The ecological and environmental protection issue is very acute in the case of Russia. Therefore, the Concept of National Security of the Russian Federation attributes it as one of the most dangerous threats to Russia's security and it is outlined as a major area of the state's activities in this field.

Psychological terrorism

As it has been noted above, one of the goals of terrorist acts, generally, is to produce a psychological impact on state powers, population, and public opinion. In other words, it is important to have a terrorizing effect that can be obtained without explosions and blood but through a direct impact to the mind of an individual or a certain social group. Psychological weapons and propaganda, social technologies and drugs – these are the means of contemporary terrorism.

The Doctrine on Information Security of the Russian Federation outlines "unlawful information and psychological influence" (UPI), which pose a serious threat to an individual, society and state, as well as to the constitutional rights and freedom of a person, individual, group and social consciousness.

When UPI threats include negative information and psychological impact which can manipulate a person or society to act against oneself for the benefit of certain persons, groups or organizations exercising such influence⁵⁸.

Such UPI through propaganda, sedition or direct influence on the public consciousness can lead to disruption of social stability, damage to health and life of the citizens, and to social, racial or religious hatred. The same result is obtained through activities of totalitarian sects that propagate violence and brutality. In reality, these impacts, even unperceived, are capable of increasing serious psychological and physical disorders, as well as increasing risky social and personal situations.

Separate types of UPI directed at the population as a whole or towards individuals, social strata, groups, political parties and movements can seriously disrupt the normal function of social institutions, governmental

structures, public organizations, communities, and individuals. These impacts are categorized as negative because they raise psychoemotional and socio-psychological tension, distortion of moral criteria and standards, moral and political disorientation and, as a result, inadequate behavior of individuals and groups. It is these that are the basis of techniques and methods of psychological terrorism.

Presently, new UPI sources and technologies are becoming a powerful tool of consciousness formation and manipulation, i.e. in a way they can be a type of information weapon and, thus, used by terrorists.

Psychoterrorism, as compared with other types of terrorism (nuclear, chemical, bacteriological, cyber), is more attractive for organizers of terrorist activities since it features consequences of an enormous scale (slowing down the development of a state, instigation of conflicts between states). It does not require material expenditure to achieve great effects. It is covert to the highest degree and does not involve material damage, and such terrorist acts are not subject to international and national legislation and there are no mechanisms to legally protect the object of a terrorist act.

The following means can be used to exercise information and psychological influence over an individual, or group⁵⁹.

Mass media. In real time they may widen or limit the influence range, adjust to the subject of influence considering its nationality, educational level, religion and social background. In doing so, it is possible to use various methodologies of covert influence on ideology and subconsciousness with the help of sound and video images. This brings them closer to weapons of mass destruction in terms of consequences.

The most dangerous feature of UPI is their capability of presenting information in such a way as to form a virtual picture of the real world behind apparent objectivity⁶⁰. However, the "cooked and served" virtual reality exists in human consciousness only until it is put under doubt, then the information influence efficiency decreases sharply. The emergence of global broadcasting systems has provided an opportunity of retaining UPI effects for a long time. Such systems, which are used in peaceful and human ways in routine life, are

capable of unobtrusive delivery of a signal to any place in the world.

Specially weighted information and psychological means (mobile radio and TV broadcasting centers, mobile loudspeakers, placards). Their application technology has been perfected and their further development mainly directed to seek covert ways of affecting human consciousness. The new means include laser systems for creating virtual reality and projecting it on large areas, for example, clouds.

Global information and computing networks. In the 1990s the Web – a unique means of information dissemination – was created. A relatively low cost of access, the freedom of dissemination and receipt of information make the Web a unique tool for enabling information influence mechanisms, especially in the conditions where the "subculture of the information society" is actively being formed.

Information dissemination on the Web is not legally regulated. This creates an opportunity to disseminate any information. The facts may be seriously played with using text, sound and video information handling techniques. Such techniques allow for managing the public perception or organizing largescale propaganda campaigns to undermine public confidence in a specific governmental policy⁶¹. The first attempt to treat as criminal the acts of dissemination in the Web of harmful information has been done in the framework of the European Convention on Crimes. The draft First Computer Supplement to the Convention devoted to racism and xenophobia, which is under discussion, is important also in terms of countering psychoterrorism. But so far the technologies of fast dissemination of information over the information and computing networks will play an ever increasing role since they provide for legally targeted information campaigns without any control on the part of the state.

Activities of this kind pose serious problems not only for governments but also for mass media which is taken by the consumer as sources of objective information. The direct result is that the leadership of countries and the society as a whole may not be aware of what is happening in reality. Today it is difficult to understand already who treats Al

Jazeera videos as objective documents - the average viewer or the U.S. government.

The formation of various groups on the Web may become a basis for real terrorist or crime-inclined organizations with a structure and links which are difficult to disclose.

Illegal modification of software used in decision making. Human activities are increasingly becoming supported by information and computing means. An official, to make decisions, uses the information provided by a computer. In many cases it is not possible to promptly verify the confidence of the information, therefore a deliberate modification of information massifs and messages results in erroneous decisions by the individuals who use them. Many countries develop special managing means including remote ones regarding the information circulating in the information management systems. This makes their application and the damage that could be caused difficult to detect.

Means of creating virtual reality. Maximum UPI efficiency can be achieved through creation on the screen of TV or monitor or the most advanced pilot's helmet of an image representing a virtual reality. There is information in development of the means to simulate voices and video images of political and public leaders. Especially designed simulations of their public addresses (there is information on such developments) can produce the utmost psychological impact to the population⁶².

Means of subliminal psychosomatic influence. A wide range of means have been developed to manage behavior, thoughts, and feelings through subliminal psychosomatic influence, e.g. by audio and visual Consciousness does not perceive very weak signals, which penetrate deeply into the subconsciousness. They covertly orient thinking and behavior to the required direction. Such "penetration" is easy through audio and visual channels. For instance, a tune pleasant for the object is mixed with a repeated worded operative suggestion 10-15 times slowed down. This is an easy way to suggest information to the citizens through radio. At this, neither the radio producer nor sound engineer notice that they are the performers of an act of terrorism. When video stimuli are used (influence through visual channels) a video, for example, is added with very short

(0.4 seconds) "incuts" of the suggested text or image repeated each 5 seconds.

Acoustic or electromagnetic generators. Ultrasound is also used to influence the human cogitative faculties. These oscillations affect the brain and nervous system causing headache, dizziness, disorders of eyesight and breathing, convulsion, and even the state of insensibility. Infrasound causes irritation, fear and discomfort allowing tampering of health, mood and response. UHF leads to perception distortions, fatigue, nausea, and headache. A terrorist UPI requires relatively low generating capabilities for such radiation.

The main task of psychoterrorism is to stealthily change (deform) different subjects (individuals, groups, organizations, states, etc.) through influencing individual, group and mass consciousness. Such impacts result, primarily, in destruction of subjectivity that can be manifested through the loss of real freedom of choice and action for an individual or social group, alteration of traditional values, loss of historically formed way of life, etc. The common feature is to make a subject the object of manipulation. The most invariant and dangerous subjectivity destruction mechanisms associate with the influence on response of consciousness. The blocking of response and reflex management can be used as the powerful means of subjectivity destruction.

Psychoterrorism threats are becoming more acute as new information technologies, and especially the Web, develop. Information consumers become more dependent on individuals (web-sites are more and more looking like newspapers with their editors-in-chief, security service, and, of course, owners who determine the site policy). Dependence of mankind on the information sphere grows, crossing sometimes the boundaries of reason and creating a "cyberspace dependence syndrome", which is a source of threats to a person, society, and state.

Organized Crime and International Terrorism

Recently, the threat of two merging social phenomena – organized crime and terrorism – has become serious. They, while co-existing and being independent at the same time, show a mutual interest which is conditioned by their qualitative characteristics. Organized crime needs terrorism, its techniques and methods to solve its political

tasks effectively. Otherwise, terrorism, by using the forms, methods and capabilities of the organized crime (e.g., drugs industry), strengthens its financial and material foundation and makes its activities more organized.

The integration of both social phenomena complicates the political situation, disrupts the activities of governing and managerial authorities, and affects significantly the processes ongoing within the society. The ingress of organized crime, armed with political extremism, into the international criminal structures creates a threat to security of a country, international organizations, and international security as a whole. Under globalization transnational organized crime has expanded on such a scale that it has become a factor influencing the processes of sustainable development and the economic situation of countries (in particular, a number of the UN General Assembly resolutions admit such influence produced by corruption). In regard to cyberspace, the traditional views on territorial jurisdiction, administrative borders and the like are just losing their meaning in many aspects. If the problem is ignored and national and international law is lacking the required "breakthrough", organized crime would acquire forms still more dangerous for the international security, and it could facilitate not only criminalization of societies but also the development of terrorism as a form of settling political conflicts.

In May 1988 the First International Symposium on Combating Organized Crime held under the auspices of Interpol in Saint-Claude, France formulated the following working definition of organized crime: "Any venture or a group of individuals involved, irrespectively of state borders, in unlawful activities with the primary goal of profit" activities with the primary goal of profit" The Four main organized criminal group types are distinguished as:

- mafia family-like communities with strong hierarchy, internal rules and "code of honor"; they are often multi-faceted and act in various legal and illegal businesses. Such unions are the most stable and possess large capabilities of exercising pressure on the authorities;
- groups which act (apart from the organized criminal groups pertaining to the first type) in one or several narrow illegal spheres and do not have such firm structure. Most often they specialize in

- autotheft, setting up and use of drugs producing laboratories, financial fraud, etc.;
- ethnic criminal groups. Two recent decades have witnessed a substantial growth of criminal communities of this type in the world;
- terrorist organizations pursuing political goals.

In the second half of the twentieth century the exacerbation of contradictions in various spheres of social life facilitated the intensification of crime. Organized crime was no different. It acquired a number of characteristic features solely pertaining to it while also following general trends. One of the features is the politicization of the organized crime communities' actions. Its main cause, in addition to the general politicization of social life, has become the excessive accumulation of criminal capital. The activities of the groups in question are expanding beyond the sphere of economy; they are actively entering the process of political struggle.

The emergence and active expansion of the organized criminal communities' political activities are conditioned by their goal of influencing state-level decision making and controlling state authorities and management bodies. The result is a threat to the essential interests of a person, society, and state, as well as a threat to existence of the main institutions of democracy. The politicization of organized crime and its trend to act against the states and democratic world order are destructive to democracy, especially the political system, form of government, economic and inter-ethnic relations, constitutional rights, freedoms of person, and law enforcement. Its increased danger to the society appears not only as a result of its use by structures with ever-increasing criminal potential but also by its flexibility, dynamics, ability to influence, and capability of reproduction.

The goal of organized crime is to influence the state-level decision-making, seizing controls over the governmental bodies' activities. This is manifested through creation of posts within governmental powers, as well as infiltration into the managerial strata of ministries, agencies and their local branches. This strategic task, if solved, facilitates strengthening of the financial and economic potential of organized crime and the ability to acquire immunity to the law and law enforcement. Organized criminal groups and communities practice bribery of parliamentarians and local authority officials, representatives of administrations, officials of ministries, agencies, and institutions. During pre-election campaigns they actively promote criminal designees to the legislative and managerial bodies. Attempts are made to infiltrate young criminals into law enforcement training and educational institutions to further promote them to high-rank positions within the system.

The aspiration to achieve certain political goals also can be a driving force of such actions. It is widely known that satiety, the repletion of venal wants transforms into the craving for power.

The expansion of the trend to actively use extremism in the political struggle has facilitated the wider use of violence by organized crime to achieve their goals. Their unlawful practices are replenished by the use of various forms and methods of extremism including terrorism. The solving of economic issues through unlawful techniques and methods of a political nature have conditioned the interference of organized crime into the sphere of international relations, as well as into the activities of public unions standing for political and economic reforms.

As a result, the unlawful activities of organized criminal groups and communities have incorporated such forms of unconstitutional activities as taking of hostages, hijacking of vehicles with passengers, threatening governmental officials and public leaders, initiating serious disorders, committing explosions in places of public use, kidnapping, blockading settlements and regions with residents of different nationality by cutting off supplies of food, electricity and other essential items.

The need for armaments has resulted in assaults by organized criminal groups on military munitions stockpiles, armory convoys, patrols, law enforcement and national security service offices. Groups have also formed smuggling arrangements with foreign organizations involved in the armaments' deliveries. Most dangerous is the acquisition of modern weaponry systems capable of causing mass destruction or significant damage (it is a known fact that a mafia-like group attempted to seize a nuclear submarine). The seizure of such armaments can be done for blackmail or ransom. Experts estimate the

probability of such attempts as rather high. This can be done by force, bribery and infiltration into the top ranks of army units. It is quite realistic to make an active member of the criminal community out of an army officer. Boutros Boutros-Ghali, in his address to the 47th Session of the UN General Assembly, stressed the necessity to take measures to prevent criminal access to nuclear stockpiles, devices and fissionable materials.

The knowledge of the main areas where the organized crime uses political extremism is important. This form of extremism is most prominent in the area of international relations. The study of causes of the Azerbaijani-Armenian conflict in Nagorno-Karabakh Autonomous Region (NKAR) distinguishes, as one of the causes, the aggravation of contradictions between the shadow economic structures operating in the territory of both republics. The struggle for markets, sources of raw materials, and cheap labor facilitated initiation of the conflict, which eventually acquired the nature of open warfare between these two state and national formations. The hidden confrontation was transferred from the economic sphere into political, and that, irrespectively of heavy casualties and material damage, was used by shadow economic structures to cater to their own economic and other interests.

The February 1990 Tajikistani events demonstrate that organized criminal groups associate with the inspiring of serious disorders and other social disturbances accompanied by riots against a population of another nationality. The criminal investigation on organizers and activists of the 1990 riots in Dushanbe revealed that the criminal communities' leaders had played an active role in plotting the seizure of power in the republic and declaring an Islamic state in its territory. The riot organizers pre-designed assaults upon the non-indigenous population of the republic.

Similar events occurred in Tajikistan in spring 1992. By that time political extremism had made enormous beachheads in the activities of organized crime in the republic. The blockade of the Tajikistan Supreme Soviet building, the taking of the people's deputies as hostages, and other violent anti-constitutional acts had become widely used practices of the organized criminal communities on the territory of the republic.

The violence towards other nationals took place in the course of the well-known events in Osh, Fergana, and Alma-Aty where the organized criminal communities were the most active in inspiring and further expanding the anti-constitutional acts.

In today's Russia organized political extremism in the sphere of international relations has manifested itself in the utmost in Chechnya.

The conditions of aggravated crisis that have seized political, economic and social relations in the Russian Federation and other CIS member-states, organized crime is further expanding. Its development is mainly influenced by the conditions facilitating illegal ways of gaining maximum profits, enrichment due to unbalanced distribution of the national income and loss of the state control over the governmental and public structures. In Russia, as in other countries, as the financial and material potential grows, organized crime leaders and activists objectively tend to exercise pressure on the state powers and law enforcement. They develop not only tactics but also a certain criminal strategy of such pressure and ways of ensuring their own security while committing large-scale criminal acts. First, purely self-security measures prevail. Further, as riches accumulate, organized crime more visibly shows the trend of infiltrating into the state powers. Now it designs not only its own security measures regarding the criminal acts and their performers but also the ways of producing pressure on the state powers, including violence, to have the managerial decisions in the area of economic policy or on other social and political issues made for its benefits. In fact, organized crime, being interested in destabilizing the state power, disrupting operative, investigation and judicial activities, ever-increasingly towards conspiracy measures combined with the use of force to combat the state powers and authorities, and towards methods of terror towards certain social groups and society as a whole. It seeks to slow down efficiency and effectiveness of law enforcement and to make society inactive. The above said leads to the conclusion that organized crime, in its nature and internal development logic, objectively creates the prerequisites for motivating terrorism. At the same time terrorism influences organized crime. It initiates organized crime development and broadens the capabilities of mafia-like communities in achieving

their political and economic goals. Therefore, in contemporary conditions one may speak about the ongoing processes of interlinking and interacting of organized crime and terrorism and of the motivating influence of the former on the latter.

Terrorism provides for the expanding of organized crime capabilities. On the one hand, it is used to suppress the society's activity, to overcome counteraction of the state powers and law enforcement. On the other hand, organized crime itself has feedback from terrorism which encourages its development. To a certain degree, terrorism is a parasite on organized crime. A part of terrorist formations is within the "operating range" of criminal communities. The terrorist formations, while executing orders of the organized crime leaders, create by their actions the favorable conditions for mafia-like organizations to achieve their political and economic goals.

Thus, the following should be taken into account while considering organized crime motivations. Firstly, organized crime leaders and players are interested in expansion of terrorism as an accompanying social phenomenon. Secondly, organized crime, while building its own security system, in fact, presupposes the existence of terrorist formations as its element. These formations' acts not only destabilize the situation but also help to achieve concrete criminal goals, to gain profits, etc. They also evoke uncertainty in the society, paralyze its response and, by this, create favorable environs for development of terrorism proper. Thirdly, the organized crime leaders under an ideological shade take the line of organizing campaigns and seditious acts against the state powers and law enforcement so as to disable them. By their acts and demagoguery they seek to create a state of impunity instigating by this the terrorisminclined extremist organizations to commit acts of violence.

When analyzing this phenomenon, one should note the close interlink and interaction of terrorism and banditry as a marginal form of criminal violence. On the one hand, terrorism is inevitably linked with banditry even if the performers of terrorist acts do not want it. Under certain circumstances the leaders of political terrorist formations try to employ criminal violence and bandit terror to create the situation favorable for ter-

rorist organizations in a region depending on the set goals. On the other hand, banditry produces socio-political and psychological influence on society. Organized crime seeks to expand its influence within society and suppress the social activity of the public. To this end, it builds up terror, uses blackmail and many forms of intimidation and reprisal to create an unfavorable moral and psychological climate in the society. The public, seeing inability of the power to protect them from criminal violence, treats it negatively in political terms. They criticize anti-crime policy and inefficiency of the law enforcement. They criticize the political regime as a whole. The population doubts the possibility and expediency of the democracy.

The trend of merging terrorism and banditry is more distinct at the level of the terrorist acts' performers. Leaders of criminal formations seek to build militant groups comprising such individuals, the groups which are mainly replenished by criminals.

Terrorism, whatever shade it has, whatever ideology it is covered with, whatever political standing it pursues, must be considered as a criminal phenomenon, subject to a thorough criminological analysis to find out its causes, survey personalities of terrorist acts, and the motivations of their instigators and players. It is important to study the social basis of terrorism in a country, as well as the social groups and strata which produce criminal terrorism leaders and organizers. Also, it is important to study the stratum of individuals who are tending to radicalism in politics and extremist, terrorist methods of political struggle. As demonstrated in practice, criminals are the main combat force of organized crime in regard to acts of terror provoked by the latter. While studying the criminal processes, presently, the approach of the 1980s prevails, which proceeds from the fact that in the criminal world, leaders are far from politics and instigated only by vested interests and inclination to violent criminal acts. The analysis of available facts, however, demonstrates that the social criticism of the contemporary system of rule and management influences the building up of readiness to commit violent acts without an ultimate goal within the criminal and anti-social stratum (hooligans, wasters, etc.). They are just "waiting in the wings" when they will be able to rob, rape, "settle scores" with law enforcement without punishment (when

counting on the "mob effect"). What is forming is a complex trend of politicization of crime linked with actions of stealthy forces seeking power and finding support in the criminal elements. Thus, organized crime has sound resources for acts of terror, resources that can used if it is in the interests of organized crime.

Organized crime and terrorism inter-linkage and interaction are also influenced by a trend of those phenomena to become world-wide. The development of international connections of organized crime goes in parallel with internationalization of terrorism. Presently, there are "international organized crime" and "international terrorism". International criminal syndicates pursue the goals of getting enormous profits and employ international terrorist organizations to this end. At the same time, the international terrorist organizations use for their purposes the positions organized crime has within government and law enforcement. Organized crime, by providing for such support, creates assistance for terrorist groups to realize their tasks and that in turn motivates terrorism.

The illegal drug industry has become an acute problem. The vast potential of Asia and Latin America supplemented with synthetic drug production facilitates transformation of the drug industry into one of the most profitable types of organized crime. Today, organized crime has several features allowing for influence on terrorist activities. These features are:

- world-wide spread of drugs industry, persistence of criminal groups, interregional connections;
- large finance, firearms, means of transport;
- readiness to finance destabilizing activities against "unwanted regimes".

The seventeenth UN congress on crime prevention and treatment of criminals stressed, in the context of countering the drugs trade, that under some circumstances there could be an interaction between organized crime and terrorist groups. In some regions the close cooperation between large criminal organizations and terrorist groups has lead to illegal trafficking of drugs. In the past criminal drug traders considered successes of law enforcement in fighting them as "costs of production" accepting the losses in the fear of more active reprisals on the part of the

governmental authorities. However, when countries adopted more severe legislation and law enforcement measures, the most important channels for drugs related products and services were ruined. Then the criminal organizations became more active in protecting their areas, using techniques and methods of violence.

Therefore, the emergence of the drug-terrorism phenomenon was mainly fueled by the wish of drug traders to use the existing extremist structures, the combat power and training system of terrorist groups to protect their economic interests. The extremist structures, in their turn, were interested in the offered large funds and new opportunities for financing and gaining profits from illegal activity, which had not been attractive financially before. The organizations involved in illicit drug trafficking often use terror to compel state powers, justice, law enforcement and military authorities, to keep them from tracking down, detaining, or imprisoning their members.

The ever-increasing use of violence by drugs producers and traders in response to the measures to establish control over the drug trade is spreading to the acquisition of armaments. This should be added with a possibility of involvement of foreign terrorist organizations in protecting the interests of international drug industries, which annual profits from drug production and distribution exceeds 0.5 trillion US dollars. This prognostic conclusion is becoming proven by facts.

Considering the mechanism of motivation of terrorism by organized crime it is important to note the dependence of organized terrorist formations upon the nature of their interrelations with organized crime.

In this context one can distinguish between two types of organizational structures of terrorist formations interconnected with organized crime. The first type includes the terrorist structures which exist independently and are motivated by organized crime through material, financial, ideological and other means, but which themselves are not a part of the mafia-like formations, though they may be controlled by them. The other type is terrorist formations, which are directly subordinate to the mafia-like groups and fulfill their direct orders.

While studying the mechanism of interaction between criminal formations and describing them, one should consider the two types of such interactions depending on the scale of activities of these formations. The first functions at the macro-level and includes corporate criminal formations which spheres of activity and influence cover Russia, its large regions, as well as territories of the CIS countries. They are in direct interaction and interrelation with international mafia structures. The second type functions at the micro-level within the frame of separate organizations controlling their subordinate structures. Their interests are limited by one type of criminal activity and certain smallsize territories. Such considerations of the interconnection of organized crime and terrorism are important to effectively counter organized crime's motivation of terrorism.

Therefore, the study of the issue of politicization of organized crime outlines a number of features in the actions of its organizational structures, which mirror those of terrorism. Not all particular formations incorporated into the structure of the organized crime channel their efforts to achieve political goals. Generally, these activities are pursued by large organized communities. Their leaders, though unseen, have enormous criminal staff. The fact should not be ignored, however, that structurally small criminal groups may be subordinate to larger ones, be a part of the organized criminal communities' system, and follow their directives and fulfill their tasks.

The following features pertain to organized crime activities in the field of political relations:

- Active use of terror and other forms of political extremism. Their use by the criminal system indicates the commitment of organized crime to achieve political goals and its readiness for extreme measures to this end. Such a stand in the organized criminal communities' activities speaks of the increased hazard they pose to society.
- Organized crime becomes larger, interregional and international, in scale. Such ties and contacts include joint criminal acts and operations, financial and material assistance, exchange of information and criminal expertise.

- The organized criminal structures include combat units and groups capable of extremist actions including those of a terrorist nature. There are cases where the militants from criminal groups were sent abroad to commit acts of terrorism and other extremist acts.
- Often enterprises and companies with joint and foreign capital play the role of mediators to support deliveries of large batches of firearms and munitions to a state's territory. This points to the fact that international extremist centers attach great significance to such deliveries. Moreover, they consider such deliveries as a possibility of improving their financial and material foundation rather than achieving their political goals.

The activities of organized criminal communities more often feature the wish to influence (sometimes simply through acquiring or establishing control) the mass media to dictate their values and ideas to the society. It seems that one cannot exclude organized crime's influence on TV shows and publications which are flooded with a cult of violence and brutality. The making of heroes out of physically strong and cruel people who ignore the law and morality produces an impact that leads to the loss of spirituality and moral qualities of the society. This facilitates widening of the social foundation of crime, and increasing the number of unlawful acts⁶⁴. In addition, such acts of criminal groups can represent psychological terror campaigns.

At the level of national legislation the struggle with organized crime, banditry and other related offences has been carried out for a rather long time. International law is a different sphere. Though it has been noted above that the issue received attention even in the addresses of the UN Secretary General, until recently serious work has not been done to resolve it at the international level. The situation drastically changed when the international drug industry and internacriminal organizations emerged in the arena. As a result the struggle with transnational organized crime, while being the continuation of countering terrorism and illegal drug trafficking, has found its place on the international agenda.

Recently, cooperation in this area has been actively developing. Considering the fact that

the standing international criminal court will shortly start functioning, one may speak of international criminal justice being formed.

Cooperation between states to combat transnational organized crime can be conditionally divided into areas, three of which are questions of present interest:

- establishment by the states of more rigid control over finance including the struggle with corruption and criminal profit laundering (this includes the struggle with financing of terrorism in terms of the mechanisms being employed);
- countering various types of illicit trafficking including that of firearms, people and drugs;
- prevention and countering of crimes in the area of high technologies including cybercrimes.

The distinct feature of all listed crime categories is their inter-boundary nature.

At the same time the borders established by states, including political, administrative, customs, tariff, and jurisdiction boundaries, are obstacles for law enforcement agencies, rather than for criminals.

Strong action to establish cooperation in the fight against international organized crime must be taken through the ratification of the Convention against Transnational Organized Crime signed in Palermo on December 12, 2000 and its supplemental protocols: Against the Smuggling of Migrants by Land, Sea and Air (2000), Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children (2000), and Protocol against the Illicit Manufacturing of and Trafficking Firearms, Their Parts and Components and Ammunition $(2001)^{65}$.

Actions such as participation in a criminal group, obstruction of justice, and laundering of proceeds of crime are treated as criminal by the Convention. In addition, the Convention contains a detailed description of such key areas of cooperation between the states as the forfeiture of proceeds of crime, extradition of sentenced persons, mutual legal assistance, and protection of witnesses and victims. The feature of the convention and protocols is that they create a universal and integral legal basis for the practical interaction between state law enforcement agencies in various fields of countering crime. So far,

the Convention has been ratified by 40 states (including Canada, Spain, and France), and it enters into force on 29 September 2003.

At present, the anticrime efforts within the framework of the UN are focused on the draft Convention Against Corruption, which is expected to be agreed upon and opened for signing this year. The draft Convention contains a number of new provisions important in principle for the international community. The most important is the establishment of a general rule according to which the proceeds of crime will be returned to the country of origin. The inclusion of this provision, which is highly debated by diplomats on the UN Special Committee Against Corruption, will be of a revolutionary significance for many countries (including Russia) from which the proceeds are transferred for laundering to other countries. Adoption of this provision will require substantial alteration to many national legislations, which today provide for the confiscated proceeds to be turned into state income.

The anti-criminal cooperation of states develops not only through adoption of new international commitments taken on in multilateral agreements but also through agreement on higher cooperative standards and harmonization of relevant national procedures and law enforcement practices. Mainly, the issues of relevance are worked through at the level of the UN General Assembly, the Economic and Social Council of the UN, and primarily, through its subsidiary Commission on Crime Prevention and Criminal Justice. The work of these bodies is supported by the Vienna-based UN Centre for International Crime Prevention of the UN Secretariat.

The work on convergence of national legislations is also underway at the regional level. Europe is discussing the issue of creating a common judicial space. The Council of Europe plays a special role in this process where a number of working bodies act to counter crime.

The cooperative mechanisms created in the EU (including EUROPOL, EUROJUST and the European Arrest Warrant) represent an advanced level of interaction of states countering crime and can serve as a model for other European states and sub-regional formations including the NIS. The organizational forms of anti-criminal cooperation developed in the EU meet the requirements

of the common judicial space and allow the by-pass of a number of formal legal obstacles in the way of enhancing such interaction. In particular, the European Arrest Warrant in essence provides for bypassing such traditionally huge procedures as extradition of sentenced persons and relieves the problem of adoption by the states of the court rulings made by other states.

Russia's the Council of Europe conventions signed in the anti-criminal area: the European Convention on Mutual Assistance in Criminal Matters (1959) and the European Convention on Laundering, Search, Seizure and Confiscation of Proceeds from Crime (1990).

The main documents that regulate interaction of the CIS member-states in countering transnational organized crime are Convention of Legal Assistance and Judicial Relations on Civil, Family and Criminal Matters (1997), the Concept of Interaction of Commonwealth Member-States (1999),Countering Crime and the International Program of Joint Measures for Crime for 2003-2004. Countering Cooperation is based on interagency agreements in different areas of law enforcement, border guarding, customs, and intelligence.

Recently, the capabilities of the Coordinating Bureau for Countering Organized Crime and other Dangerous Crimes (CBCOC CIS) and international bureaus of Interpol have been used on a broader scale. In March 2002 an information assistance protocol was signed between the Antiterrorist Center and CBCOC CIS that significantly improved effectiveness of the joint work of these agencies.

Proceeding from the trends outlined above, one can be certain in forecasting the development and deepening of international relations in countering transnational crime and, correspondingly, an increase in number of the agreements to be concluded.

Russia's Legal Basis For Countering Terrorism

In Russia in the 1990s terrorism transformed from a combination of separate, rare and practically unique manifestations of violent offences into a systematic and large-scale threat to security of the state and society. Before that the Soviet Union had had an effective legislation which provided for suffi-

ciently strict measures to fight politically or socially motivated crimes. In this regard, the potential subjects of possible terrorist manifestations (nationalistically inclined individuals, clerics, members of extremist groups plotting the forceful change of the existed regime, etc.), even at the stage of designing antisocial and, moreover, unlawful acts, were seen by security authorities. They were subjected to overt and latent punishment to correct their behavior and return them under the shade of law. In addition, the country had an efficient state system of measures to prevent extremist and terrorist manifestations (propaganda of unconstitutional ideas and setting organizations advocating such ideas were subject to the criminal law; the state censorship of publications excluded massive issue and open dissemination of materials containing ideas of national, race or religious exceptionalism; the system of permits debarred seriously the acquisition of firearms and explosives, etc.). In such conditions, separate manifestations of terrorism like the blasts in the Moscow's subway system arranged by the Armenian nationalists in 1977 or the aircraft hijack attempt in Tbilisi airport in 1984 were truly taken as marginal phenomena which were not characteristic of our country. In this respect Soviet law treated as terrorist crimes only two offences: a terrorist act and a terrorist act against a foreign national (Articles 66 and 67 of the Criminal Code of the RSFSR, correspondingly).

However, by the beginning of the 1990s the situation changed crucially. In the outbreak of so-called democratic reforms in the country the active destructive processes started on a wide scale to objectively create exclusively favorable conditions for the growth of crime, extremism and terrorism: economic crisis; aggravation of inter-national relations; separatist moods; devaluation and disappearance of such notions as patriotism, public spirit, sense of duty, and internationalism, which previously had played the role of ideological cramps of the society. Unsanctioned meetings, rallies and demonstrations were becoming of a more antisocial nature, violating the law, and growing into mass riots and ethnic and socially motivated pogroms. State power did not respond to them as promptly and strictly as expected. These destructive processes have resulted in the collapse of the state and, correspondingly, the state law

enforcement system. Legislation also did not respond to the situation.

The role the negative socio-political processes played in Russia in the late 1980s – early 1990s to form the terrorogenic factors is exclusively important and turned out to be the decisive one in many respects.

The causes and conditions which in the early 1990s should have been considered as circumstances fostering the spread of terrorism in the Russian Federation should include:

- the collapse of the political structure of society without creating a new effective mechanism of social management;
- economic crises;
- loss of ideology by the society,
- national tension often growing into armed conflicts;
- · weakening of security measures;
- expansion of illicit trafficking of firearms and other means of violent crimes;
- outgrowth of ordinary and organized crime on the background of high rate of corruption of officials;
- intrusion of political and religious extremism into the social and economic life, on the one hand, and criminalization of the society, on the other.

Since the early 1990s in the Russian Federation the number of crimes of terrorist nature has been continuously growing. For example, if in 1994-1995 in Russia 64 criminal explosions were recorded, in 1996-2001 there were about 600-700 recorded annually. At this, one should note the change in quality of offences committed with the use of explosive device. The ever-increasing number of such offences had all attributes of terrorism rather than that of trivial mobsters' actions. According to FSB information, if in 1997 only 16 explosions out of about 600 could be treated as terrorist ones, in 2001, having approximately the same number of explosions, 150 were considered terrorist plots. The same criteria were used to categorize as terrorist 61 crimes out of 155 committed with explosion device only in the first quarter of 2001.

Also, the trend of growing of social danger should be noted in regard to the explosions that have occurred in Russia during recent years. In 1997 the death toll was 153 people, in 1998 – 163, in 1999 – 506, in 2000 – 207 persons perished and hundreds were injured.

Already in the mid-1990s legislators had to respond to the increasing threat of terrorism in the country and broaden the range of crimes attributed to terrorist deeds. The Federal law # 10-FZ of July 1, 1994 introduced Article 2133 "Terrorism" into the Criminal Code of the RSFSR. From that moment this definition has acquired legal standing. The article defines terrorism as "committing for the purpose of disruption of public security or influencing the decision-making by the state authorities an explosion, setting fire or other acts posing the danger of human losses, significant material damage and other serious consequences".

Starting from January 1, 1997 the Criminal Code of the Russian Federation came into effect. It contains a legal niche for terrorism in Article 205 of Chapter 24 (crimes against public security) of Section IX (crimes against public security and public order).

Many Russian men of law and practical jurists are of one accord that the above definition does not adequately reflect the substance and content of terrorism. In fact, the goal of terrorist activities (i.e. the individuals who commit acts of terrorism) may be not only to influence governmental decision-making. In the broader context terrorism is "a way of controlling society through preventive intimidation"66. In this regard the goal of terrorist activity may be to influence the people who have nothing to do with the state powers, including groups, nationalities, races, political groups, classes, religious groups, or the population as a whole.

However, such approach is also debated. Controlling society is clear politics. By influencing it means to seek to influence decision-making.

Some experts believe incorrect the mere wording of definition of "terrorism"⁶⁷ given in Article 205, which is interpreted as "committing an explosion, setting fire or other acts posing the danger of human losses, significant material damage and other serious consequences for the public, if these acts have been committed for the purpose of disruption of public security or influencing the decision-making by the state authorities, as well as a threat of committing such acts for the said purposes".

Also, it is doubtful to attribute intimidation of the public to the terrorist goals. In fact,

intimidation is an important, substantive element of terrorism and in this respect Article 205 of the Criminal Code of the Russian Federation (CC RF) stands out from Article 213³ of the Criminal Code of the RSFSR where this element was missing. This element, however, serves as a tool to achieve terrorist purposes rather than being its ultimate goal.

The criminal liability for crimes of a terrorist nature (besides Article 205 on terrorism the CC RF introduced Article 206 on taking hostages, Article 207 on deliberately false reports of a terrorist act, Article 277 on an offence against life of a governmental official or public leader, Article 360 on assaults upon persons or agencies being under international protection) still did not solve the issue of countering terrorism as an extremely dangerous socio-political phenomenon. The necessity to solve this issue at the state level through the development of an adequate system of counterterrorist measures was realized as early as the 1990s by the security and law enforcement agencies whose officers more often faced directly the manifestations of terrorism. As a result, in the late 1996 a working group on drafting the Federal Law "On Countering Terrorism" was set up and started functioning within the State Duma Committee on Security of the Federal Assembly of the Russian Federation. In spite of the small size of the group the resulted law is the end product of work done by dozens of students, experts, specialists and officials from different ministries and agencies directly or indirectly associating with problems of terrorism. In addition to what had been available in terms of antiterrorist regulations to FSB, MVD and the General Prosecutor's Office of RF, the proceedings of topical conferences were used and the foreign law making experience in this area was thoroughly studied and analyzed. So, the working group members had in their disposal the legislation of other countries (including the above said laws) which regulate issues related to countering terrorism in the Great Britain, Israel, Spain, Italy, Peru, the USA, Turkey, and FRG. The work on the legislation found understanding and support with nearly all deputies irrespective of political creed, faction or group.

As of the first hearing held on September 10, 1997, terrorism was defined by the drafters as a socio-political phenomenon that is "the

unlawful violence or a threat of violence towards physical persons or organizations as well as destruction (damage) or a threat of destruction (damage) of property and other material objects being committed to disrupt public security, international law and order or established routine of management through compelling the state authorities to adopt the decisions lucrative for terrorists". Thus, the authors departed from the narrow juridical interpretation of terrorism. This was absolutely justified because the target was not a criminal legislation, but a federal law being designed to establish a system of measures to combat terrorism as a dangerous socio-political phenomenon. It was the quoted wording of the definition of terrorism that was adopted by deputies when the bill was read for the first time.

During the discussion that followed the legal subjects of the bill submitted a great number of similar comments⁶⁸ where the drafters were strongly recommended to bring the notion of terrorism in consistency with Article 205 of the CC RF. In particular, such comments were in the letters of the President of the Russian Federation and the Government of the Russian Federation. Regretfully, this position was taken under pressure of authoritative reviews. As a result, the notion of "terrorism" was narrowed down to a list of the criminalized acts in the criminal law as corresponded to Articles 205, 207, 277 and 360 of the Criminal Code of the Russian Federation. This could not but narrow in the legislation the sphere of the preventive function on the part of the state as regards countering terrorism, because, on the one hand, the focus of this function was formally shifted to the crimes of terrorist nature of which prevention and termination is the responsibility of security and law enforcement agencies. On the other hand, the antiterrorist officials could not handle many of the circumstances and processes which act as determining factors for terrorism. These factors should be covered by an especially built and used national system of measures that includes, among legal and special measures, economic, ideological, social and other nature measures.

One more serious deficiency should not be omitted, which occurred after the bill had been adopted by the State Duma on September 10, 1997 after the first reading. It deals with the status of the Interagency

Antiterrorist Commission of the Russian Federation established in accordance with Directive # 45 of the Government of the Russian Federation of January 16, 1997. At that time the Director of FSB of Russia was designated as the head of the said commission. In other countries, generally, the counterterrorist activities are carried out under the auspices of the supreme executive power. This is especially topical in the conditions of Russia. In this regard, while drafting the law "On Countering Terrorism" its authors in the "The article Interagency Antiterrorist of the Russian Federation" Commission defined that this commission is to report to the Government of the Russian Federation and the Deputy Chairman of the Government was to head the commission.

Additionally, the bill provided for corresponding interagency antiterrorist commissions in Russia's federal subjects (or regional for several subjects). Therefore, it was planned to set up a national scheme of countering the terrorist threat with top-to-bottom controls. This proposal, however, was also adjusted under pressure from the presidential side and acquired the following "rubber" wording: "to coordinate activities of the subjects countering terrorism, the antiterrorist commissions on the federal and regional levels can be established by decisions of the President of the Russian Federation and the Government of the Russian Federation." 69.

Eventually, this deficiency was eliminated by Directive # 1302 of the Government of the Russian Federation of November 6, 1998 with the Chairman of the Government being determined as the Head of the Interagency Antiterrorist Commission of the Russian Federation.

Therefore, the Federal Law "On Countering Terrorism", which entered into force on August 4, 1998, cannot be considered a perfect document. However, it helped to relieve a number of problems that previously existed in the area of antiterrorist activities. The legislation increases the legal and social degree of protection of persons directly involved in counterterrorist operations, and that is at the outmost important for the law enforcement operative officers. The legislation presents a system of notions associated with the area of countering terrorism and introduces basic terms.

The Federal Law "On Countering Terrorism" outlines the subjects charged with the responsibility of countering terrorism. Article 6 lists six such subjects: the Federal Security Service (FSB), the Ministry of Interior (MVD), the Foreign Intelligence Service (SVR), the Federal Agency of Protection Service (FSO), the Ministry of Defense (MO), and the Federal Frontier Service of Russia (FPS). In fact, their jurisdiction in regard to antiterrorist activities is defined in very generic terms. For instance, paragraphs 2 and 3 of Article 7 of the Law state that prevention, detection and termination of crimes of the terrorist nature pursuing political goals is the jurisdiction of the FSB of Russia and that countering crimes pursuing sordid motives is the jurisdiction of MVD of Russia. The legislation, however, does not provide for definitions of and clear distinction between the political and sordid motives.

The legislation establishes that, besides the subjects directly involved in the antiterrorist activities, the Government of the Russian Federation determines a list of other executive bodies that, within their jurisdiction, are involved in prevention, detection and termination of terrorist activities.

The identifying of specific ministries and agencies in the legislation as agents countering terrorism is very important and far from pure formality. During the hearing the heads of some of the listed institutions tried to avoid direct participation in countering terrorism referring to the previous federal laws where they had not been directly charged with solving such problems. If a law-maker were guided by such attitude, he would have placed the responsibility for countering terrorism in the Russian Federation only on two agencies - FSB of Russia and MVD of Russia, since the task of countering terrorism in these or other forms had been their responsibility before the draft Federal Law "On Countering Terrorism" was developed. Also, see the Federal Laws # 40-FZ "On the Federal Security Service in the Russian Federation" of April 3, 1995 and # 27-FZ "On the Internal Troops of the Ministry of Interior of the Russian Federation" of February 6, 1997, as well as in the Presidential Decree # 1039 "On Approval of the Provisions on the Ministry of Interior of the Russian Federation" of July 18, 1996. The drafters of the Federal Law "On Countering Terrorism" proceeded from the fact that the

new legislation could be capable of changing or broadening functions of ministries and agencies and the list of tasks they were charged with in accordance with the previous legal acts.

Further, the Federal Law "On Countering Terrorism" introduces serious constraints on concessions to terrorists which are possible on the part of officials negotiating with the criminals for the sake of lives of people. Only the persons especially authorized by the head of staff of the counterterrorist operation are permitted to negotiate with the terrorists should such negotiations deem expedient. In pursuing so, the transfer to terrorists of any persons, firearms and other means or items which can pose a threat to life and health of people, as well as fulfillment of the terrorists' political demands should not be considered as a condition of seizure by the terrorists of their criminal acts.

Lastly, the legislation makes an attempt to escape a traditional approach, which has been in use in our country during recent years. That is to reduce counter-terrorism down to termination of acts of terror, though the mere definition of the terrorism given in Article 3 of the Law, as it was indicated above, is not correct in this sense. However, Article 2 of the Law ("Main Principles of Countering Terrorism") following the principle of legitimateness declares the principle of priority of the terrorism prevention measures. Other provisions of the Law also direct to the necessity of preventive measures in countering terrorism, which are to detect and eliminate the causes and conditions facilitating implementation of terrorist encroachments as well as to obtain timely preventive information on preparation of such acts.

It should be noted that the Law "On Countering Terrorism" does not outline new forms of terrorism, while disclaiming in Article 3 in the definition of notion "a terrorist act" that it can be carried out with the use a nuclear explosive device, radioactive, chemical, and biological and other device and substances. As a result, the Law does not determine the features of combating these forms of terrorism. Correspondingly, there is nothing said about other forms of contemporary terrorism and ways of countering them. The methods described (counter-terrorist operations and the like) are applicable only to older terrorist activities. On the other

hand, attributing the financing of terrorist organizations and other support to them to the terrorist activities, the Law does not elaborate on this area and translates all practical work in regard to the sponsorship of terrorism into the jurisdiction of the criminal law.

In early 1999, a draft Federal Program for Strengthening Counterterrorist Activities was developed in accordance with the Decree of the President of the Russian Federation and under the auspices of the Security Council. After review and concurrence with all relevant agencies the document was shelved in the Ministry of Economy and the Ministry of Finance due to a simple reason of lacking funds. As a result, only separate fragments of the draft were incorporated in the Federal Countercrime Program. It should be noted that the section devoted to antiterrorist preventive measures was the most representative among the five sections of the draft program. The preventive measures, among others, included measures to actively counter the dissemination of extremist and terrorist ideology. It seems that the lack of these measures played an extremely negative role in countering the chauvinistic social practices fundamentalist Wahhabites and Chechen separatists in August 1999 when they escalated Russia into a new military conflict in the Northern Caucasus.

International Law And Megaterrorism

In the early 1990s the growth of terrorist manifestations in number and scale at the international level caused concerns in world society. This issue was addressed by the 49th Session of the UN General Assembly. On December 9, 1994 the General Assembly adopted the Declaration on Elimination of International Terrorism. The document calls for all world nations to unequivocally condemn all acts, methods and practices of terrorism as criminal and unjustifiable, wherever and by whoever committed, including those which jeopardize the friendly relations among states and peoples and threaten the territorial integrity and security of states.

The Declaration states the commitments of the UN member-states to refrain from organizing, instigating, assisting or participating in terrorist acts in territories of other states, or from acquiescing in or encouraging activities within their territories directed towards the commission of such acts. The states are urged to take effective and resolute measures for the speedy and final elimination of international terrorism, in particular:

- (a) To refrain from organizing, instigating, facilitating, financing, encouraging or tolerating terrorist activities and to take appropriate practical measures to ensure that their respective territories are not used for terrorist installations or training camps, or for the preparation or organization of terrorist acts intended to be committed against other states or their citizens;
- (b) To ensure the apprehension and prosecution or extradition of perpetrators of terrorist acts, in accordance with the relevant provisions of their national law;
- (c) To endeavor to conclude special agreements to that effect on a bilateral, regional and multilateral basis, and to prepare, to that effect, model agreements on cooperation:
- (d) To cooperate with one another in exchanging relevant information concerning the prevention and combating of terrorism:
- (e) To take promptly all steps necessary to implement the existing international conventions on this subject;
- (f) To enhance their cooperation in this area through, in particular, systematizing the exchange of information, mutual judicial assistance, and extradition on a bilateral, regional and multilateral basis.

The Declaration also encourages the states to review urgently the scope of the existing international legal provisions, ensure that there is a comprehensive legal framework covering all aspects of the matter.

In the Declaration the states that have not yet done so are urged to consider, as a matter of priority, becoming parties to the international conventions and protocols relating to various aspects of international terrorism.

Analysis of materials comprising the legal basis of organizing and combating terrorism at the international level demonstrates the following. The national legislation of certain countries clearly defines what acts are terrorist acts according to their objective and subjective components. It turned out to be different at the international level, since the international players had quite different points of view in some cases. This regards, for example, such issues as the attitude to national liberation struggle, guerilla movements against an aggressor, etc. It has not been decided upon whether to consider it terrorism or a legitimate right of the oppressed or assaulted countries and peoples.

Evidently, this was the cause for the first international documents applied from the commonly understood notions like killings of legitimate power officials, hijacking of aircraft and taking their passengers hostages, supply of terrorists with the means of terrorist acts⁷⁰.

Over the years the international community should have accumulated a good experience in theoretical categorizing of terrorist crimes, however, the issue has not been resolved so far. The Committee on International Terrorism set up by the International Law Association discussed possible approaches to giving a definition of this notion but did not come to a particular conclusion. In 1984 the Committee preferred to come back to the pragmatic method and proceed from the already applicable norms of the international law.

The modern system of multilateral cooperation on countering terrorism has formed mainly over four recent decades. It basis is comprised by 12 universal conventions and protocols related to the countering various manifestations of terrorism in air, sea and land, which have been developed and adopted by the UN:

- 1. Convention on Offences and Certain Other Acts Committed On Board Aircraft, Tokyo, September 4, 1963
- 2. Convention for the Suppression of Unlawful Seizure of Aircraft, the Hague, December 16, 1970
- Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation, Montreal, September 23, 1971
- 4. Convention on the Prevention and Punishment of Crimes Against Internationally Protected Persons Including Diplomatic Agents, New York, December 14, 1973

- 5. International Convention Against the Taking of Hostages, New York, December 17, 1979
- 6. Convention on the Physical Protection of Nuclear Material, Vienna, March 3, 1980
- 7. Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, supplementary to the Convention for the Suppression of Unlawful Acts against the Safety of Civil Aviation, Montreal, February 24, 1988
- 8. Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation, Rome, March 10, 1988
- 9. Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf, Rome, March 10, 1988
- 10. Convention on the Marking of Plastic Explosives for the Purpose of Detection, Montreal, March 1, 1991
- 11. International Convention for the Suppression of Terrorist Bombing, New York, December 16, 1997
- 12. International Convention for the Suppression of the Financing of Terrorism, New York, December 9, 1999

The first step to create a universal legal basis for international antiterrorist cooperation was the development in the framework of the International Civil Aviation Organization and adoption of the Tokyo Convention on Offences and Certain Other Acts Committed On Board Aircraft (1963).

The Convention Articles 1 and 2 determine that the Convention applies in respect of offences against penal law, acts which, whether or not they are offences, may or do jeopardize the safety of the aircraft or persons or property wherein or which jeopardize good order and discipline on board and their consequences go beyond the national borders.

According to the Convention provisions, when the aircraft commander "has reasonable grounds to believe that a person has committed or about to commit, on board of the

aircraft, an offence or any unlawful act contemplated by the Convention" he may impose upon such a person "reasonable measures including restraint" which are necessary to protect safety of the aircraft or of persons or property therein. According to Article 6 of the Convention, the commander may require or authorize the assistance of other crew members and may request or authorize, but not require, the assistance of passengers to restrain any person he entitled to restrain. It is not less important that Article 10 of the Convention provides for a mechanism of protection of the aircraft commander, any other member of the crew, any passenger, the owner or operator of the aircraft against being made responsible in any proceedings on account of the treatment undergone by the person against whom "the actions were taken".

For the first time the Convention committed the states to take all appropriate measures to restore control of the aircraft to its lawful commander when a person on board has unlawfully committed by force or threat thereof, an act of interference, seizure, or other wrongful exercise of control of an aircraft in flight (Article 11).

The Convention dictates that the contracting states will allow to disembark on their territories any person suspected in committing or has committed the offences pursuant by the Convention. In this regard it is stated that the authorities of the state of disembarkation should immediately investigate the case, report on its findings the other states concerned and indicate whether it intends to exercise jurisdiction.

The provisions of the Tokyo Convention were supplemented by the agreements that followed: the Hague Convention for the Suppression of Unlawful Seizure of Aircraft (1970) and the Montreal Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (1971), which to a certain extend develop the cooperation of states in preventing and punishing crimes affecting two or more states.

According to the provisions of **the Hague** Convention, the states undertake to make the offence committed by persons on board of the aircraft (i.e. at any time from the moment when all its external doors are closed following embarkation until the moment when any of such doors is opened

for disembarkation) punishable by sever penalties, if such persons commits the following acts considered criminal:

- unlawfully, by force or threat thereof, or by any other form of intimidation, seizes or exercises control of, that aircraft or attempt to perform any such act;
- is an accomplice of a person who performs or attempts to perform any such act commits an offence.

The Convention is not applied when the place of take-off or the place of the actual landing of the aircraft on board which the offence is committed is situated within the territory of one and the same state. The exclusions are the cases when a criminal is on the territory of the state other than the state of registration of that aircraft (Article 3).

The Convention provisions are targeted to ensure the punishment of offenders is inevitable. It is based upon the principle of universal jurisdiction. The contracting states are committed either to extradite or to prosecute offenders.

The provisions that deal with the issues of prevention acts of criminals, information exchange, mutual legal assistance, settlement of disputes as regards application and interpretation of the Convention were eventually laid as the basis for the similar regulations stipulated in other international agreements on countering terrorism including the convention against taking of hostages and on protection of the diplomatic agents.

The Montreal Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation (1971) defines as offensive the following acts:

- an act of violence against a person on board an aircraft in flight if this act is likely to endanger the safety of that aircraft;
- destruction of an aircraft in service or damage to such an aircraft so that it renders it incapable of flight or which is likely to endanger its safety in flight;
- placing or causes to placed on board an aircraft in service a device or substance which is likely to destroy that aircraft or to cause damage to it which is likely to endanger its safety in flight;
- destruction of or a damage to air navigation facilities or interference with their

- operation, if any of such act is likely to endanger the safety of aircraft in flight;
- communication of information which he knows to be false thereby endangering the safety of an aircraft in flight.

Also an attempt to commit any of the above offences or being an accomplice to them is termed as an offence. The contracting states commit to apply strict measures to punish such offenders.

The Convention provides for inevitability of punishment. To this end it establishes the universal jurisdiction and obliges the contracting state either to extradite the offender or submit him to the competent authorities for prosecution.

Both conventions, while supplementing each other, constitute the international legal basis for the interaction of states to prevent offences against international civil aviation and for inevitability of punishment in case the offence has been committed.

However, the legal foundation of the cooperation in this area had been completed only by 1988 by adoption of the Protocol for the Suppression of Unlawful Acts of Violence at Airports Serving International Civil Aviation, supplemented which the Montreal Convention (1971). Therefore, the foundation was completed of the legal international cooperation of different countries as regards the protection of airports against terrorist encroachment. According to the Protocol, the range of issues was expanded that were treated as offensive in the context of the Montreal Convention. In addition to the offences outlined in the Convention, the Protocol states that "any person commits the offence if he unlawfully and intentionally, using any device, substance or weapon:

- performs an act of violence against a person at an airport serving international civil aviation which causes or is likely to cause severe injury or depth;
- destroys or seriously damages the facilities of an airport serving international civil aviation or an aircraft not in service located thereon or disrupts the services of an airport;
- if such act endangers or is likely to endanger safety at that airport."

The said offences must be subjects to jurisdiction of a Montreal Convention contracting

state when an offender is located on its territory and the state does not extradite him.

These documents are called for to provide for the cooperation between different countries in such a way and in form that to ensure safety against terrorist acts of the fastest means of transport used for international communications.

The issues of countering terrorist acts in the sea were addressed in the framework of the International Maritime Organization and through adoption in 1988 of the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation and the Rome Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf.

The Convention Preamble states that one of the reasons for its adoption is the wide-world escalations of acts of terrorism in all forms which jeopardize safety of persons and property, seriously affect the operation of maritime services, and undermine the confidence of the peoples of the world in the safety of maritime navigation. The world community's concerns with such acts were raised, in particular, by the hijacking in 1961 of the cruise ship *Santa Maria* with 600 passengers on board in the Caribbean Sea and the Italian liner *Achille Lauro* in 1985.

The Convention applies to a vessel of any type that is not permanently attached to the sea-bed, including dynamically supported craft, submersibles, or any other floating craft. This Convention, similarly to the convention on civil aviation safety, does not apply to warships or the ships owned or operated by a state when being used as naval auxiliary or for customs or police purposes.

The Convention applies if a ship is navigating or is scheduled to navigate into, through or from waters beyond the outer limit of the territorial sea of a single state, or the lateral limits of its territorial sea with adjacent states"; its provisions also apply when the offender is found on the territory of other state party.

The parties to the Convention commit to make punishable the following unlawful and intentional acts considered as an offence:

 seizure or exercising control over a ship by force or threat thereof, or any other form of intimidation;

- an act of violence against a person on board a ship if this act is likely to endanger the safe navigation of that ship;
- destruction of a ship or causing damage to a ship which is likely to endanger the safe navigation of that ship;
- placing or causing to be placed on a ship a device or substance which is likely to destroy that ship or cause damage to that ship or its cargo, which endangers or is likely to endanger the safe navigation of that ship;
- destruction or causing a serious damage to maritime navigational facilities or serious interference with their operation, if any of such act is likely to endanger the safe navigation of that ship;
- communication of the information which is known to be false, thereby endangering the safe navigation of that ship;
- causing injury or killing any person in connection with commission or attempted commission of any of the offences set forth above.

The abetting to commit or threatening so to compel a physical or juridical person to do or refrain from doing any act if that threat is likely to endanger the safe navigation of the ship in question are also termed as offences.

The Convention states that its parties are obliged to prosecute offenders irrespective of the place where the act was committed or where the offence suspects have been found, who are either to be extradited or prosecuted. The principle "either extradite or prosecute" is supplemented with the mechanism for submitting the offender to the competent authorities of the participating state.

As of the Rome Protocol (1988), it is of facultative nature for the participating states. Its provisions apply to the fixed platforms located on the continental shelf, i.e. to facilities and structures permanently fixed on the seabottom for the purposes of survey or exploration of resources as well as for other economic objectives, and to the physical persons present on such platforms when any acts regarding such persons are directed against the safety of a facility.

In 1973 under the auspices of the United Nations the Convention on the Prevention and Punishment of Crimes Against Internationally Protected Persons Including

Diplomatic Agents was developed and adopted. Its Preamble states that offences against such persons jeopardize the maintenance of normal international relations necessary for cooperation between the states. Convention attributes to such persons the heads of states, heads of governments, ministers, diplomats, consuls as well as members of their families when they are present on the territory of other state and engaged in issues of international relations and whose status is determined by the Convention on Diplomatic Relations of 1961 and the Vienna Convention on Consular Relations of 1963.

According to the Convention Article 2, the intentional commission of a murder, kidnapping or other attack upon a person or liberty of an internationally protected person, a violent attack upon official premises, private accommodation or the means of transport of an internationally protected person likely to endanger his person or liberty, threats to commit any such attack or attempts thereof; an act constituting participation as an accomplice in any such attack must be made a crime. The Convention obliges the states to make "these crimes punishable by appropriate penalties" taking into account their grave nature.

The document established the principle of the universal jurisdiction which presupposes the inevitability of punishment wherever and against whomever such crimes were committed.

The main areas of interaction of the states parties to the Convention are:

- the cooperation in prevention of crimes including measures to prevent preparations of commission of those crimes, exchanging information and coordinating respective activities;
- the cooperation in prosecution of offenders on the basis of the principle "either extradite or prosecute": communicate to all states concerned the information on the alleged criminal location, on the circumstances of the crime committed, and its victims; take the appropriate measures under its internal law so to ensure the presence of the offender on the territory of the state participant for the purpose of prosecution or extradition; submit the case to the competent authorities for the purpose of prosecution;

- the cooperation in the criminal proceeding issues which provides for the broad mutual legal assistance in connection with the criminal proceedings brought in respect of crimes including the supply of all evidence necessary for the proceedings (the information on the final results of the criminal proceedings is communicated through the UN Secretary General to other states participants);
- the cooperation in settlement of disputes concerning the application or interpretation of this Convention through negotiations as well as providing a possibility to refer to an organization of arbitration or the International Court of Justice.

The International Convention Against the Taking of Hostages (1979) aims at the most dangerous manifestation of terrorism - the taking of hostages. Such offence is taken by the Convention as an act committed by any person who seizes or detains and threatens to kill, to injure or to continue to detain another person ("the hostage") in order to compel a third party, namely, a state, an international intergovernmental organization, a natural or juridical person, or a group of persons to do or abstain from doing any act as an explicit or implicit condition for the release of the hostage. Also an attempt to commit an act of hostage-taking as well as being accomplice of a person who commits or attempts to commit such act is taken as the said offence.

As compared to other antiterrorist conventions this Convention introduces the criteria of jurisdiction as mandatory established by a state participant in connection with an offence (place where offence was committed, nationality of the alleged offender, the direction of the compulsion: to compel a state to commit or refrain from an act), a faculty jurisdiction if an offence was committed against a hostage when the hostage is a national of a given state.

Convention Article 9 allows for the refusal of extradition of the alleged offender if the requested state has substantial grounds for believing that such request "has been made for the purpose of prosecuting or punishing a person on account of his race, religion, nationality, ethnic origin or political opinion". Evidently, these provisions to a great degree determined the attitude of many states to their participation in this Convention because

the broad justification of causes not to grant extradition is possible and, therefore, the certainty that the principle of inevitability of punishment disappears.

Our country joined this Convention only in 1987. In doing so, the statement was made which, in particular, noted that "article 9, paragraph 1, of the Convention should be applied in a manner consistent with the stated aims of the Convention, which include the development of international co-operation in adopting effective measures for the prevention, prosecution and punishment of all acts of hostage-taking as manifestations of international terrorism through the extradition of alleged offenders".

The threat of use of nuclear weapons or its components by terrorists presupposed the necessity of development of a number of legal international tools to regulate cooperation between the countries in strengthening the regime of security of such materials and prevention of their falling into the hands of terrorists. The Convention on the Physical Protection of Nuclear Material (1980) became one of such tools. This Convention applies mainly to the nuclear material used for peaceful purposes while in international nuclear transport. The scale of the problem becomes clear if one considers that more than a million of radioactive material shipments are carried out in the world annually. In some cases the Convention is applied to the nuclear material used for peaceful purposes while in domestic storage and transport.

The increased danger posed by the nuclear material is mentioned in the Convention provisions in accordance with which the nuclear material shipments are prohibited if there are no assurances that it is protected at the appropriate level (as established in the addendum to the Convention). The Convention obliges all state parties to identify their central authorities and point of contact having responsibility for the physical protection of nuclear material and for the coordinated countermeasures against unlawful acts in regard to it. In addition, the parties to the Convention take on the obligation to cooperate and assist each other in the recovery and protection of such material to any state that so requests in the event of theft or other unlawful taking of nuclear material or credible threat of such acts. According to the Convention, the means of implementation of such cooperation are to be determined by the parties concerned.

The Convention provides for the state parties to take appropriate measures "to protect confidentiality of any information which they receive in confidence by virtue of the provisions of this Convention from another state party or through participation in an activity carried out for the implementation of this Convention".

According to Article 7 of the Convention, the following intentionally committed acts are punishable by each state party:

- an act without lawful authority which constitutes the receipt, possession, use, transfer, alteration, disposal or dispersal of nuclear material which causes or is likely to cause death or serious injury to any person or substantial damage to property; a theft or robbery of nuclear material; an embezzlement or fraudulent obtaining of nuclear material; an act constituting a demand for nuclear material by threat or use of force or by any other form of intimidation;
- a threat to use nuclear material to cause death or serious injury to any person or substantial property damage, or commit a theft of nuclear material or seize it in order to compel a natural or legal person or international organization or a state to do or to refrain from doing any act;
- being an accomplice to any of the above offences.

The Convention provides for the principle of universal jurisdiction supplemented by a commitment of a state party to either extradite or prosecute the offender. Two criteria are determined to establish a national jurisdiction: the offence is committed in the territory of the state party or on board a ship or aircraft registered in that state; the alleged offender is a national of that state.

Other articles of the Convention are in many respects similar to provisions of the universal international agreements aimed at countering various manifestations of terrorism.

UN Security Council Resolution 635 (1989) on prevention of the use of plastic explosives for terrorist purposes was a prologue to concluding the Convention on the Marking of Plastic Explosives for the Purpose of Detection (1991). The Convention called for

fostering termination of terrorist acts presumably against international civil aviation, formed the basis of an international regime prescribing to introduce in all explosives commonly known as "plastic explosives" including explosives in flexible or elastic sheet form special detection agents (as described in Technical Annex to the Convention) to render them detectable.

In particular, the Convention provides for prohibition and prevention of the manufacture on the territories of state parties of unmarked explosives as well as their movement into or out of the state parties' territories. The Convention calls for countries to exercise strict and effective control over the possession and transfer of possession of unmarked explosives, assuring of their destruction or consumption so that it will be consistent with goals of this Convention. Certain exclusions are made only for plastic explosives consumed by military and police authorities.

A feature of this Convention is that it is lacking a criminal prosecution mechanism in combination with other norms to facilitate international monitoring over compliance with its provisions. For example, Article 7 stipulates that the state parties should inform the Council of the International Civil Aviation Organization (ICAO) on measures being taken to implement this Convention.

The International Convention for Suppression of Terrorist Bombing (1997) lists as an offence unlawful and intentional delivery, placement, discharge or detonation an explosive or other lethal device in, into or against a place of public use, a state or governmental facility, a public transportation system or an infrastructure facility with the intent to cause death or a serious bodily injury or to cause extensive destruction of such a place, facility or system where such destruction results in or is likely to result in major economic loss. In the context of the Convention, an attempt to commit any of the said offences and participation as an accomplice to commit them or participation in an organization of other persons or commanding them to commit such offences or intentional contribution to the commission of one or more of such acts with the aim of furthering the common criminal activity or purpose or in the knowledge of the intention of the

group to commit the offence or offences are also listed as offences.

The Convention incorporates the mechanism of universal jurisdiction based on the principle of "either extradite or prosecute".

Among the features of the Convention one could note the more detailed (as compared with other antiterrorist instruments) list of preventive measures. In particular, they are the steps to prevent relevant terrorist acts including measures to prohibit unlawful activities of persons, groups, and organizations who encourage, instigate, organize, intentionally finance, or participate in committing offences outlined in the Convention.

The Convention provides for the exchange of information, a possibility of technology and equipment transfers in accordance with the national legislation, and coordination of administrative and other measures. The states take on the obligation to cooperate in research and development of methods of detecting explosive and other dangerous substances which may cause death or injury and in holding consultations on issues related to development of detection agent standards to mark explosives for the purposes of identification of their origin during investigations after bombing.

Apart from other antiterrorist conventions, this Convention states that each state party adopts such measures as may be necessary "to ensure that criminal acts within the scope of this Convention, in particular where they are intended or calculated to provoke a state of terror in the general public or in a group of persons or particular persons, are under no circumstances justifiable by considerations of a political, philosophical, ideological, racial, ethnic, religious or other similar nature and are punished by penalties consistent with their grave nature".

Article 11 of the Convention stresses the criminal nature of political offences, in particular "non of the offences set forth in this Convention shall be regarded, for the purposes of extradition or mutual legal assistance, as a political offence or as an offence connected with a political offence or as an offence inspired by political motives. Accordingly, a request for extradition or mutual legal assistance based on such an offence may not be refused on the sole ground that it concerns a political offence or

an offence connected with a political offence or an offence inspired by political motives".

Article 12 of the Convention, elaborating on the previous article, states that nothing in the Convention may be interpreted as imposing an obligation to extradite or to afford mutual legal assistance, if the requested state party has substantial grounds for believing that the request for extradition for offences set forth in the Convention or for mutual legal assistance with respect to such offences has been made for the purpose of prosecuting or punishing on account of that person's race, religion, nationality, ethnic origin or political opinion or that compliance with the request would cause prejudice for that person's position for any of these reasons.

After the UN had developed and adopted the International Convention for the Suppression of Terrorist Bombing, it started working on the draft International Convention for the Suppression of Acts of Nuclear Terrorism. A draft of such a measure initiated by Russia in 1998 was called for to eliminate gaps in the list of measures necessary to prevent the use of nuclear weapons by terrorists, which were not provided for, primarily, by the Convention on the Physical Protection of Nuclear Material (1980) and the International Convention for the Suppression of Terrorist Bombing (1997). The draft is also aimed at encouraging interaction of states over a wide range of issues, first of all, to ensure security of nuclear power plants or any nuclear reactor including nuclear installation on marine vessels, aircraft and spacecraft, and other vehicles. The scope of the future convention includes also threats to commit terrorist acts or attempts to commit them regarding the said facilities as well as being an accomplice to organizing such acts and committing or attempting to commit.

Recently, however, the activity to develop this measure and adopt it has been hindered by an assumption that in accordance with Article 4 of the Draft it will not cover the activities of military force of the states. At this, the proponents of incorporation of military force into the scope of the future Convention do not seem inclined to accept that the similar regime has already been stipulated in the existing antiterrorist conventions, primarily in Article 2 of the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime

Navigation (1988), paragraph 2 of Article 3 of the Convention on the Marking of Plastic Explosives for the Purpose of Detection (1991), and paragraph 2 of Article 19 of the International Convention for the Suppression of Terrorist Bombing (1997).

Another stumbling block was the issue of whether acts of so-called "state sponsored terrorism" would be covered by the Convention and the issue related to introducing in it the provisions on dumping regarding radioactive waste. Regretfully, these three factors hinder the completion of such important measure which could ensure an effective regime of security of nuclear facilities against terrorist encroachment and which could become a significant element of existing universal antiterrorist conventions.

The International Convention for the Suppression of the Financing of Terrorism (1999) calls for bridging the gap in the existing international legal regime of antiterrorist cooperation of the states. This Convention is of special significance for Russia since it is aimed at terminating the financing of the terrorist activities in the territory of our country from abroad.

The Convention stipulates the criminal, civil and administrative liability for offences related to the financing of terrorists. It is called for ensuring the inevitability of punishment of offenders based on a broad range of provisions regulating mutual legal assistance and extradition. The states parties to the Convention commit to assist each other on a possibly broad scale in crime investigation as well as to provide for legal assistance related to the offence committed within the meaning of this Convention. Paragraph 2 of Article 12 stipulates that the state parties may not refuse a request for mutual legal assistance on the ground of bank secrecy. Among the other measures it is stipulated that the parties to the Convention are obliged to develop and adopt such measures which would require financial institutions and other professions involved in financial transactions to utilize the most efficient measures available for the identification of their usual or occasional customers, as well as to pay special attention to unusual or suspicious transactions and report transactions suspected of stemming from a criminal activity.

The state parties must establish and maintain channels of communication between their competent agencies and services to facilitate the secure and rapid exchange of information concerning all aspects of offences within the meaning of this Convention. According to Article 2 such offences are committed when person by any means, directly or indirectly, unlawfully and willfully, provides or collects funds with the intention that they should be used or in the knowledge that they are to be used, in full or in part, in order to carry out:

an act which constitutes an offence within the scope of and as defined in one of the basic international antiterrorist conventions;

any other act intended to cause death or serious bodily injury to a civilian, or to any other person not taking an active part in the hostilities in a situation of armed conflict, when the purpose of such act, by its nature or context, is to intimidate a population, or to compel a Government or an international organization to do or to abstain from doing any act.

Similarly to other antiterrorist conventions, the organization of an offence, participation as an accomplice of an offence, assistance to commit an offence or an attempt to commit it are taken in as an offence. The Convention also stipulates the principle of the inevitability of punishment implemented through the mechanism "either extradite or prosecute" in order to establish a regime of universal jurisdiction regarding offences.

According Article 8, the states parties must take appropriate measures "for the identification, detection, freezing or seizure of any funds used or allocated for the purpose of committing the offences... as well as the proceeds derived from such offences, for purposes of possible forfeiture".

The states parties also have to take measures for the forfeiture of funds used or allocated for the purpose of committing offences and consider establishing mechanisms whereby the funds derived from the forfeitures are utilized to compensate the victims of offences or their families.

It is also provided for concluding agreements with other state parties on sharing the funds derived from the forfeitures.

The United Nations, besides the said Russian Draft International Convention for the Suppression of Acts of Nuclear Terrorism, is reviewing the India-initiated **Draft**

Comprehensive Convention on International Terrorism submitted in 1996. In spite of the fact the document was initiated long ago, the negotiations in the UN to address it started only in 2000 in the framework of the Working Group of the Sixth Committee of the 55th Session of the UN General Assembly. The Draft contains provisions regulating the issues of liability of states, extradition and taking into custody of persons who have committed offences of a terrorist nature as well as the assistance in conducting criminal investigations of terrorist offences or extradition procedures regarding persons who have committed terrorist offences. As in the case of the Russian draft document, there are three factors hindering the final agreement and adoption of the Indian draft: disagreements regarding a definition of the notion of "terrorism", the issue consistency of the Comprehensive Convention on International Terrorism with already applicable antiterrorist instruments, and the disagreements between different groups of states on a distinction between the notions of "terrorism", "right of nations to self-determination", and "struggle with foreign occupation". Regretfully, all these disagreements, similarly to the Russian draft, substantially reduce the possibilities of coordinated adequate response by the international community to terrorist challenges.

Antiterrorist cooperation, primarily between the G8 countries, received a new powerful impetus from the directive by the leaders of these countries contained in their joint statement of September 19, 2001 regarding development of a specific counter-terrorist joint action plan.

The first practical step to implement the said directive was the development by the ministers of finance of specific measures to shut down channels of terrorist financing. In addition to the G8 countries, these efforts are actively supported by the Financial Action Task Force (FATF). Some estimates show that these efforts have resulted in freezing in total about US\$ 116 million, and there are serious grounds in believing that these funds are used to finance terrorist activities.

Another step was the preparing by the experts and adoption at the level of the G8 foreign ministers the Recommendations on Countering Terrorism, which represented the standards, principles, best practices, and

measures of interaction to guide and expand the possibilities of combating terrorism and allow for improving the existing mechanisms, procedures and protection networks of the G8 countries against terrorist threats. The obligation of the G8 member-states and their call for all other states "to conduct outreach, including technical assistance, to other countries", with a view to building capacity to implement UNSCR 1373, the twelve United Nations counter-terrorism conventions and protocols, the Roma Group counter-terrorism recommendations, and the Recommendations on Transnational Crime contained in the Recommendations (Section 10: Outreach To Non-G8 States) were the principally important aspect. If necessary, the G8 is to develop best practices to facilitate such outreach and cooperate closely on capacity building and outreach with the United Nations Security Council's Counter-Terrorism Committee. This section also stresses the necessity to use the potential of the international organizations and civil society, to increase the awareness of all individuals that any act or threat of terrorism represents a serious crime with appropriate penalties.

The June 2002 Kananaskis Summit initiative called the G8 Action Plan on Transport Security developed by experts has become one more step to implement the directives of the leaders. Considering the criticality of the global economy and, at the same time, rather vulnerable nature of the world transport infrastructure, the G8 countries came to the conclusion that land, sea, and air transportation security should be improved. To this end they developed a set of practical recommendations including the introduction of new, strict security standards for international and domestic transportation of people by air, land and sea, as well as rigorous operational tests for the airlines in their countries. At the same time, the measures are directed to help the cost-effective and efficient movement of people, goods, containers, and vehicles. The G8 is to review semi-annually the progress of work on these recommendations to ensure timely implementation of this initiative.

The G8 leaders at the June 2003 Evian Summit made a substantial move on the path of real combating against megaterrorism. The Summit adopted extremely important documents devised not only to counteract terrorism directly but also to prevent the pos-

sibility of weapons of mass destruction and radioactive materials falling into the hands of terrorists.

The work completed under the G8 Action Plan "Building International Political Will and Capacity to Combat Terrorism" within the framework of the Statement of September 19, 2001 should be attributed to the first direction. The document evaluates the actual situation with respect to terrorism in the world, determines the strategy and outlines a specific action plan to build up the international capability of combating terrorism. In particular, it determines three main areas of counter-terrorist activities to focus on:

- to deny terrorists the means to commit terrorist acts (to prevent the financing of terrorism);
- to deny terrorists a safe haven and ensure that terrorists are prosecuted and/or extradited including the acceleration of conclusion of counter-terrorism conventions and protocols;
- to overcome vulnerability to terrorism, primarily to enhance domestic security measures.

It is noted that such activity should be seen as complementary to initiatives to strengthen good governance, the rule of law, human rights and judicial reform, and to the analysis of factors that contribute to the emergence of terrorism.

The G8 leaders on behalf of their countries stated their readiness to assist in training experts in main areas facilitating the building of counter-terrorist capabilities of any other countries.

By having designed the main action plan the G8 charged with its implementation the especially set Counter-Terrorism Action Group (CTAG) that means the conversion of intentions into practical steps. In doing so, it is initially planned to have a close interaction of CTAG with the existing counter-terrorist institutions, primarily, the UN SC CTC, international financial institutions and organizations like WTO, ICAO, IMO and the international organizations for coordination and assistance in antiterrorist activities. CTC has already started working.

In the antiterrorist area one should consider important for organization of international legal actions the fact that four other Evian Summit documents directly treat counteract-

ing terrorism as counteracting proliferation of weapons of mass destruction and insurance of secure storage of radioactive materials⁷¹. In fact, these documents launch the real combat with international megaterrorism. Besides, they are the evidence that the leading world powers acknowledge that in the today's world it is impossible to divide the processes of proliferation of new armaments towards countries striving to regional dominance with terrorist organizations desperate for the realization of their political ambitions. This confirms the approach to non-proliferation and terrorism problems, which are contained in a number of Russia's initiatives implying the equal thereat of WMD and other contemporary levers, in particular information weapons, reaching authoritarian regimes or terrorists. These G8 decisions seem to substantially facilitate work to build an international legal basis to combat both WMD and megaterrorism.

Other joint steps of the G8 countries in the antiterrorist area are a large set of measures developed and approved at the level of leaders of the states. Though it is difficult to express the cost of these activities in numbers (the foreign ministers' report on the progress in antiterrorist activities approved at the Wistler meeting only indicates that the Group of Eight countries have allocated billions of dollars to improve security), it is evident, that if these measures helped to prevent at least one terrorist act, they would be worth the effort and resource spent for their development and adoption.

The imposing political and legal potential to combat terrorism has been created also at the regional level. In this context one should mention the Organization of American States Convention to Prevent and Punish Acts of Terrorism Taking the Form of Crimes against Persons and Related Extortion that are of International Significance (1971), the European Convention on the Suppression of Terrorism (1977), the SAARC Regional Convention on Suppression of Terrorism (1987), the Organization of African Unity Convention on the Prevention Combating of Terrorism (1999),the of the Organization of Convention Islamic Conference Combating on International Terrorism (1999), the Shanghai Convention on Combating Terrorism, Separatism and Extremism (2001), the Agreement on the Regional Anti-terrorist

Structure (RATS) of the Shanghai Cooperation Organization (2002), the Treaty on Cooperation between the CIS Member-States in Combating Terrorism (1999), and the Program on Combating International Terrorism and Other Manifestations of Extremism till 2003.

In June 1999 the CIS states-participants signed the Treaty on Cooperation between the CIS Member-States in Combating Terrorism, which creates a legal basis for interaction of the competent authorities as regards prevention, detection, termination and investigation of acts of terror, and the Program on Combating International Terrorism Other Manifestations of and Extremism till 2003 was developed. The main areas of the Program are:

- joining of the CIS member-states main international legal instruments on combating international terrorism developed in the framework of the UN, its special agencies, IAEA, and the Council of Europe;
- fulfillment of internal state procedures necessary for international counter-terrorism agreements to come into force;
- development of model legislation on combating international terrorism and harmonization of the national legislation of the CIS member-states in this area;
- joint headquarter and tactical antiterrorist exercises;
- coordinated interagency targeted preventive and special operations to prevent, detect and terminate activities of international terrorist organizations;
- compilation of a database on international terrorist organizations, their leaders, structures and individuals supportive of the international terrorists;
- operative information exchange;
- scientific and practical conferences on issues of combating international terrorism and other manifestations of extremism:
- training of experts and instructors of units involved in combating international terrorism.

The non-standard approach demonstrated by the CIS member-states who adopted in 2000 the relevant decisions to set up the Antiterrorist Center (ATC) must be also noted. ATC is a standing coordinating structure for daily informational and analytical

practical interaction of the competent authorities and intelligence bodies of the CIS member-states who created it. The main tasks and functions of the Center are:

- development of proposals on combating international terrorism for the CIS member-states;
- compilation of the specialized databank;
- participation in the antiterrorist headquarters and tactical exercises;
- assistance to the CIS member-states in preparing and carrying out investigations and integrated operations in regard to combating international terrorism;
- development of patterns of coordinated antiterrorist operations and assistance in their conduct;
- establishing and maintaining working level contacts with international centers and organizations involved in the issues of countering international terrorism.

The CIS Member-States Council of Heads of Security and Intelligence exercises the overall command of ATC.

The potential built-in into this new form of international cooperation on combating terrorism was appreciated by the states of the Shanghai Cooperation Organization (SCO). Even before any SCO supporting structures had been created, its members started working on development of a regional antiterrorist structure with the corresponding agreement signed at the St. Petersburg SCO Summit in June 2002.

Experience in combating terrorism has been accumulated at the bilateral level. In addition to the traditional interaction of the law enforcement agencies and intelligence, recently a new form of joint Working Group activity has been developed. The first of such working groups was created by Russia and the USA. Since August 2000 it has carried out five meetings. The prospects of such integrated interaction of foreign political agencies and intelligence have initiated creation of the similar working groups by Russia and India, China and the Great Britain, and the USA with India and Pakistan.

The past year has convincingly demonstrated that September 11, 2001 was not just a tragic date in the history of mankind. On that day the world entered a new phase of development where a state needs not only pre-

dictable international relations to ensure security of its citizens but something of the greater extent. In this context, Foreign Minister of Russia Igor Ivanov, addressing the 57th Session of the UN General Assembly, suggested a "global system of counteraction to contemporary threats and challenges", a system that "could be deployed to solve the real problems of security and meet the essential interests of each state, which could ensure international stability and long-term sustainable development".

The strengthening of the international legal basis of cooperation of the states is another priority in combating terrorism. Russia, by ratifying the International Convention for the Suppression of the Financing of Terrorism (1999), became a party to eleven out of twelve universal antiterrorist conventions and protocols described above. On today's agenda is Russia's joining of the Convention on the Marking of Plastic Explosives for the Purpose of Detection (1991). It is quite evident that without the maximum possible participation of the states in antiterrorist conventions and insurance of their implementation it will be extremely difficult to put reliable, formidable barriers on the path of various extremists and bandits.

In this regard the task of getting the final agreement in the UN on the draft Comprehensive Convention on International Terrorism, the draft International Convention for the Suppression of Acts of Nuclear Terrorism, and the issues in the draft documents submitted by Russia and India are similar in many respects. In the face of the terrorist threat to mankind it is important not only to act actively and in concert, but also seek for other methods, in addition to force, to meet the challenge. The development of the Human Right Code against Terrorism could become a serious step on this path. The code could incorporate a wide range of measures: from criminal prosecution of persons who committed terrorist acts or in other way involved in them, assurance that the penalty will be inevitable up to assistance to victims of terror including financial assistance, social and psychological rehabilitation and reintegration in the society.

Mankind can and must, supported primarily by the manifold system of multilateral international legal instruments including the UN Charter, create a global system of countering contemporary threats and find, on its basis, effective and adequate responses to the challenges it was brought up against in the beginning of the third millennium.

Conclusion

Recently, the topic of international terrorism has come to the forefront in discussions of national and international issues. As Russia's President Vladimir Putin noted, "after September 11... many, very many people in the world understood that the Cold War had been over. They understood that there were other threats; another war goes on, the war on the international terrorism. Its danger is apparent and it does not require evidence"⁷². At this, the focus is changing both in activities of the terrorists themselves and in perception of this phenomenon.

"Classic" terrorism was for public resonance rather than for deaths; the new paradigm of megaterrorism views terrorist acts as a direct means of achieving the goal, as a means of war. This thesis is grounded by acts of the Chechen militants in Russia, the outbreak of terror in the Middle East and the acts of megaterrorism in the USA.

If it was previously thought that megaterrorism is the terrorism using weapons of mass destruction (nuclear, chemical, bacteriological weapons), it is clear today that it is not necessary to possess such weapons to achieve an effect comparable in terms of damage and deaths. Mankind has provided terrorists with new technologies whose destructive consequences are quite comparable with that of weapons of mass destruction. Primarily, these are information weapons followed by ecological levers and psychological weapons, which allow direct influence of individual and public consciousness. Along with this, the starting point for the contemporary perception of megaterrorism is a transition from the traditional political terrorism to targeted terrorist campaigns, from the declarative terrorism as a blackmail tool to anonymous terror as a means of achieving set goals. Here, the religious or strictly political inclinations of these or other organizations are not of importance or principle.

Terrorist groups are actively using modern communications technologies to achieve their criminal goals. International terrorist organizations have acquired advanced means of communication and use international and national information and telecommunications networks. A number of international terrorist groups possess mass media of their own who actively disseminate ideas of terror over a nation and a region and, indirectly, over the world information space. At this, the state often lags behind them in implementing innovations, response and organization efficiency.

It is clear that contemporary terrorism is linked with the enormous flows of illegal, primarily, criminal, funds. Everywhere terrorism is integrating with organized crime where drugs dealers are in the first ranks. To shut down the financing of terrorism is a much more serious a problem for the world community. The developed world banking system can become, but has not become yet, a means of struggle with the financial make-up of terrorist activity.

The multi-faceted and complex nature of contemporary terrorism challenges the majority of nations with a search for adequate response measures. In pursuing so, one of the key issues is the dilemma: where the antiterrorist efforts should be concentrated – the whole range of threats possible or the areas of terrorist actions which are the most probable for a given country. On the one hand, considering the whole range of threats seems very costly, but on the other hand, the September 11, 2001 events demonstrated the reality of terrorist actions of any kind and in any form.

Terrorism in any of its forms remains a crime; the higher the terrorist potential, the higher the degree of crime of those involved in this activity, and the higher their degree of responsibility must be. The inevitability of such responsibility must be understood as unconditional moral and legal imperative.

The high efficiency of organization and implementation of the recent acts of megaterrorism draws a number of experts in terrorism to a conclusion that states and state interests were behind those acts. Terrorism moves now to the domain of international relations and international security. Ways of identifying effective countermeasure systems regarding this challenge are, primarily, in the sphere of international law. The creation of a system of inter-national relations, which rule out the possibility of state terrorism to emerge and develop, will make unfeasible for new "axes of evil" to form. However, the

wish to give a broader interpretation to the notion of terrorism bears a threat that is not less heavy: the use of the pretense of countering terrorism to expand one's own military presence in the world and one's capabilities of settling conflicts by force.

The first thing to be done in countering terrorism is to implement efficient measures preventing terrorists from accessing weapons of mass destruction in all their forms. "The G8 Global Partnership against the Spread of Weapons and Materials of Mass Destruction" launched by leaders of the eight largest countries in June 2002 in Kananaskis can become an effective mechanism of countering megaterrorism. The commitment to the principles targeted to prevent access of terrorists or those who shelter them to weapons or materials of mass destruction declared at the Summit gives hope for that.

It should be stated that the world community has already done a lot to reduce the threat of terrorism. The international legal basis is in place. Still, in practice, the achieved results are insufficient. And the road does look neither short nor smooth.

It is important that, while pursuing this road, the efforts to counter terrorist manifestations and to make decisions regarding cessation of its development must be well-concerted. Here, it is essential to obtain positive results in solving problems of limitation of arms proliferation (first of all the weapons of mass destruction) and new technologies, the military applications of which could lead to massive casualties and enormous economic, environmental and psychological damage to the countering state. In this, the role and active involvement of international organizations are invaluable.

Another direction of principle is the development of national antiterrorist legislation, harmonization of legal systems of all world community members. Terrorists must not find gaps in legal irresponsibility anywhere in the world.

All these circumstances urge improvement of antiterrorist efforts, the international base of agreements, treaties and arrangements that counter terrorism considering its new forms and new conditions, and the use of "double standards" being prohibited in regard to terrorist actions in different countries. Efficiency of antiterrorist actions in the world on the

whole will depend in many respects on the commitment of all members of world community to solve this problem rather than achieve political goals of the moment.

¹ The authors of this work include Aleksandr Bedritsky - Research Associate at the Russian Institute of Strategic Studies; Dr. Vladimir Lepsky, Professor at the Diplomatic Academy of the Russian Foreign Ministry, Head of Laboratory at the Institute of Psychology of the Russian Academy of Sciences, Aleksey Lyzhenkov Head of Division at the Department of New Challenges and Threats of the Russian Foreign Ministry; Dr.Viktor Petrischev – FSB Russia; Ambassador Nikolay Uspensky – Head of Directorate of the National Security Council of the Russian Federation; Aleksandr Zmeevsky – Director of the Department of New Challenges and Threats at the Ministry of Foreign Affair of the Russian Federation

² Statement made at the Russia's Government meeting, 7 July 2003.

³ Quadrennial Defense Review Report, 30 September 2001, p. 3

⁴ In this context the following bibliography may be of interest: Walter Laqueur, The New Terrorism, Fanaticism and Arms of Mass Destruction. (N.-Y., Oxford, Oxford University Press, 1999).

⁵ For information weapons and their possible and real application see: Alexander Fedorov, Vitaly Tsygichko (eds.), Information Challenges to National and International Security (Moscow, PIR Center, 2001).

⁶ Bill Gertz, 'CIA Says al Qaeda Ready To Use Nukes', Washington Times, 3 June 2003.

National Information Service Strana.Ru, 14 January 2003.

⁸ ITAR-TASS, 30 January 2003.

⁹ A G8 Action Plan. Building International Political Will and Capacity to Combat Terrorism, Evian, France, 1-3 June 2003.

¹⁰ No one of dozens of thousands of children gathered for the "child crusades" from France, Italy and other European states came back home, but ever got to Jerusalem. All either died of hunger and diseases or were sold for slaves to the Arabic East.

¹¹ In publications on terrorism this term unites all Muslim extremists and terrorists who call for the "holy war" (jihad) against infidels and struggle for restoration of the ancient state Caliphate on the Muslim settled territories. For the warriors of Islam a fatwa is the excuse and ground for the holy war. Fatwas in a religious war declaring the necessity of bloodshed have replaced taking responsibility after a terrorist act.

¹² The Collective Security Agreement (CSA) was signed May 15, 1992 in Tashkent by leaders of the six CIS states: Russia, Armenia, Kazakhstan, Kyrgyzia, Tajikistan, and Uzbekistan. Eventually it was joined by Azerbaijan, Georgia, and Belarus. According to Article 11, the Agreement came into force for all nine parties on April 20, 1994 for 5 years with subsequent extension (the "automatic" extension is not foreseen). On April 2, 1999 the Agreement Extension Protocol was signed by six states (Georgia, Azerbaijan and Uzbekistan thus left the Agreement). November 1, 1995 the Agreement was registered with the UN Secretariat.

¹³ Pierre-Joseph Proudhon, Qu'est-ce que la Propriété? (Russian language edition, Moscow, 1998), p. 14.

¹⁴ Quoted from: Sergey Bulgakov, *The Two Cities* (St. Petersburg, 1997), p. 103.

¹⁵ See, for example: Noam Chomsky, *9-11* (N.-Y., Seven Stories Press, 2001).

¹⁶ See, in particular, a big, still anonymous article: 'Bin Laden is Here (phenomenon of "international terrorism"

in the context of the "new world order")', Zavtra, № 4-6, 21 January - 5 February 2002.

John Arquilla, David Ronfeld, Michele Zanini, 'Networks, Netware, and Information Age Terrorism', In: The Changing Role of Information in Warfare (RAND Corp., 1999).

¹⁸ Neal Pollard. The Future of Terrorism. (N.-Y., Terrorism Research Center, 2001).

¹⁹ These examples may be supplemented with others, in particular, the links between the Latin American terrorist organizations with the Islamic groups Hamas and Hizballah and IRA. These ties, however, are (so far!) of purely commercial nature: cocaine - armaments. In this connection it should be noted that this fact is the proof to the statement on the linkage between drugs mafia and terrorists.

²⁰ Despite conclusion of peace agreements between IRA and the British government, the peacemaking process in the Northern Ireland was threatened by actions of socalled "Real IRA". Similarly, Yasser Arafat, the leader of the Palestinian Autonomy, seeking to continue the negotiations with Israel, failed to influence the most radical militant groups. That led not only to disruption of the peace dialogue but also to him loosing his profile among the Palestinians as a whole. This is also the cause of the fact that the significance of bin Laden as a man is not up to the significance of bin Laden as an embodiment of the jihadists' idea.

21 Neal Pollard states that as the terrorism is gaining strength, in the US the problems will become more acute of combating internal radical movements, in particular, «true» guerrilla movements whose terrorist goal is the destruction of the US governmental institutions, rather than influencing the government, a particular policy or public opinion. Pollard stresses that such radical views find more support with rural areas of the country rather than urban centers. It is illustrative that some of provisions of the US Homeland Security Doctrine echo these statements.

²² See: Peter Probst, 'Antiterrorism: Certain Aspects of Organization', Natsionalnaya Bezopasnost, 2001, No 9-10,

p. 24.

In the Russian language the term "netwar" is closely associated with attacks in information networks and becomes a synonym of cyberterrorism, hackerism, etc., that does not correspond to the English notion of "netwar".

²⁴ In this case terrorists (or someone else - no one before the court judgment has the right of categorizing the occurrence) used the "CNN effect" at maximum, i.e. no one could have been able to bring information to each family, each house, make them a party to the phenomenon. All the authors conversed with on the topic noted both the participation effect and the informationpsychological impact retaining (see Section "Psychological terrorism"). One may state that CNN deliberately or indeliberately take on a part of implementation of this barbaric act.

²⁵ Instead, surprisingly to the whole world, in September 1999 Bill Clinton announced the initiative to lift completely even the previous constraint (this is not for the "outlaw states") regarding sales of encryption software with the key length over 56 bits.

²⁶ In 2000 the US President Bill Clinton signed a provision permitting for commercial use GPS systems with enhanced resolution (up to 10 meters), which in principle sufficient for guiding the high precision weapons. The United States made this move because commercial benefits, as it believed, would exceed negative consequences of possible use of data obtained through these systems by other states or individuals and groups for ter-

rorist or military purposes.
²⁷ Mikhail Gorshkov (Director of ICSS RAS), Interview to Kultura TV channel ("Chto delat?" talk-show), 17 September 2002.

²⁸ They will be considered in more detail in Section "Cyberterrorism".

²⁹ However, direct attempt have been repeatedly made; this will be demonstrated below.

Attempts often are made to equal state and political terrorism. It should be noted that the mere formulation of the case is not correct. As it has been noted above. terrorism by definition is a political phenomenon. There is no and cannot be another terrorism. Another thing is that organized crime and state military formations or special services can use the same methods as terrorists, terror can be a part of the state policy or military tactics. However, the army and intelligence, being the elements of the state, i.e. political, structure, act also in the political interests.

Therewith, a well-known American student and politician Noam Chomsky in the already cited book 9-11 (see Note 10) demonstrates in well-founded manner that the United States is the key state who has been pursuing the policy of state terrorism for many years. This is the only country condemned by the International Court for such activities (in 1986 in connection with "the unlawful use of force" and intervention in the domestic affairs of Nicaragua) and a special resolution by the UN General Assembly.

32 Proceedings of Seminar U.N.O. "Cyberterrorism and Information Warfare Threats and Responses", Report PIPS/98/2, 16 April 1998, Potomac Institute for Policy Studies, Washington, DC, USA.

33 Richard A. Falkenrath, Robert D. Newman, Bradley A. Thayer, America's Achilles' Heel. Nuclear, Biological, and Chemical Terrorism and Covert Attack. (Cambridge, Mass.; London, The MIT Press, 1998), p. 14.

Environmental Encyclopedia, N.Y. Knopf, 1994, p. 390-391.

35 This plot, reported by American intelligence, was planned on US territory by an al Qaeda terrorist who was captured in early June 2002.

³⁶ Leonid Bolshov, Presentation at the Russian-American workshop "Terrorism in a High-Tech Society: Legal Aspects and Contemporary Methods of Preventing and Countering Terrorist Activity", Moscow, June 2001.

As it was done by Aum Shinrikyo.

38 Bruce W. Nelan, 'The Price of Fanaticism', Time, 3 April 1995, p. 26-29.

Orbis, 1993, Vol. 37, No. 3, p. 393-410. Cited from: Borba s prestupnostiyu za rubezhom (Inf. Bulletin). M.,

VINITI, 1994, No. 3, p. 8-18.

40 *Orbis*, 1993, Vol. 37, No. 3, p. 393-410. Cited from: Borba s prestupnostivu za rubezhom (Inf. Bulletin). M., VINITI, 1994, No. 3, p. 8-18.

⁴¹ Chemical Weapon Convention Bulletin, March 1996, No. 31, p. 22.

⁴² Barbara Starr, 'Discovering a Japanese Cult Deadly Designs for Doomsday', Jane's Defense Weekly, 18 November 1995, p. 25.

Lyudmila Asaulova, 'New Confessions by Aum Shinrikyo Members', Segodnya, 27 July 1995.

44 Chemical Weapon Convention Bulletin, March 1992, No. 15, p. 11.

45 'Chile Sarin Threat', Jane's Defense Weekly, 1995, Vol. 23, No. 17, p. 12.

Aleksey Tarasov, 'Blackmail of the Mayor by Threatening to Poison A Million of City Residents', Izvestiya, 23 March 1995, p. 8.

⁴⁷ Sergei Voeikov, 'Compatriots' fortitude as combat CA tested', Krasnaya Zvezda, 3 October 1995.

⁴⁸ Cited from: Borba s prestupnostiyu za rubezhom (Inf. Bulletin). M., VINITI, 1994, No. 3, p. 8-18.

49 Andrei Varlamov, 'Asakhara Casts Back Murder

Accusations', ITAR-TASS, 18 May 1995.

⁵⁰ Chem. & Eng. News, 5 July 1999, p. 8-17; Science, 26 February 1999, p. 1234-1235

⁵¹ Washington Post, 21 May 1998, p. 1, 19.

52 New York Times, 22 September 1999, p. A, B.

⁵³ Georgy Safonov, Presentation at the Russian-American workshop "Terrorism in a High-Tech Society: Legal Aspects and Contemporary Methods of Preventing and Countering Terrorist Activity", Moscow, June 2001.

⁵⁴ Jones M. Hugh (Louisiana State University School of Veterinary Medicine, Professor), Presentation at the Russian-American workshop "Terrorism in a High-Tech Society: Legal Aspects and Contemporary Methods of Preventing and Countering Terrorist Activity", Moscow, June 2001.

⁵⁵ S. Grigoryan, *The "Green" Party in FRG* (M., INION RAN, 1986), p. 13.

⁵⁶ Acts of Ecoterrorism by Radical Environmental Organizations: House of Representatives Hearing before the Subcommittee on Crime of the Committee on the Judiciary, 9 June 1998, Proc. U.S. Congress, 105 Session, Washington D.C., US GPO, 2000, p. 11.

Acts of Ecoterrorism by Radical Environmental Organizations: House of Representatives Hearing before the Subcommittee on Crime of the Committee on the Judiciary, 9 June 1998, Proc. U.S. Congress, 105 Session, Washington D.C., US GPO, 2000, p. 11.
 V. Anosov, Vladimir Lepski. 'The Prerequisites of

⁵⁸ V. Anosov, Vladimir Lepski. 'The Prerequisites of Information and Psychological Security'. In: Andrey Brushlinski, Vladimir Lepski. (eds.). The Issues of Information and Psychological Security (M., the Institute of Psychology of RAS, 1996), p. 7-11.

⁵⁹ Georgy Smolyan, Vladimir Lepski, 'New Technologies of Information Influence on Individual, Group and Mass Consciousness', *Problemy psykhologii I ergonomiki*, 2001, No. 3, p. 18.

60 One who watched "live" CNN reports on September 11, 2001 does not need further explanations: even the most gifted agitators during years and years of hard work could not ever produce a psychological impact of such force as the real-time worldwide broadcasting did. Therefore, mass media can be a horrible weapon in the hands of superterrorists. The CNN effect is more than just illustrative. If this channel broadcasts an act of terror scenes, the mere act of terrors becomes irrelevant. Such a report (series of reports, that is even more effective), which re-broadcasted in thousands of copies by all TV channels in the world, will be practically impossible to verify, more over to cast back. Is not it a rule over the world? The only thing that is necessary is that the central CNN studios get into the hands of information terrorism experts for half an hour.

⁶¹ Above we noted the subversive web-site *Kavkaz-tsen-tr*, which creates large problems.

62' What should a unit commander do when he sees on his monitor the image or hears on the radio the voice of his commander-in-chief giving the warfare seizure order? And the commander-in-chief for whom this fact will also be a surprise?

⁶³ International Criminal Police Review, Jul.-Aug. 1989, No 419; Confidential Supply, No 12, p. 19.

⁶⁴ When noting this circumstance, the general system of ideas and practices of the organized crime should not be underestimated. In terms of its significance it equals to the activities of the criminal communities directed to gain, for example, positions within the state powers. The public conscience already has a strong opinion that the mass media represent the "fourth power". Its use in the interests of the organized crime foster the building in the public conscience the spirit of law nihilism, antisocietal values and ideas, the reducing the social security immunity.

ty immunity.

65 In the Russian language the term "human trade" is strongly used to define the illegal trafficking in human beings. This Russian expression does not accurately translate the English notion "trafficking in human beings". The problem is not in the trading proper when people are sold and bought as it goes from the Russian term but in the fact that they are smuggled across the state border (borders). Regretfully, this creates serious difficulties in terms of application of our internal legis-

lation since the Criminal Code contains the article prohibiting slave trading.

⁶⁶ Mikhail Odesski, David Feldman, Poetics of Terror and New Administrative Mentality (M., Russian State Humanitarian University, 1997), p. 19.

⁶⁷ As Noam Chomsky points out in his book 9-11, one of the students counted 109 definitions of terrorism existing in the world.

⁶⁸ In total over 300 comments and proposals were received after the bill was read for the first time.

⁶⁹ Comments to the draft Federal Law "On Countering Terrorism" by the President of the Russian Federation", O/G # Pr-1705 of October 18, 1997.

⁷⁰ In particular, the first internationally agreed definition of terrorism was provided for in 1937 by the League of Nations in the Convention for the Prevention and Punishment of Terrorism:

«All criminal acts directed against a State and intended or calculated to create a state of terror in the minds of particular persons or a group of persons or the general public.

The terrorist acts shall mean:

- An offence against life or security or health or liberty of a Head of State, persons enjoying prerogatives of a Head of State, their successors, hereditary or designated, spouses of the said persons, and persons performing the state functions or duties when an offence was committed because of performing by them these functions and duties.
- Destruction or causing damage to the government property or property used for government purposes.
- 3. An act which may endanger life of people due to fear before the common threat and, in particular, seizure of airplanes, taking of hostages and all other violent acts regarding the persons enjoying international protection or diplomatic immunity.
- Manufacture, acquisition, use, supply of armaments, munitions, explosives or dangerous materials with the purpose to commit a terrorist act".

The Convention does not mention, in particular, whether the general definition of terrorist acts covers the criminal acts directed against opponents to the political regime residing on the territory of other state or against political leaders deprived of power by unconstitutional methods and found asylum on the territory of other state

The definition of a terrorist act as "a criminal act directed against a State and intended or calculated to create a state of terror in the minds of particular persons or a group of persons or the general public" irrespectively of their motivation, evidently, is broadening in nature and can be used inappropriately.

A G8 Declaration. Non-Proliferation of Weapons of Mass Destruction; A G8 Statement. Securing Radioactive Sources; A G8 Action Plan. Non-Proliferation of Weapons of Mass Destruction. Securing Radioactive Sources; A G8 Action Plan. Global Partnership Against the Spread of Weapons and Materials of Mass Destruction.

⁷² The Address of President of the Russian Federation Vladimir Putin to the Federal Assembly of the Russian Federation, 18 April 2002, http://www.kremlin.ru.

Yaderny Kontrol (Nuclear Conrol) Journal of the PIR Center for Policy Studies Volume 9, No. 1 (67), Spring 2003

First Deputy Chief of the General Staff of the Armed Forces of the Russian Federation Colonel General Yuri Baluyevsky, in an exclusive interview with Yaderny Kontrol Journal correspondent Ilya Fabrichnikov, spoke of the timeliness for signing the SORT Treaty. He said that the Treaty on Strategic Offensive Reductions (SORT) ensures continuity in the process of limiting strategic offensive forces and that, from this point of view, it meets Russia's interest. Yuri Baluyevsky stressed that the parties are now free to determine the structure of their strategic nuclear forces - a situation that certainly meets the needs of Russia's security. The Deputy Chief of the General Staff also addressed the issues surrounding the development of the United States' national missile defense system and reforms in the Russian army.

Vadim Kozyulin, in his article, "Military Cooperation: Russian-Israeli Technical Confrontation," discusses Israel's intrusion to weapon markets traditionally controlled by Russia. Only ten years ago, the world's leading arms manufacturers did not consider Israel as a potential global competitor. Israeli's small production capacity seemed to set clear limits on the Israeli weapon manufacturers' production potential. But recent years' events have demonstrated that Israel's underestimated scientific and technical potential for developing advanced weapons systems and the aggressiveness of Israeli exporters - coupled with strong governmental support - have created a favorable environment for Israeli weapons to seize the world's weapons markets, including Russia's.

William Potter and Nicolas Florquin, in their "The Different Faces of Nuclear Terrorism," raise the issue of a new phenomenon in modern life - nuclear terrorism. The threat of nuclear terrorism is nothing new and has been the subject of scientific and political analysis for several decades. Moreover, it has led to the development of various national and international legal and political instruments; programs and guidance dedicated to different aspects of this perceived threat. After the events of September 11, the issue of nuclear terrorism has acquired a new meaning, which requires reappraisal by many analysts. That is the readiness of ethnic groups to use weapons of mass destruction. There are at least four types of

threats that are often united under the common heading of "nuclear terrorism." They include the dispersal of highly radioactive materials with the help of common explosives or other radiological dispersal devices, an attack on or sabotage of nuclear power facilities, the theft or acquisition of fissionable materials with the intent to produce a nuclear weapon or the seizure of actual nuclear weapons. All the above threats are real and deserve attention by the international community. They require considerable resources to reduce the probability of their occurrence and to alleviate their consequences. Nevertheless, these threats are different: in terms of their probability of occurring and in their impact in terms of human and financial losses.

Natalya Kalinina, in her article "The Efficiency of the Convention on Chemical Weapons Depends on Russia's Actions," reviews the problems associated with Russia's chemical weapons arsenal and the process of its elimination. The total quantity of poison gases, in terms of weight, is about 40 thousand tons. Russia's theoretical and regulatory readiness to start fulfilling its assumed international obligations is clearly reflected in the Russian federal program for the elimination of chemical weapon stockpiles in the Russian Federation, which was approved on March 21 1996. However, the elimination of first category chemical weapons is behind schedule. When signing the convention and at the point of ratification, Russia brought to the world community's attention the existence of problems that may make it difficult for Russia to fulfill its contractual obligations and expressed hope for assistance in its efforts to eliminate the world largest chemical weapons arsenal.

Alexander Saveliev, in his article "A New Meaning for Mutual Nuclear Deterrence," discusses the role of nuclear weapons in the modern security policies of Russia and the United States and reaches the conclusion that Russia needs to adjust its nuclear strategy. The breakup of the USSR has made it much more difficult to ensure Russia's national security. It should be openly recognized that nuclear weapons are no longer the universal means of ensuring Russia's safety. Furthermore, the use of nuclear weapons by Russia should be considered very unlikely since scenarios, where a large scale use of aggression against our country would lead to a decision to use nuclear weapons, are of very low probability.

John Wolfstal, in his article "US Nuclear Policy and the Future of Arms Control," dwells on the new US nuclear policy. Notwithstanding

the signing of the Moscow Treaty, by presidents Bush and Putin, that establishes the level of reductions for nuclear weapons of both parties, the Bush administration has committed itself to the preservation, at any cost, of flexibility in ensuring military security of the United States. Such a desire to preserve nuclear potential, in the absence of clear restrictions on the dismantled nuclear warheads in the Moscow Treaty, bodes ill for the solving of critical nuclear security problems and the resolution of issues concerning tactical nuclear weapons, excessive nuclear materials and the nuclear arsenals of other nuclear powers.

Viktor Yesin, in his article "Nuclear Deterrence Within the Strategic Dialogue Between Russia and the United States," raises the issue of whether it is possible to reconcile the declaration of a new stage in the relationship between the Russian Federation and the United States with the provisions set out in the US Nuclear Posture Review, which reconsiders the US nuclear forces' strategic role. This contradiction was reflected in the so called Nuclear Posture Review, presented to the U.S. Congress by Secretary of Defense Donald Rumsfield, in January 2002. The document states that, while officially Russia is no longer an enemy of the United States, the Pentagon must be ready to use nuclear weapons against it in the same way as it would against China, Iraq, North Korea, Iran, Libya or Syria. In order to resolve this contradiction, the author proposes a number of steps that could increase the confidence of each party that it would not become a victim of a sudden attack.

Anatoly Luchin and Vitaly Fedchenko, in their article "Myanmar's Nuclear Future," address the issue of Russian-Myanmar nuclear cooperation. During his visit to Russia, in July 2000, the Myanmar Minister of Foreign Affairs made a first time request for Russian cooperation in the construction and operation of a 10 MWt nuclear research reactor, in Myanmar. The reactor is to be used for carrying out peaceful scientific research. As the negotiations continue, it has become evident that nuclear cooperation with Myanmar is strategically beneficial to Russia. However, in autumn of 2001, an IAEA commission visited Myanmar twice and concluded that the level of security available for the operation of a facility, such as a nuclear reactor, does not meet even the agency's minimal requirements. The United States, Australia, Argentina, China and the countries of the European Union have all expressed concern about Myanmar's intentions.

Sergei Yakimov, in his article "Russian Export Control System," reviews the achievements made during the past ten years in Russia's export control system. During those years, considerable work was accomplished in the development of control mechanisms for 'sensitive' exports at the government level. They were designed to ensure, in the conditions of a market economy and during the conducting of foreign trade activities, protection of the interests of the Russian Federation and fulfillment of its international obligations for the nonproliferation of weapons of mass destruction (WMD) and most other dangerous types of weapons. The export controls today are not just an instrument of nonproliferation, but an important element of governmental policy for ensuring national security, including its technological component.

Yevgeni Zverde, in his article "Global Monitoring System and the International Code of Conduct," writes about the prospects of the Missile Technologies Control Regime. Among the ideas put forward recently, concerning further development of international regulations for missile technologies, the one that gained maximum support from the interested states was Russia's proposal for setting up a Global System of Control over the NonProliferation of Missile Technologies and a code of 'correct' behavior rules – the socalled International Code of Conduct – that was developed

within the framework of the MTCR. At the autumn 2001 plenary MTCR meeting, in Ottawa, the memberstates summarized the results of their first discussions on the draft code and confirmed their conviction that the code should become universal exclusively through transparent negotiations that are open to every country.

Svetlana Kovaleva, in her article "I Can't Imagine the Way a Single Bomb May Be Used," writes about Lev Feoktistov, the famous Soviet nuclear scientist, laureate of the Lenin Prize and one of the most prominent theoreticians in the field of nuclear weapons. Even at the start of his career, Lev Feoktistov was distinguished as one of the most brilliant of theoreticians. He was an unordinary person - as a scientist and an individual. Lev Feoktistov's contribution to the fundamental design of nuclear weapons was enormous. His viewpoints have always been held in high regard due to his profound understanding of the complex problems facing modern physics and because of his original ideas.

Yaderny Kontrol (Nuclear Conrol) Journal of the PIR Center for Policy Studies Volume 9, No. 2 (68), Summer 2003

In an interview with Mikhail Margelov entitled "The National Interests of Russia and the United States Do Not Contradict One Another" by Yaderny Kontrol journalist Ilia Fabrichnikov, the head of the Federation Council Committee on Foreign Affairs expresses his opinions on several vital questions, such as cooperation within the Global Partnership framework, Russian-American relations, and international cooperation in the fight against terrorism.

Commenting on Russian-American relations, Mikhail Margelov in part noted: "Partnership by definition implies cooperation, joint decisionmaking, and that means mutual benefits. Our partnership with the USA in the fight against international terrorism is based on an understanding of the general threat that it represents. Our countries consider the prevention of this threat a priority." Mikhail Margelov also commented on the situation on the Korean Peninsula and the Russian position on the crisis: "Our dialogue with North Korea not only promotes the improvement of the situation on the peninsula, and rapprochement between Seoul and Pyongyang, but also the strengthening of global stability. In this regard, Moscow has clearly brought home to the North Korean leadership the fact that the announcement about a so-called "right" to possess nuclear weapons is destabilizing the Far East."

Vladimir Novikov, in his article "US Politics and the Fate of the Nonproliferation Regimes", analyzes the current status of the nuclear nonproliferation regime and its prospects in the context of the terrorist attacks in the USA and the recent Iraqi American conflict. The author believes that the rigid, one-sided actions taken by the United States in Iraq may provoke several countries to begin their own military nuclear programs. Vladimir Novikov believes that the current status of the international nuclear nonproliferation regime can be characterized as insufficiently effective, and demonstrating a tendency toward erosion. In addition, the author suggests that the United States' practical actions in the realm of nuclear nonproliferation and the fight against international terrorism are the most important factor determining the current state and prospects of the regime, but that the American military action against Iraq without UN sanctions may exert the most serious, negative impact on the entire nuclear nonproliferation regime, strengthen ing the pursuit of these weapons by "states of concern" and others as well.

In their article "Iran: A Nuclear Missile Puzzle for Russia", Vassily Lata and Anton Khlopkov examine the current status of the Iranian nuclear and rocket building programs. Despite the assurances of Iranian leaders regarding the exclusively peaceful character of Iran's program, it provokes a host of questions in the minds of experts. The authors attempt to conceptualize Iran's nuclear and missile programs in light of news about the Iranian leadership's intentions to create a closed nuclear fuel cycle in their country. Their evaluation indicates that Iran will obtain the technical capability to join the club of states with nuclear missile potential by 2006. Given this situation, Russia should ask itself what its position should be regarding further cooperation with Iran in the nuclear and other spheres and what it should do to decrease the possible negative consequences of the development of Iran's nuclear industry. The authors believe that in the current circumstances, Russia should renew, and maybe even initiate, the work of bilateral RussianAmerican groups on the Iranian nuclear missile issue.

Vyacheslav Pushkarev. the article in "Strengthening and Developing **IAEA** Safeguards", looks at the current status of IAEA safeguard mechanisms and ways to strengthen them, particularly in the light of the new situation, in which the very efficacy of the Treaty on the Non-Proliferation of Nuclear Weapons is being questioned by several countries. The author emphasizes the necessity of increasing global attention to the task of speeding up the adoption of the additional protocol in the many countries that are called upon to do just this at annual IAEA General Conferences.

Dmitry Kovchegin, in his article "The International SNF Market: Does Russia Have Any Prospects?" raises questions about Russian prospects for importing and reprocessing spent nuclear fuel. The author analyzes several fundamental factors influencing SNF imports into Russia, including the positions of states controlling the world SNF market. The United States plays a critically important role in deciding whether Russia can import SNF, since the vast majority of potential client countries require US agreement to export SNF to Russia. Obtaining an agreement with the USA on this issue will require, in the first instance, the fulfillment of several demands, primarily related to

nuclear security and US nonproliferation policy. In the author's opinion, at present the most important obstacle to an agreement between Russia and the United States is Russian-Iranian cooperation in the nuclear sphere.

Yury Podgornykh and Yevgeny Sirotinin, in their article "Nonstrategic European ABM: Possible Models", examine the difficulties that will arise in the construction of a European nonstrategic ballistic missile defense system. The authors examine the advisability of creating an ABM system, as well as the necessary capabilities and resources. The authors remark, in particular, that the idea of constructing a nonstrategic European ABM system should not be considered in isolation from the problems of ensuring global strategic stability and the US pursuit of NMD. At the same time, one should not base assessment solely on US estimates of missile threats supposedly emanating from "rogue states." At the present time there is simply no real missile threat to either the USA or Europe. And one can scarcely foresee such a threat in the next 1015 years.

Andrey Frolov, in his article "India's Quest for a Nuclear Submarine Fleet" analyzes India's drive to build its own nuclear submarines. To achieve this goal, the Indian Navy is not only renting a Russian nuclear-powered submarine, but is also working on the creation of its own Advanced submarine class, called the Technology Vessel. The author also raises questions about the weaponry for Indian nuclearpowered submarines, and considers the joint Russian-Indian Brahmos missile project in detail. Andrey Frolov notes the Indian Navy leadership's clear drive to possess its own nuclear-powered submarine. However, the capabilities of the Indian shipbuilding and nuclear industries on the one hand, and financial constraints on the other, call into question the possibility of constructing a vessel in the near future. This situation can only change if other shipbuilding projects are sacked and significant financial resources are concentrated on the national nuclear-powered submarine construction project.

Andrey Piontkovsky, in his article "The Crisis of International Security Institutions in Light of the Iraq Conflict", voices his opinion regarding the necessity of creating new mechanisms to regulate international relations, and the creation of a "global government" structure that would take upon itself the responsibility for overcoming crisis situations that threaten international security and stability. In the opinion of the author, the role of an effective global government can only be fulfilled by a union of

responsible world powers united by a common view of the problems and challenges of contemporary society and by common values, and possessing the political, economic, and military resources to realize their joint policies.

Vladimir Dvorkin, in his article "Lessons of the War in Iraq for Russian Military Reform", analyzes the actions of antiIraqi coalition forces during the war in Iraq. In his opinion, the Russian military and political leadership must derive lessons from the recent events in the Persian Gulf in order to carry out a more deliberate policy of reforming the Russian army. The historic uniqueness of the moment in which Russia finds itself now is that, for the first time in a thousand years, it does not face enemy states that threaten it militarily. It can make use of this opportunity to begin the creation of a compact, modern high- tech army.

Dmitry Evstafiev, in his article "The Nuclear Crisis on the Korean Peninsula: Development Scenarios" analyzes developments relating to the DPRK's withdraw al from the Treaty on the Non-Proliferation of Nuclear Weapons and North Korea's renewal of its nuclear program. The article enumerates the possible paths the North Korean nuclear crisis might take and the consequences of the crisis for the region and its key actors. For Russia a crisis over the North Korean nuclear program would result in an exceptionally difficult situation. This is because Moscow cannot remove itself from direct participation in the conflict by declaring, as it basically did in Iraq, that the fight is "not our war."

Viktor Lichaev, in his article "Solutions to the Problem of Orphaned Radioactive Sources, speaks of the necessity of securing radioactive sources in the light of the events of September 11, 2001. In the article, the author notes the necessity of increasing monitoring of radioactive sources that could become weapons used in a full-scale terrorist attack.

Andrey Frolov, in his article "Russia, France and the Global Partnership", studies the history of and prospects for Franco-Russian cooperation and French assistance to Russia in the nuclear sphere, and considers those areas in which the two nations' cooperation has been the most effective. Franco-Russian cooperation in the field of excess plutonium disposition was one of the most important bilateral programs in the late twentieth century. The author notes that in the course of cooperation both sides demonstrated the desire to solve together those problems that Russia could not solve on its own. The fact that bilateral Franco-Russian initiatives gradually grew into multilateral cooperation is encouraging.

Yaderny Kontrol (Nuclear Konrol) Journal of the PIR Center for Policy Studies Volume 9, No. 3 (69), Fall 2003

The editorial "The Results of Evian Should Not Be Recycled" considers prospects of the G8 Global Partnership against the spread of weapons and materials of mass destruction in light of the outcome of latest G8 Evian Summit in France.

The task of ensuring sustainability of the Global Partnership requires further efforts on behalf of its participants. The possible measures could include increasing Russia's share of financing, conversion and commercialization of projects, and involvement of nongovernmental organizations such as the newly created Board on Sustainable Partnership for Russia.

In his interview "World History Is Not a Pile of Diplomatic Notes" to Yaderny Kontrol, Dmitry Rogozin, the Head of the State Duma Committee for International Affairs, expresses opinions on the most topical issues of contemporary world politics. Topics include Russia's relations with its CIS allies, the Korean Peninsula and Iran crises, deficiencies of the nonproliferation regime, and the significance of the SOR Treaty for Russia.

Assessing the nonproliferation regime, Dmitry Rogozin states that it "should be strengthened, made efficient and all international actions should be targeted in nature and authorized, at least, by the UN Security Council."

Commenting on the possibility of Iran acquiring nuclear weapons, Dmitry Rogozin notes that "Iran is a close neighbor of Russia and Russia's interest is to exclude the emergence of nuclear weapons there in spite of our good relations".

Roland Timerbaev's article "The Middle East and the Nuclear Problem" discusses the prospects of a peaceful resolution to the conflict in the context of recent events around Iraq. The successful solution to the nuclear problem plays a significant role in achieving this goal. Countries of this region showed an interest in atomic energy as early as the 1950s and at present Algeria, Egypt, Iran, Israel, Jordan, Libya, and Syria in different ways pursue nuclear activities.

Israeli nuclear capability has been the key factor influencing the history of Arab-Israeli confrontation, especially since 1967. As a result,

some of the Arab countries have been and will be seeking to oppose Israeli nuclear weapons with nuclear weapons or some other weapons of mass destruction of their own.

The author studies causes behind the emergence of the atomic factor in the region, the degree of its impact on the prospects of political settlement in the Middle East, and proposes practical solutions to this problem.

Also included is Alexander Kalyadin's article "The Role of Coercion in Preventing Proliferation of Weapons of Mass Destruction." The threat of international terrorism and proliferation of WMD can lead to crises where traditional political and diplomatic instruments may be insufficient. In the article, the author notes that effectively countering terrorism may require prompt coercive measures.

Vasily Lata's article "SNF Development in the Interests of Strengthening Russia's Military Security: Geopolitical Aspects" discusses various scenarios of improvement and modernization of Russia's strategic nuclear forces. The condition of the Russian SNF in the twenty first century will depend on external and internal geopolitical factors, which serve as criteria for the planning of strategic nuclear forces development. Effective reform of Strategic Nuclear Forces requires allocation of significant financial resources and clear understanding of the role SNF play in Russian foreign policy and in world affairs.

In his article "Evolution of U.S. Nuclear Policy: is the Role of Nuclear Weapons Growing?" Nikolai Sokov considers the changing place and role of nuclear weapons in U.S. policy. Early in 2003, the Bush Administration's request to fund the development of small-yield nuclear charges again raised the issue of the place of nuclear weapons in U.S. strategy. The author provides a detailed analysis of various aspects related to the U.S. nuclear arsenal and compares the conceptual approaches to nuclear weapons in the United States and Russia.

The article discusses possible directions of nuclear weapons modernization in the United States, which include both improving the existing warheads and developing new designs.

Yevgeni Satanovski, in his article "The World After the War in Iraq," considers the consequences of the Iraqi war, the global changes, the role of world institutions, the place of morality and politics in the contemporary world, as well as religion and civilization-related factors. In addition, the author pays close attention to weapons of mass destruction, discusses how they are related to intervention in

the internal affairs of states, and explores aspects pertaining to their proliferation and possible use for terrorist purposes.

The article by Konstantin Eggert "NATO, Russia and the Threats of a New Century" analyzes the format of relations between the North Atlantic Treaty Organization and Russia. Against the background of rapid transformation of NATO, the future place of this organization in world politics represents a fruitful topic for discussion. The Prague NATO Summit, as the author believes, completely dismantled the Yalta system of geopolitical checks and balances. Simultaneously, NATO's political component advances to the forefront, setting aside the military one.

In the article by Roland Timerbaev "Progress in Preparing the 2005 NPT Review Conference," the author analyzes the results of the recent Preparatory Committee meeting for the 2005 NPT Review Conference. The meeting was held in a unique circumstance - the withdrawal from the treaty of one of the parties, the DPRK. Also, the PrepCom paid special attention to the issues of countering nuclear terrorism, nuclear and radiation safety, and education in the field of nonproliferation and nuclear disarmament.

Aleksandr Fedorov in his article "Organized Crime and Terrorism: Interconnection and Interaction," elaborates on the trend of cooperation between the two phenomena. The ingress of organized crime armed with ideas of political extremism into the international criminal structures poses a threat to the national security, international organizations and international security as a whole. The author comes to a conclusion that terrorism irrespectively of ideology is, first of all, a criminal phenomenon, which has recently acquired an international nature.

The article by Victor Kozlov "Prospects of Russia's Nuclear Export" describes the history

of USSR/Russia's international cooperation in the area of design and construction of NPPs. The article describes participation of Russian organizations in the construction of nuclear power units in China, India and Iran, which are the most attractive and promising markets, as well as other possible areas of the Russian export of nuclear power equipment.

Elina Kirichenko, in her article "Technology Transfer and Export Control in the Age of Globalization," analyzes the interrelations between the growing role of international transfer of technologies and the trends in development of export control, as well as prospects of export control in the beginning of the twenty first century. The emphasis is put on the analysis of control over so-called intangible transfers of technology, because it is very difficult to control such information transfer channels.

The study by Natalia Beloborodova, "Global Partnership in Russian-Japanese Relations," examines Japanese assistance to Russia in eliminating the WMD legacy of the Cold War. During his last visit to Russia, Japanese Prime Minister Junichiro Koizumi outlined priority areas of bilateral relations in nuclear threat reduction. The author studies the legal and financial basis of Russian-Japanese cooperation and analyses the practical implementation of existing agreements.

The author also pays attention to unresolved bilateral cooperation problems, primarily those of a legal and political nature, as well as to the lack of coordination in some actions of the Russian agencies responsible for the implementation of the agreements.

Boris Yurinov and Eduard Sharapov in their article "The Hero of Russia" unveil the mystery of a man who played a substantial role in creating the atomic bomb by the Soviet Union - secret-service agent Vladimir Barkovski. The authors share interesting facts from his career and his personal recollections.