

## MOSCOW NUCLEAR SAFETY AND SECURITY SUMMIT: SUMMING UP THE RESULTS

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Leaders of the world's seven major industrialized nations (the United States, Great Britain, France, Germany, Italy, Canada and Japan) and Russia gathered in Moscow on April 19 and 20 to discuss nuclear security issues. It was the first ever G-7 Summit held in Russia. For the first time the Summit agenda dealt with one specific issue that directly concerns these states and the whole world - the future of nuclear power engineering and its safety. It was also the first time that Russia participated in discussions on equal terms: this was reflected by the fact that diplomats called it the P-8 Nuclear Safety Summit.

Two months have passed since the end of the Summit and it is high time to unbiasedly evaluate its results. First and foremost, we should clarify why the Moscow Summit has received such little attention, and why there have been many who contend that "there was no real need for the Summit" and that "elephants bore a mouse." Are these reproaches well-founded?

### Expectations and Results

In order to answer this question, let us take a look at the pre-Summit period.

According to Boris Yeltsin, at the June 1995 G-7 Summit in the Canadian city of Halifax, he "suggested to his colleagues that nuclear safety issues be discussed at a Summit in Moscow. The idea was supported, although not immediately and rather unwillingly. Nevertheless, this way Russia was recognized not only as a great power, but also as a leading world state."<sup>1</sup> Commenting on the initial cold reception of Yeltsin's initiative, Jacques Chirac pointed out, "In Halifax, President Yeltsin said, "I have an idea: I would like to discuss civilian nuclear safety problems". I must say that initially there was some doubt, but Boris Yeltsin insisted, so everybody agreed."<sup>2</sup>

Indeed, Yeltsin's initiative voiced in Halifax became a sensation. How could it be that Russia, which had always been reproached for inadequate nuclear material protection, control and accounting as well as for excessive secrecy regarding direct and indirect data about its military nuclear program, all of a sudden suggest nuclear issues be given a priority on the Summit agenda. Does this mean that Russia is finally ready for greater transparency or is it some diplomatic trick? The phrase "nuclear safety" caused confusion. What did it stipulate - "safety", which means civilian nuclear power

engineering safety, or "security", which was the first translation of Yeltsin's idea, which means military security issues are included as well? Bill Clinton, being the first to welcome Yeltsin's initiative in Halifax, immediately suggested that the Summit agenda should also contain issues concerning nuclear smuggling, including combating potential thefts of nuclear small yield charges.<sup>3</sup> Russia obviously did not like this, it explained that only safety issues are supposed to be discussed, first of all safety at nuclear power plants (NPPs) and nuclear waste management.

The G-7 accepted Clinton's proposal, but it took their experts and governments a long time to discuss it, and it seemed to be on the verge of dropping out at some moments. Thus, according to a top Russian official who took part in preparations for the Summit, in August 1995 "it hung by a thread" and many, including those in the Kremlin, contemplated back-peddling. The format of the Summit also was not clear. Thus, sometimes it was proposed to hold a "conference" and to invite China and Ukraine, in addition to the G-8 states; even Norway was once among those states that insisted on having their representatives at the "nuclear safety and security forum". Only after long consultations was defined the format of the meeting as the P-8 Summit and Ukraine's President invited to take part in the breakfast and in discussions on the Chernobyl issue (a similar request of Belarus's President Alexander Lukashenko was not even seriously considered). As a compromise, the meeting was called "Nuclear Safety and Security Summit", though it was agreed that the Summit preparations and the Summit would focus primarily on civilian nuclear power engineering and related nuclear safety issues and only briefly touch nuclear nonproliferation issues and not touch nuclear weapons problems altogether (the day before the Summit, Yeltsin phoned Clinton and reminded him of this agreement once again)<sup>4</sup>. Also, it was difficult to find a mutually convenient time. Initially the Summit was planned for March and finally it was agreed on April 19 and 20: bilateral meetings on April 19, the Nuclear Safety and Security Summit on April 20, and the Yeltsin-Clinton meeting on April 21. It was agreed that Boris Yeltsin and Jacques Chirac would be Co-Chairmen at the Summit.

It is worth noting that from the very beginning the G-8 refused to set specific objectives to be reached at the Summit. Just the opposite, it was general issues that received priority (they were to be discussed very briefly, without going into details) and it was planned to adopt general declarative documents. According to their authors, these documents should indicate the common character of the G-8 objectives regarding nuclear safety and security issues and nonproliferation issues and should not point out to some specific "backlog". The only exception was a joint Statement on the Comprehensive Test Ban Treaty (CTBT), though it was not planned to contain any new information, apart from a joint affirmation of their prior statements on this subject.

The G-7 leaders agreed to make the discussion "sterile", e.g. not to raise acute problems altogether. According to Izvestia's report from Bonn made before the meeting, "the next favor of the Federal Chancellor to the Russian president (...) this time will be that he will just "be silent" regarding acute problems instead of discussing them at the G-7 Nuclear Safety and Security Summit. Those in Bonn assume that the Moscow Summit will be an "empty words" forum. Though Russia's Western partners are going to join Boris Yeltsin and affirm their adherence to the nuclear safety and security principles in a final declaration, they are likely to leave the most debatable issues outside the forum. Germany and its Western partners have agreed not to be lavish with financial promises to Moscow, not to promise new credits and to generally avoid delicate subjects with a due consideration to the election situation. Of course, Germans are concerned with nuclear reactors safety in Russia in particular and with Russian NPPs safety in general, but not to such an extent as to miss a chance to support Boris Yeltsin at a difficult moment. And an official agreement will be just such a support."5

The other G-7 leaders were more or less of the same opinion.

Russian commentators in the know also did not have any allusions regarding the G-8 Summit. According to Pavel Feldgenhauer, "in Moscow the world leaders will mostly just voice reports prepared beforehand by competent departments. Professional politicians did not understand much about complicated nuclear technical issues and had to completely rely on specialists even during the more tense times of the Cold War. Nowadays the eight great powers have no disagreements regarding nuclear safety and security issues altogether."6

In this connection it would be logical to raise a question: why was this Summit needed, which provoked so much noise and which cost the Russian tax-payer, according to some data, approximately 15 billion rubles?

The first answer is that Boris Yeltsin needed it to secure support of the Western leaders before the presidential elections on June 16; the Western leaders needed it to carry out "an express analysis" of the election situation in Russia and in the Kremlin. Commenting on these speculations, Presidential Aide for National Security Yuri Baturin said the following, "Of course, sometimes they say that this Summit was a kind of election measure. But I should say that the decision to hold it was made when election measures were not planned altogether. It was up to the G-7 leaders and to Russia to choose the Summit date. It did not depend only on Russia: that is why it would be wrong to think that the Summit was timed to the elections. But during the election period any measure, any action,

any step or even absence or rejection of some actions, no doubt, receive a touch of some election campaign (...). In case of its success, it will, of course, increase the prestige of the president who had initiated this meeting, who was its co-chairman and its host, and it will positively effect his election campaign."7

Today it difficult to say whether the presidential aide was cunning, saying that Yeltsin's "election measures were not planned altogether" a year ago, or was it actually so (the second alternative appears to be more probable if we remember the domestic situation in June 1995). In any case, even if we assume that it was not mere coincidence that the G-7 leaders came to Moscow at the same time when Yeltsin began his election campaign, the Summit did not considerably influence the election situation in Russia.

On the one hand, during the two days of the Summit Yeltsin behaved as a good host: one could feel it at the receptions and in his renovated cabinet in the Kremlin. Combined with his good physical shape, this produced a favorable impression on the guests. On entering the renovated Yekaterininsky hall, Clinton exclaimed, "Gorgeous!" Jacques Chirac was the most rapturous one, "I like Moscow very much, I come here from time to time and I see that the city has been changing at an enormous, fantastic speed. Again we can observe the capital of the great Russia and this makes me happy. Today, looking at Moscow, at Saint-Petersburg and at other cities, one gets an impression that the great Russia is back from day to day, and right now this makes me extremely satisfied. I would like to thank Boris Yeltsin for his reception and to tell him that the reception in the Kremlin greatly surprised me. I had been to the Kremlin before, but it was in a pitiful condition then. And [this time] I entered these new buildings, which have regained their former magnificence, with a great joy. Dear Boris Nikolayevich, I thank you for this."8 From Yeltsin's team's perspective, the meeting must have been worth being held in Moscow even if only for this praise.

On the other hand, it seems to be more than artificial to link the Moscow Summit to the average Russian elector's mood. As a matter of fact, those who were going to support Yeltsin considered the Summit to be one of his diplomatic successes. Those against Yeltsin must have been only irritated with Moscow's readiness "to be led by the West" and to agree, for example, with a complete nuclear test ban. The hesitating voter was hardly to be influenced by the Summit's results: foreign policy steps play a far smaller role than economic ones in the average elector's eyes. At the same time, if we consider the Summit impact on the June 16 elections, then we should admit that "presentation" of its results (especially the TV presentation) must have promoted Yeltsin rather than alienating a part of the hesitating electorate.

Considering the G-7 leaders' Moscow visit, we should focus on the effectiveness of Moscow's one year old foreign policy step. Indeed, the majority of these leaders spoke so much about nuclear safety and security problem, often reproaching Russia, that it was difficult for them to refuse Yeltsin's proposal and not to come to Moscow. Seizing the initiative, Russia brushed off its opponents' arguments regarding its unwillingness to resolve nuclear safety and security problems and proved that, despite colossal financial problems, it continues to advocate improvement of legal, diplomatic and technical aspects of nuclear safety and security. The Summit made it difficult to blame Russia for poor attention to these issues. It is not by chance that Chirac gave a very curt answer to a reporter's question regarding "the confusion with the nuclear material safety in Russia", "It might have been said four or five years ago, but today nobody says this, because this is nonsense. We have in detail discussed safety and security problems with appropriate information [at our hands], there were serious people round the table and nobody doubted those safety and security-enhancing measures that Russia has been undertaking. And I tell you this quite frankly."<sup>9</sup> The situation was spiced up with U.S. Secretary of State Warren Christopher's statement, which was made less than two weeks before this statement of France's President and in which he described the situation with safety and security at Russian nuclear facilities "from Murmansk to Vladivostok" as very poor.<sup>10</sup> It is no coincidence that Russia's Minister of Atomic Energy, Viktor Mikhailov, looked quite happy after the meeting was over, and in his interview with Yaderny Kontrol he said that "the forecasts of the press that just the day before predicted the Western leaders would pinprick Russia have been proved wrong. There were no pinpricks and no reproaches. Instead there was support of Russia's efforts and a constructive talk on cooperation."

Thus, Russia's expectations regarding the Summit have been one hundred percent justified since it successfully fulfilled its two major objectives: first, to show the strength of the Kremlin's "master" and, second, to underline Russia's adherence to an effective solution of nuclear safety and security problems and its readiness to cooperate with the G-7.

As far as expectations of the world public are concerned, they must have been initially overstated. Indeed, it sufficed to have a look at the Summit program to realize that nuclear safety and security problems would take no more than a few hours or even less. Given the fact that each of the participants had to have his say, it became obvious that the discussion mostly had a formal character and that all documents had been agreed to before; it was important that these documents were not reviewed during the Summit. In other words, could one really expect that a three-hour discussion would bring about some "breakthrough", moreover that it was not clear what "breakthrough" was actually expected. It is obvious that the format of such meetings, as a rule, does not stipulate a plan for resolving specific problems. In addition, the Summit participants

devoted a considerable amount of time to the situation in the South Lebanon, a problem unrelated to nuclear safety and security but which demanded fast reaction from Clinton, Chirac and Yeltsin.

Four documents were adopted on the Summit results<sup>11</sup> - the Moscow Nuclear Safety and Security Summit Declaration, the Programme for Preventing and Combatting Illicit Trafficking in Nuclear Material, the Statement on Comprehensive Nuclear Test Ban Treaty, and the Statement on Ukraine.

#### The Moscow Nuclear Safety and Security Summit Declaration

The Moscow Nuclear Safety and Security Summit Declaration testifies to the effect that the Summit was a meeting of leaders of states that have (with the exception of Italy, which gave up on building its own NPPs and imports nuclear power from France) no substantive disagreements regarding the nuclear power use-related issues. As Boris Yeltsin said, greeting his guests in the Kremlin, "Major nuclear power producing powers are represented at the Moscow Summit. Eighty percent of nuclear reactors possessed by mankind are located on their territories. This fact alone makes obvious our special common responsibility for strengthening the nuclear power sector safety and security. I do not want to deny the need to diversify the energy sources and to continue the research in the area of alternative energy options. Still, the development of nuclear and, further on, thermonuclear power should be considered today as the most promising one."<sup>12</sup> The leaders declared that they consider the XXIst century to be a century with an important role of nuclear power engineering, they affirmed their commitment to "measures which will enable nuclear power, already a significant contributor to electricity supply in those countries choosing to exploit it, to continue in the next century to play an important role in meeting future world energy demand consistent with the goal of sustainable development agreed at the Rio Conference in 1992."<sup>13</sup> The following G-8 statement appears to be very timely: "We recognize the importance of openness and transparency to obtain public trust which is a key factor for the use of nuclear energy."<sup>14</sup> It is important that this statement occupies a very important place in the Declaration. It is true that there is a long way to transparency, especially in Russia; but I would like to hope that Russia will back up this clause of the Declaration with actions. "Public trust" constitutes an even more serious problem. Though President Yeltsin considers "it important that specific objectives of nuclear power engineering should be solved in close cooperation with the public", believes in "the practice of conducting public examination, alongside the state one, of specific nuclear power facilities", and asserts, "We will continue promoting relations with Russian and international public in the future"<sup>15</sup> , "Nikitin's case" makes it considerably more difficult to believe these words. It is interesting to point out that the day before the Summit, Yuri Baturin conjectured that "Nikitin's case" might be discussed during the meeting and "some solution might be found". However, this was

not the case. The same Yuri Baturin hinted that the accused must have been directly or indirectly using secret data of a Bellona's open report. However, this does not dismiss the question whether data containing information regarding an environmental threat can be classified. This point should be clarified by Russian and international legislation.

At the same time the following arouses concern. Despite President Yeltsin's statement made at the April Summit regarding the necessity of a joint Russia/Scandinavian States monitoring of the territories of radioactive concern, Russia's Defense Minister, Pavel Grachev, failed to find time in May jointly with his Norwegian colleague to start such monitoring at Andreyeva Guba in the Murmansk Region, about which military naval bases with serious radioactive situations about which we have already written.<sup>16</sup>

The G-8 participants, though not touching issues related to the international nuclear nonproliferation regime, paid considerable attention to it in the final Declaration. It is worth noting that the Declaration refers to the Decision of the 1995 NPT Review and Extension Conference on principles and objectives for nuclear nonproliferation and disarmament as to the key document. The G-8 states intend, following the letter and spirit of this resolution, to strengthen cooperation in the area of nuclear nonproliferation and disarmament, including promotion of universal adherence to the NPT. This problem appears to be the most urgent one. A year after the decision on the NPT indefinite extension was reached in New York, one of the most important requirements of the Conference participants- to make the Treaty comprehensive, universal, e.g. provide for adherence of undeclared nuclear-weapon states, namely India, Pakistan and Israel, had not been fulfilled. It is obvious that it would be naive to speak about "forceful adherence" to the Treaty. However, "the nuclear five" have not undertaken effective efforts to push the three above-mentioned states toward the international regime of nuclear nonproliferation. The United States, Britain and Russia - the states-co-authors of the Final Resolution of the 1995 Conference on the Middle East, which, in particular, reaffirms "the importance of the early realization of universal adherence to the Treaty on the Nonproliferation of Nuclear Weapons, and calls upon all States of the Middle East that have not yet done so, without exception, to accede to the Treaty as soon as possible and to place their nuclear facilities under full scope International Atomic Energy Agency safeguards." Moreover, the resolution calls in particular upon "the nuclear-weapon States, to extend their cooperation and to exert their utmost efforts with a view to ensuring the early establishment by regional parties of a Middle East zone free of nuclear and all other weapons of mass destruction and their delivery systems."<sup>17</sup>

Though, Sergei Kislyak, Director of Russia's Foreign Ministry's department for security and disarmament, does not agree that no efforts to universalize the Treaty were made during the previous year, "Efforts have been undertaken, they are being undertaken every

day. They have been undertaken within the framework of multilateral efforts to create a nuclear-weapon-free zone in the Middle East and Russia has been playing an active role. We have close contacts with our partners in India as well. We have been conducting an open and honest dialogue, stressing our interest that the Indian colleagues adhere to the Treaty on the Nonproliferation of Nuclear Weapons. We have been negotiating on these issues with the other depositories of the Treaty on Nonproliferation - with the Americans and with the British. This work has never stopped and will continue in the future."<sup>18</sup> Answering a Yaderny Kontrol question, Kislyak evaluated the nonproliferation-related provisions of the Moscow Declaration as "adequately coordinated statements favoring strengthening the nonproliferation regime. This has been and continues to be Russia's position."<sup>19</sup>

The Moscow Declaration underlined that the 1994 Convention on nuclear security was "the most important achievement". The G-8 "urge all countries to sign this Convention and to complete internal procedures so that the Convention can be brought into force expeditiously, certainly before the end of 1996."<sup>20</sup> Russia stated that this Convention has already entered into force on its territory.<sup>21</sup>

The Moscow Declaration stated the G-8 intention to work "vigorously to strengthen the International Atomic Energy Agency (IAEA) safeguards system."<sup>22</sup> The IAEA underwent a serious test when it failed to detect Iraq's illicit nuclear activities. And in other cases it was not the Agency, but specific states, first of all the United States, that played a major role in preventing or stopping illicit nuclear activities of a number of rogue states. All this had made the IAEA more vulnerable than ever for critics. Some of the Agency's opponents even tried to push the idea of its absolute uselessness. It seems that the G-8, in a very timely fashion, determined their stance toward the IAEA. Russia's position at the Summit was also remarkable. Its essence was that "it is important to support the Agency's activities aimed at strengthening safeguards, and to create and implement an effective mechanism for detection of possible clandestine nuclear activities at initial stages, especially in regions of proliferation concern." Russia believes that "there is an urgent need to strengthen the IAEA safeguards regime by including control over non-nuclear components of nuclear weapons." Russian officials and scientists have been very concerned with this issue. Moreover there has been joint U.S./Russia research in this direction within the framework of the International Center for Science and Technology. Russia insists that it is a direct responsibility of the world's leading industrialized states that "the Agency should be provided with financial and human resources, equipment and legal rights to effectively carry out its control functions."<sup>23</sup>

Finally, the Moscow Declaration reaffirms the G-8 commitment to "the immediate commencement and early conclusion of negotiations on a non-discriminatory and universally applicable

convention banning the production of fissile material for nuclear weapons or other nuclear explosive devices."<sup>24</sup> It seems that the development of such an international legal document will start immediately after the conclusion of a CTBT. And the G-7 leaders should attach as much importance to these negotiations as they attach to the negotiations on a CTBT.

The G-8 agreed to work out their strategies concerning storage of fissile materials, which were claimed to be of no further use for defense purposes. Possible options included safe and secure long-term storage, classification, other methods of final burial and conversion into MOX fuel for nuclear reactors. The Summit participants welcomed the plans regarding small-scale technology demonstrations of these options, including the possibility of creating pilot projects and plants.

The decision was made to hold a meeting of a Nuclear Proliferation Experts Group (NPEG) until the end of 1996 in France to analyze the various proposed disposition options and to determine the possible development of international cooperation to implement the national strategies.

#### Illicit Nuclear Trafficking

It is no secret that during the Summit Russia considered this issue "provocative." It was assumed that if somebody from the G-7 wanted to pressure Russia, he would play up this very "card." Though Russian officials were sure that they could beat it: in particular, they said that there was no nuclear smuggling of proliferation scale from Russia and named Western companies that used to export nuclear components to Iraq with their governments' permission, nevertheless, they preferred to avoid this delicate subject. Number one, Russian officials who prepared the Summit knew (better than others) that the situation with nuclear material protection, accounting and control was far from being satisfactory. Number two, there has been almost no control (at least until recently) over transborder movements of nuclear and radioactive material and, as a result, a shining example of illicit export of radioactive material from Russia to Britain (the actual amount of exported material exceeded by twice the declared amount) by a large Minatom company testified to an unfavorable situation in the outside circle of combatting nuclear smuggling, rendering meaningless optimistic statements of the-smugglers-will-not-pass kind. Finally, not long before the Summit, Germany got hold of a Russian Federation Federal Security Service document that assumes the plutonium intercepted in Munich was of Russian origin; even Russian officials stopped refuting the possibility of the Obninsk origin of the material.

One should keep an eye on the domestic situation as well. Many in Russia have considered concerns of Western nations, first of all of the United States, regarding the level of physical protection at Russian nuclear facilities to be disguised penetration into the Russian nuclear weapon complex. The presidential aide for national security also does not rule out this danger, "There cannot be purely

unselfish goals in international relations. And there is the probability that somebody would like to pursue other additional objectives while resolving security tasks, for example, the reconnaissance-related ones. There have been such cases."<sup>25</sup>

Having weighed all pros and cons, the Russians chose the right tactics regarding this issue. It was as follows: one should discuss the subject of nuclear diversions despite the fact that it was what the West wanted and Moscow did not; if Russia dodged the issue the guests might think there was something more serious to hide than the already known factors. Thus, Russia admitted that though illicit nuclear trafficking "has not so far become a mass-scale one, the industrially developed countries bear an enormous responsibility for not allowing it to become one of the world worst realities alongside terrorism and drug smuggling." Russia agreed that the G-8 should always see to it that measures are taken to prevent illicit nuclear trafficking and to stop the spread of terrorism into the nuclear realm. In particular, Russia specially singled out the necessity to improve a mechanism for information exchange, for development of cooperation among special services (primarily on a bilateral basis), and for development and adoption of international norms and procedures for suing provocateurs, illicit traders and buyers of nuclear materials.<sup>26</sup>

The program for preventing and combatting illicit trafficking in nuclear material, adopted by the G-8, contains an important statement: "The majority of cases, so far, have involved only small amounts of fissile material or material of little use for weapon's purposes, and many apprehended nuclear traffickers have been swindlers or petty thieves."<sup>27</sup> However, all the G-8 countries admitted that "cases of illicit nuclear trafficking continue to occur."<sup>28</sup>

In order to prevent illicit nuclear trafficking in the future, the G-8 states agreed, in particular, to regularly share and promptly disseminate information on nuclear theft and smuggling incidents; to exchange information regarding significant incidents in this area, especially if sensitive material is involved, and to establish appropriate national points of contact for this purpose; to foster enhanced cooperation and coordination among national intelligence, customs, and law enforcement agencies and cooperation with their counterparts in other concerned countries to ensure prompt investigation and successful prosecution in cases of illicit nuclear trafficking; and to exchange scientific information and data to identify origin, history, and route of intercepted illicit nuclear material. However, no agreement has been reached on creating a nuclear "data bank" and it appears to be a long process. It is noteworthy that the Programme reflects the common position of all the G-8 states regarding the importance of cooperation in the area of physical protection. Until recently Russia has been very cautious about this issue, and only now it has begun to understand the importance of such cooperation. The first step is the U.S./Russia

project at the Mashinostroitelny Zavod [Machine-building plant] enterprise in Elektrostal city.

It is difficult to overestimate the adoption of the joint Programme for preventing and combatting illicit trafficking in nuclear material. Though, like the Moscow Declaration, this document is of general character, it contains objectives for prevention of illicit nuclear trafficking and ways to reach them, which were agreed on by all G-8 states. This coordinated and unified position appears to be the main achievement. The Programme shows that not only an individual state, but all states are concerned with this problem. And the entire world community should seek ways to resolve it, not just seek someone to blame (though the main responsibility for preventing and combatting illicit trafficking in nuclear material rests with governments of those states where sensitive material is located and it is first of all their concern to provide material protection, control, and accounting).

The adoption of the joint Programme allowed mutual reproaches and suspicions regarding nuclear smuggling to be put an end, as well as to discussion of whether such suspicions were well-founded or not (the answer was yes) and for a constructive dialogue to begin (on a bilateral or multilateral basis) on preventing and combatting nuclear smuggling.

The next steps in this direction will be taken at the G-7 Lyon Summit at the end of June. Russia believes that a Protocol on G-8 special services cooperation to prevent and combat illicit trafficking in nuclear material should be signed at the Lyon Summit. The same meeting should also develop the idea of an international Convention on combatting illicit trafficking in nuclear material and preventing nuclear terrorism, decide on creating an international center for fighting nuclear terrorism, and discuss preparations for a meeting of international experts on fissile material.

#### A Comprehensive Nuclear Test Ban

It should be noted that nuclear disarmament-related problems were not on the Summit agenda. However, the G-8 had to overcome a general feeling of a general and unbinding discussion. The only "perceptible" result was the Statement on a Comprehensive Test Ban Treaty, where the G-8 expressed their coordinated position regarding the issue. Of course, there is nothing new for experts. However, the fact that the treaty was signed by all (except China) nuclear states gives special importance to it and makes it easier to proceed at the Geneva conference.

First, the G-8 affirmed their commitment to the Australian variant of the draft treaty, underlining that "the CTBT must prohibit any nuclear weapon test explosion or any other nuclear explosion. We affirmed that this would constitute a truly comprehensive nuclear test ban."<sup>29</sup> Second, the "critical date" was confirmed, by which the Treaty should be agreed on and opened for signature - September 1996. As President Yeltsin said, "we are ready right now, this year, to sign a nuclear test ban in any atmosphere and of any breadth." However, he immediately added an afterthought that the

other Summit participants must have thought of, "But there is China, which has to be worked with, (...) in order to persuade it [China] to sign the Treaty for it to become universal and indefinite."<sup>30</sup>

Yeltsin's visit to China is very symptomatic in this respect. He has fulfilled the instructions of the G-8 and communicated to the Chinese leadership the idea that a CTBT should be adopted jointly, by the "nuclear five," in the Australian formulation (to lift any complaints regarding "peaceful nuclear explosions") and in September. According to President Yeltsin, his calling was welcomed. At the same time there have not been no grounds to be optimistic about China's position regarding the early conclusion of the CTBT and the G-8 statement will hardly become some weighty argument to China.

However, China could follow Russia's steps and adopt before or during its adherence to the CTBT a unilateral statement which would reflect the PRC's position without conflicting with the treaty. In this connection, on the eve of the Nuclear Safety and Security Summit, an official Statement of the press-secretary of the President of the Russian Federation regarding a CTBT was disseminated. It begins with the reaffirmation that "Russia supports its commitment to a ban on any test explosions of nuclear weapons and any other nuclear explosions in any environment." It further indicates that Russia "has a special responsibility for maintaining safety and security of its nuclear arsenal until a universal and complete elimination of nuclear weapons, which remains our final goal," in this connection "under conditions of the CTBT (...) [it] will have to conduct works on maintaining its nuclear stockpile, which will not contradict the ban under the future treaty."<sup>31</sup>

The following measures are to be undertaken: first, to adopt a Federal program for works on providing security and safety of Russian nuclear stockpiles without conducting nuclear explosions; second, to fund Russian nuclear centers and to implement programs there in the area of theoretical and nuclear technological developments research to maintain scientific and technological capabilities and high qualifications of scientists, designers and workers; third, to preserve a basic potential to resume nuclear tests if the Russian Federation is no longer limited by the Treaty.

Russia claimed that "if its supreme interests are jeopardized, it will use its right to withdraw from the Treaty in order to conduct all necessary tests that could be needed in case there is no other possibility to confirm the high level of certainty in safety or reliability of any of the key types of the Russian nuclear weapons."<sup>32</sup>

It appears that this Statement is a well-balanced and well-considered document (including its form - on behalf of the presidential press-secretary of the president). On the one hand, it resists the pressure of those who hope that Russia will resume nuclear tests. On the other hand, it lifts concerns of those who would like to deprive Russia of the possibility to resume nuclear

tests in case of a radical change in the international situation. However, there is a long way from the treaty's completion to its entry into force, and China's position is not the only possible obstacle.

#### The Chernobyl NPP

The presence of Ukrainian President Leonid Kuchma during the major part of the Moscow Nuclear Safety and Security Summit was an important success of Kiev's diplomacy. President Kuchma stated Ukraine's support of the Programme for Preventing and Combatting Illicit Trafficking in Nuclear Material, the Moscow Nuclear Safety and Security Summit Declaration, and the Statement on a Comprehensive Nuclear Test Ban Treaty. The Summit recognized the importance of L. Kuchma's decision to shut down the Chernobyl NPP by 2000, consistent with the Memorandum of Understanding signed on December 20, 1995.<sup>33</sup> Signatories of the Memorandum of Understanding reaffirmed their commitment to its complete implementation and noted that they will closely cooperate with Ukraine and international banks of development in order to work out measures to assist Ukraine. In particular, there was allotment of a \$3 billion credit to Ukraine for "the Chernobyl NPP's shut-down," out of which \$2.5 billion is to be given as credit and \$500 million - as free assistance.<sup>34</sup> On his side, Leonid Kuchma reaffirmed Ukraine's willingness to actively and effectively cooperate within the framework of the Memorandum; he once again confirmed that the Chernobyl NPP will be closed by 2000, and announced that one of its blocks is likely to be phased out in the near future.<sup>35</sup>

At the Summit, Leonid Kuchma and Boris Yeltsin expressed their concern regarding the state of the sarcophagus which was allegedly designed as an interim construction and will last a maximum of 10 years.<sup>36</sup> In this connection the G-8 discussed the process of the on-going research regarding the sarcophagus (financed by the European Union) and expressed their wish, on Leonid Kuchma's insistence (who made the G-8 introduce changes into the Statement on Ukraine at the last moment),<sup>37</sup> that this research be completed before the end of the year so that a final decision could be made on how to resolve the problem of burial of the fourth energy unit.

However, there was an impression that Leonid Kuchma was not completely satisfied with the Summit's results. According to his words, the G-7 and Ukraine should sign an agreement which would set forth terms, dates and sources of funding of all measures stipulated for by the program of closure of the Chernobyl NPP. Without such agreements "Ukraine will not be able to undertake the responsibility to phase out the Chernobyl NPP meeting all nuclear safety requirements."<sup>38</sup>

It was fundamentally important to Russia that the problem of the Chernobyl NPP and the problem of RBMK reactors would be separately discussed at the Summit. And that is what happened: nobody from the G-7 wanted to tease Minatom. Thus, the demands

to immediately shut down all Russian RBMK reactors were not on the Summit agenda. At the same time Russian officials informally hinted that Ukraine was making a mistake, promising to close the Chernobyl NPP by 2000.

As an argument, they cited conclusions of an international expert group regarding RBMK reactors, according to which problems of NPPs with RBMK are not specific. As for Western NPPs with the same service life, these problems are associated with modernization of old generating units to meet ever stringent safety requirements or introducing compensating measures. According to a number of Russian scientists, since the Chernobyl accident in 1986, a number of developments has been introduced at all RBMK units.<sup>39</sup> According to the international projects, no unsolved safety problem was found for the third-generation reactors; second-generation units can be upgraded to safety standards of third-generation units; first-generation units cause greater concern, but even they are amenable to improve safety measures through modernization.

Thus, the conclusion is drawn, "there are no technical reasons for closing down the nuclear stations before they complete their design service period; the discovered defects of RBMK reactors are similar to the defects of Western reactors built according to old standards, and none of the defects is technically irremediable. (...) The Chernobyl station had not been included among the stations dealt with in the projects, but it is apparent that the Western conclusions can be applied to its units as well."<sup>40</sup>

Moscow believes that, speaking about closing down the Chernobyl NPP, which makes a minor contribution to power generation (6% of the overall power generation), Ukraine is more concerned with social aspects and Western aid. "Considering that the early closure of the Chernobyl units has no scientific and technological substantiation, and may result in Ukraine losing several tens of billions of dollars, all responsibility for damage compensation should be shared between parties to this purely political decision."<sup>41</sup>

#### Non-Deployment of Nuclear Weapons Outside National Territories

At any Summit every delegation always has a card which it by all means wants to play and lays on it special hopes; sometimes the whole thing is started by only this very card. The initiative not to deploy nuclear weapons outside national territories of their owners was such a card for Russia at the Moscow Summit.<sup>42</sup> This idea has been in the air for a long time and it is important that it was Russia that voiced it at the right time - at the time when all G-8 leaders were together (though this issue, as well as the CTBT issue, was not formally included into the Summit agenda).

Unlike the previous important Russian initiative (the fall of 1994) regarding conclusion of a Treaty on nuclear security and strategic stability, this one is not so encompassing. It is extremely concrete, very simple and quite attractive to the majority of the countries. Unfortunately, the initiative was in the background of discussion, as

often occurs with Russian initiatives regarding arms control. Despite the Kremlin's desperate attempts to promote it through the press before the Summit, the initiative was discussed neither as a primary, nor as a secondary issue.

The NPT does not insist that nuclear weapons be located only on national territories. At the same time the experience of the "nuclear age" shows that the worst international grievances occurred when nuclear weapons were deployed outside national territories (e.g., by the Soviet Union in Cuba or in Poland, in Hungary and in Czechia; by the United States in Turkey and then in Italy, in Belgium, and in Germany, etc.).

Though deployment of nuclear weapons by nuclear-weapon states outside their territories does not violate the letter of the NPT, it certainly conflicts with its spirit. Indeed, one cannot speak of a non-nuclear status of states which have nuclear arsenals, even those which they have no control of, on their territories. It is no mere chance that many states go further and, on concluding treaties on nuclear-weapon-free zones; specially stipulating not only non-acquisition of nuclear weapons, but also non-deployment on territories of zonal states and even for their non-transit.

"The 1992-1994 Ukrainian precedent" has illustrated that a state on whose territory another state's nuclear weapons lie might want to seek rights to these weapons. According to data of the international organization Greenpeace, U.S. tactical nuclear weapons, in particular, which were deployed on bases in Germany, Belgium and Greece, belong not only to the United States, but to the listed states as well since pilots of these states gain access to the weapons during training flights and, supposedly, will gain access to them in case of a military conflict.<sup>43</sup>

At present nuclear weapons of the two states - the United States and Britain - are also located outside their national territories. It is first of all 500 B61 nuclear aviation bombs on aviation bases in Germany, Belgium, Britain, Italy, Greece and Turkey. In addition, more than fifty British WE-117 nuclear tactical aviation bombs for Tornado fighter-bombers are deployed on bases in Germany.

In order to reduce proliferation risks, it would be very important to withdraw these weapons from the territories of Western European states, where they are currently located.

One cannot expect automatic support of the Russian initiative by the United States and Britain. It is no mere chance that a Pentagon's top official, in his interview to the Segodnya newspaper, stated the day before the Summit that these aviation bombs "do not have military importance and are not targeted against anybody. They have a stabilizing influence on the situation in Europe since they are a means of nuclear deterrence that nuclear-weapon states - members of NATO can use." The West does not plan to relocate or deploy more nuclear weapons in Europe in case of NATO's enlargement since "there is no need to conduct additional negotiations with Russia on this issue."<sup>44</sup>

At the same time it is high time this question were brought up for an active discussion at various levels. It is noteworthy that a number of G-8 states were very responsive to this new initiative of Moscow. Thus, Canada's Ambassador in Moscow Jeremy Kinsman called it "realistic and reasonable." According to his words, "it is unlikely that any nuclear-weapon state has plans to expand the zone of its deployment."<sup>45</sup>

#### Nuclear-Weapon-Free Zones in Europe

All the same, the main agenda of the Russian delegation was to uncover the true stance of the Western partners, first of all the United States and Germany, towards creating a nuclear-weapon-free zone in Central and Eastern Europe. Only a year ago, at the NPT Review and Extension Conference, Russia was skeptical about this scenario, today the situation is fundamentally different (it is regrettable that Russian diplomats did not foresee it then). NATO's enlargement to the East, with Poland, Hungary, Czechia and Slovakia's entry, will become inevitable in the spring of 1997 and Russia will have to tolerate it. Deployment of Russian tactical nuclear weapons in Belarus and on the warships of the Baltic fleet (in spite of the START I Treaty and the Lisbon Protocol) is more likely to be bravado, which is backed up with neither military, nor diplomatic calculations, rather than a reasonable way out.<sup>46</sup> Hence, Russia needs space for a diplomatic maneuver to forestall the possible deployment of nuclear weapons in the new states parties to NATO.

Of course, a Treaty on non-deployment of nuclear weapons outside national territories adopted by the "nuclear five" would rule out this risk. It is also understandable that it will take long to develop such a document once it started. While the issue of the creation of a regional nuclear-weapon-free zone could be resolved very quickly, especially given two factors: first, there is considerable experiences in creating regional nuclear-weapon-free zones (only recently two new zones - in Africa and in the South-East Asia - have been created), including legal aspects; second, there is Belarus's initiative,<sup>47</sup> which aroused the interest of Ukraine, Sweden and Austria; in addition, such authoritative international non-governmental organizations as the Pugwash movement and Physicians for Prevention of a Nuclear War insist that such a zone be created.<sup>48</sup>

It is no mere chance that during the Summit there was a series of official and unofficial statements regarding the creation of a nuclear-weapon-free zone in Europe. Thus, Deputy Foreign Minister of Russia, Igor Ivanov, in his interview to Yaderny Kontrol, said that "Russia's position of principle is to create as many nuclear-weapon-free zones as possible (and) Russia would only welcome the creation of a nuclear-weapon-free zone in Central and Eastern Europe."<sup>49</sup> Sergei Kislyak, Director of Russia's Foreign Ministry's department for security and disarmament, added, "especially given the possible enlargement of NATO into the East, this idea is becoming more and more acute and it has been increasingly

discussed among specialists."<sup>50</sup> The Press-Secretary of the President of the Russian Federation, Sergei Medvedev, affirmed that Russia's official policy is creation of nuclear-weapon-free zones everywhere where there are currently no nuclear weapons: "in Eastern Europe, including the outlying districts, a de-facto nuclear-weapon-free zone has emerged. Russia believes that if this nuclear-weapon-free zone were not legally finalized now, it would be "a missed chance."<sup>51</sup>

It is understandable that neither the United States, nor Eastern-European states welcome the idea of a nuclear-weapon-free zone in Central and Eastern Europe. On the other hand, if Russia and the United States reach mutual understanding regarding this issue, it will be difficult for Poland, Czechia, Hungary and Slovakia to refuse this idea. Their refusal would mean that they are seriously considering the possibilities of deployment of nuclear weapons on their territories. In addition, in case of the creation of a nuclear-weapon-free zone, these states would receive special security assurances.

Today it is too early to speak of borders of the European zone (or zones). Russia and the United States would probably prefer that it is not only Belarus (and moreover, not Russia), but some Central European countries that put up this initiative. In addition, Sweden's official proposal to start a discussion on creating a nuclear-weapon-free Baltic-Black Sea corridor appears only logical.<sup>52</sup> Beginning in April 1996, Russia, too, has been proposing, at official and unofficial levels, to include the issue of a European nuclear-weapon-free zone into agendas of large international forums. I think that neither the United States nor NATO have weighty premises to turn down this initiative.

At the Summit the issue of creation of a nuclear-weapon-free zone in Central and Eastern Europe was not even addressed, although "various ways" were being studied to avoid confrontation during NATO's enlargement.<sup>53</sup> It was noted at the meeting between Boris Yeltsin and Helmut Kohl that "the coming months should be used to find solutions with due consideration to the interests of Russia and of those states that are seeking membership in the Alliance."<sup>54</sup> At the same time Chancellor Helmut Kohl, leader of the state whose eastern part is "a nuclear-weapon-free zone" under the Treaty 2+4, was skeptical about prospects of creating such a zone in Europe, adding that "its time has not yet come."

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The results of the Moscow Safety and Security Summit are not so sparse as they might at first appear. The documents adopted on the Summit results, as well as the statements made during the Summit, raise a number of key problems, set objectives before the G-8 governments, and indicate ways of solving them. The major result of the meeting is that Russia has returned to the political scene as a great power which is no longer kept waiting outside in the corridor during discussions and is no longer "reprimanded" for

its "mistakes" and that the P-8 dialogue on nuclear safety was conducted on an equal basis, with no division into "elders" and "youngers." Russia demonstrated its capability to put forward responsible and considerate initiatives.

Of course, the Club of 7 has just begun to turn into the Club of 8, and Russia's low economic performance will be the major obstacle on this way; so far there has also been unwillingness on the part of the United States, Canada and Japan to create a permanent G-8. However, this process has had a dignified beginning.

1 Press-Conference of Russia's President Boris Yeltsin and France's President Jacques Chirac on results of the G-8 Nuclear Safety and Security Summit Moscow, April 20 1996. - Federal News Service. April 20, 1996, 16:00.

2 Ibid.

3 See Bulletin of USEA News, June 21, 1995.

4 Izvestia, April 18, 1996, p. 5.

5 Izvestia, April 19, 1996, p. 3.

6 Segodnya, April 19, 1996, p. 1.

7 Press-Conference of Yuri Baturin, Presidential Aide for National Security . Moscow. April 18, 1996. - Federal News Service. April 18, 1996. 18:00.

8 Press-Conference of Presidents Boris Yeltsin and Jacques Chirac.

9 Ibid.

10 The Moscow Times, April 4, 1996.

11 As a result of the discussions, a "background document on nuclear safety and security" was disseminated, which included agreed positions of the Summit's participants regarding nuclear material accounting and control, safety of civilian nuclear reactors, nuclear waste management, safe and effective management of weapons fissile material designated as no longer required for defence purposes.

12 Speech of Russia's President Boris Yeltsin at the Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 2.

13 The Moscow Nuclear Safety and Security Summit Declaration. Moscow, April 20, 1996, p. 1.

14 Ibid.

15 Speech of Russia's President Boris Yeltsin at the Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 15.

16 See Andreyeva Guba: Another Nuclear Theft Has Been Detected (Investigation Report by Mikhail Kulik), Yaderny Kontrol Digest #1 pp.17-21

17 NPT. CONF/1995/L.8, p. 2.

18 Press-Conference of Deputy Foreign Minister of the Russian Federation Igor Ivanov and Director of Security and Disarmament Department of the Foreign Ministry of the Russian Federation in the press center of the Foreign Ministry of the Russian Federation on April 18 1996. - Federal News Service. April 18, 1996. 14:30.

19 Ibid.

20 The Moscow Nuclear Safety and Security Summit Declaration. Moscow, April 20, 1996, p. 3.

21 Speech of Russia's President Boris Yeltsin at the Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 8.

22 The Moscow Nuclear Safety and Security Summit Declaration. Moscow, April 20, 1996, p. 2.

23 Speech of Russia's President Boris Yeltsin at the Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 13.

24 The Moscow Nuclear Safety and Security Summit Declaration. Moscow, April 20, 1996, p. 2.

25 Press-Conference of Yuri Baturin, Presidential Aide for National Security . Moscow. April 18, 1996.

26 Speech of Russia's President Boris Yeltsin at the Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 11.

27 Programme for preventing and combatting illicit trafficking in nuclear material. Moscow, April 20, 1996, p. 1.

28 Ibid.

29 Statement on Comprehensive Nuclear Test Ban Treaty. The Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 1.

30 Press-Conference of Russia's President Boris Yeltsin and France's President Jacques Chirac on results of the G-8 Nuclear Safety and Security Summit Moscow, April 20 1996. - Federal News Service. April 20, 1996.

31 The Statement of the Press-Secretary of the President of the Russian Federation regarding a CTBT.

32 Ibid.

33 The Statement on Ukraine. The Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 1.

34 Press-Conference of Russian President Boris Yeltsin and French President Jacques Chirac on results of the G-8 Nuclear Safety and Security Summit Moscow, April, 20 1996. - Federal News Service. April 20, 1996.

35 Ibid.

36 According to environmentalist Alexei Yablokov, it is five years or even less. Interfax, April 11, 1996.

37 Interview of Deputy Foreign Minister of Ukraine Konstantin Grishchenko to Interfax-Ukraine, April 20, 1996.

38 Interfax, April 20, 1996.

39 The new features include: the reduced positive steam coefficient, new-design control rods, quick-acting emergency protection devices, on-tap reserves of reactivity, closer metal monitoring, changes in the operating regulations, no unauthorized cut-out of emergency protection, etc.

40 Concerning the Chernobyl nuclear power station (Findings and Conclusions of International Expert Groups). Reference material for the Moscow Nuclear Safety and Security Summit. April 19-20, 1996, pp. 11-13.

41 Ibid.

42 "Russia has undertaken most vigorous measures to concentrate promptly in its territory all nuclear weapons of the former Soviet Union. The year 1996 will witness the final stage of this work: the withdrawal of nuclear arsenals from Byelorussia and Ukraine and their dismantling. I believe, it is in our mutual interest to make sure that nuclear weapons of all nuclear states are concentrated solely within the boundaries of their own territories." Speech of Russia's President Boris Yeltsin at the Nuclear Safety and Security Summit. Moscow, April 20, 1996, p. 13.

43 Interview of Vladimir Orlov with Joshua Handler, April 1995, New York.

44 Segodnya, April 19, 1996, p. 1.

45 Interfax, April, 19, 1996.

46 It is no mere chance that Presidential Press-Secretary Sergei Medvedev at the press-conference on April 19, 1996, undubiously indicated that Russia is not considering re-deployment of nuclear weapons in Belarus or deployments in Kaliningrad Region or on warships of the Baltic fleet. The Presidential Press-Secretary underlined that such actions would conflict with Moscow's present policy.

47 At the NPT Review and Extension Conference, Belarus' Foreign Minister Uladymir Syanko noted the importance of the existing and emerging nuclear-weapon free zones and recalled that "Belarus mentioned a possibility to create this kind of zones in the center of Europe as far back as in 1990. Today, with Ukraine's recent decision on being non-nuclear, one could speak of specific grounds for the implementation of this idea. We are somewhat concerned, however, about possible risks of more and more places in Europe being used for nuclear weapons deployment in case of NATO's geographical expansion."

48 One of the movement's leaders, Dr. Ron McCou from Malaysia, made an appropriate statement at its press-conference in Moscow (see Interfax, April, 16 1996).

49 Press-Conference in the Foreign Ministry of the Russian Federation, April 18, 1996.

50 Ibid.

51 Press-Conference of Presidential Press-Secretary Sergei Medvedev on April 19, 1996. Cited on Interfax, April, 19, 1996.

52 See Yan Prawitz. A Nuclear-Weapon-Free-Zone from the Black Sea to the Baltic Sea. A report was submitted to the Pugwash Workshop that took place in Moscow in March, 1996.

53 In this respect a document adopted on April 19, 1996, at the Yeltsin-Chirac bilateral meeting regarding a new European security system. The document admits that "one cannot take into consideration only military aspects while solving problems of European security." "We have come to a joint understanding that the OSCE should be a basis of a European Security Architecture, which includes three main constituents: the European Union and its defence link - the Western European Union, the North-Atlantic Organization, and Russia as an essential part of European security

architecture. We believe that strengthening the OSCE and development of cooperation of the three main constituents will play a specially important role in Europe's security and stability." - A Joint Statement of Presidents Boris Yeltsin and Jacques Chirac on European Security Architecture. Moscow, April 19, 1996.  
54 Interfax, April 19 1996.

## NUCLEAR-WEAPON-FREE ZONES. WILL THEY LEAD TO A NON-NUCLEAR WORLD?

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Relaxation of nuclear confrontation between the key nuclear-weapon powers, although yet not stable enough, provides an incentive to seek more radical solutions of the nuclear problem. Some regions in the world are actively seeking ways to create nuclear-weapon-free zones (NWFZs). Recently two more NWFZs have been added to the old ones in Latin America and the South Pacific. The first regional treaty was concluded in Bangkok last December, and the treaty establishing an African nuclear-weapon-free zone is expected to be signed in Cairo on April 11. All five of the nuclear-weapon powers - Russia, the United States, China, Britain and France - have been invited to the signing ceremony.

Practically all states in the zones, numbering more than a hundred, are parties to the Treaty on the Nonproliferation of Nuclear Weapons (the NPT), which was indefinitely extended last May. This means that all of them have undertaken not to create nuclear weapons. However, all of these states are also seeking ways to strengthen their non-nuclear status - this time at the regional level. Why?

The answer is that a NWFZ provides them with enhanced security. Unlike the NPT, regional treaties prohibit not only production of nuclear weapons, but also stationing of such weapons that belong to nuclear-weapon powers on the territory of the region(they prohibit even temporary and transit - while transporting by sea or by air - stationing). The zones give their members another important advantage - legally mandatory security safeguards of their non-nuclear status, which the NPT does not give. These safeguards are given in the form of the nuclear-weapon powers' adherence to a special protocol which is an integral part of the regional treaty.

The model created by these zones has attracted the attention of the other regions of the world. Arab states, led by Egypt, have been more actively raising the issue of creating a NWFZ in the Middle East. The current process of political settlement there under the aegis of the United States and Russia is establishing certain preconditions for creating a nuclear-weapon-free zone or a zone free of weapons of mass destruction. Of course Israel is not going to easily part with its nuclear potential, but its leadership has already begun to think over whether their negative stance prevents progress toward establishing a true and lasting peace in a region incessantly inflamed with armed conflicts and terrorist acts. It is not

by chance that Israel's Prime Minister Shimon Peres has recently stated, "Give me peace and we will renounce our nuclear program."

Prospects for creating a NWFZ are more uncertain in South Asia because of the nuclear potentials of two rival states - India and Pakistan, which, moreover, have been struggling over Kashmir for many years. Unlike the Middle East, where the problem can be resolved at the regional level, India flatly rejects the local approach, arguing that it has global interests and needs deterrent capabilities not only against Pakistan, but other states as well. To all appearances, India will agree to shrink its nuclear capabilities only if its northern neighbor, China, along with the other nuclear-weapon powers will do the same.

Nonetheless, certain mutual relaxation and confidence-building measures can be carried out even here: in the region which bears the highest risk of a nuclear conflict and is close to Russia's and the other CIS states' borders. Neither the Soviet Union, nor today's Russia have been paying sufficient attention to how to settle and diminish nuclear confrontation between the two countries on the Indian subcontinent. In our opinion, Russia has a lot of unused resources for doing so, which could strengthen Russia's and its southern neighbor states' security and boost Russia's international standing in the region and in the world.

The global tendency to resolve the nuclear problem at the regional level extends to new regions as well. Some time ago Belarus sponsored an initiative to create a NWFZ from the Black Sea to the Baltic Sea, which would cover states in Central and Eastern Europe. These states are parties to the Treaty on the Nonproliferation of Nuclear Weapons and they would be happy to receive more reliable safeguards, which is but a natural desire, given the fact that neither strategic nor political stability has been reached on the continent.

It is well-known that some of the Central and Eastern Europe countries want to join NATO, but do they really want to and does it correspond to their interests if NATO's nuclear weapons are deployed on their territories? When Germany was reunited, it was agreed in the Treaty on the final settlement in Germany of September 1990 that neither NATO nuclear weapons nor their delivery systems would be deployed on the former GDR's territory. This is an important precedent and it would be reasonable to develop it and to legally consolidate a fully non-nuclear status of Central and Eastern Europe, in other words to establish a NWFZ there.

In the United Nations Kirgiz government put forward a similar suggestion regarding creating a NWFZ in Central Asia.

The newly independent states in Central Asia have for a long time been a testing ground for various nuclear experiments and exercises. There is the former testing ground in Semipalatinsk, a production association for research on nuclear rocket engines, experimental nuclear reactors, the Ulba plant fabricating nuclear power engineering fuel, uranium mines, and many other facilities. There used to be silo-based launchers of heavy multiple warhead nuclear missiles. The Chinese nuclear testing ground in Lobnor is also not far away.

Specialists and analysts in Central Asia are currently actively discussing the expediency of the fully non-nuclear status that would be consolidated by an international legal instrument. Of course, creating of NWFZs is a matter of states' free-will.

However, it appears obvious that such zones are gradually paving the way to a non-nuclear world and to the complete liberation of mankind from the nuclear sword of Damocles.

Vladimir Orlov, editor-in-chief of the Yaderny Kontrol journal, interviews  
Yuri Baturin, Presidential Aide for National Security.

#### NUCLEAR SECURITY: BEFORE AND AFTER THE MOSCOW SUMMIT

Q. Yuri Mikhailovich, what do you think to be the crucial thing at the Moscow G-8 Summit?

A. It is important that all G-8 states realize their responsibility for strengthening security of the nuclear energy sector and the necessity of taking coordinated approaches to this problem. All G-8 leaders, not denying the need to diversify energy power resources and to continue research in the area of alternative energy options, consider the nuclear energy sector to be one of the most promising options and are rejecting "radiophobia." All of them agree that the nuclear energy sector, being one of the major energy sectors of the XXIst century, should meet ever-increasing safety requirements to rule out accidents which might result in contamination of large territories.

Finally, the fact that the Safety and Security Summit participants gathered in Moscow testifies to the fact that the principle of equal partnership, on which the G-8 is based, is becoming a reality.

Q. There have been many rumors associated with illicit trafficking in nuclear material, or just nuclear smuggling. Does Russia admit there is a problem?

A. Russia proceeds from the necessity to prevent by all possible means illicit nuclear trafficking. We admit that there is such a problem and that illicit nuclear trafficking even with small quantities of nuclear materials poses a threat. However, we believe that this phenomenon has not so far reached the level that would allow speaking of the threat of nuclear material proliferation for the purpose of acquiring weapons and that the scale of this problem has been to a large extent exaggerated by the mass media.

Given the fact that the problem of nuclear diversions concerns interests of various states and their citizens, its solution needs prompt and coordinated action of all states concerned.

Russia's Penal Code has four articles that stipulate for liability of illegal handling of radioactive substances. A special governmental commission has been set up to deal with nuclear weapons complex-related issues; The State Program of the Russian Federation for creating and equipping with physical protection systems facilities of the nuclear weapons complex, of atomic industry, of power engineering and research facilities of the Atomic Energy Ministry of the Russian Federation and facilities of the Defense Ministry of the Russian Federation has been worked out and has begun to be

implemented, which stipulates for measures to improve physical protection at nuclear facilities. A number of laws have been adopted or are being developed, which regulate: procedures for accounting, control, storage, and physical protection of nuclear material and facilities, procedures for handling nuclear weapons and their components and for providing their safety and security during nuclear weapons production, storage and transportation; licensing procedures for granting access to nuclear materials and for operating nuclear facilities, as well as for moving, transporting and selling nuclear material; and control by law enforcement bodies and general prosecutor's office over implementation of appropriate acting laws.

This system of measures have been developed and implemented in cooperation with the Atomic Energy Ministry, the Defense Ministry, the Interior Ministry, the Foreign Economy Ministry, Gosatomnadzor, the General Prosecutor's Office, the State Customs Committee, the Federal Security Service, the External Intelligence Service, and the Federal Frontier Service.

Q. What are the first conclusions of the governmental commission?

A. According to analysis of the recently detected cases of illicit nuclear trafficking, the stolen material was not weapons-grade nuclear material. As a rule, it was natural uranium, as well as uranium dioxide containing from 2 to 4 percent of uranium-235 (in a number of cases it had a higher enrichment degree). In some cases the stolen materials were to be smuggled outside Russia.

As to the weapons-grade materials, we should point out that at Russia's nuclear facilities there is and has always been a well-adjusted and strict system of accounting, storage and protection of nuclear weapons and their components, which meets IAEA requirements and which is constantly upgraded with due consideration to the situation at a specific facility in particular and in the country in general.

Q. What about the so-called "nuclear mafia"?

A. According to analysis of data available to Russian concerned organizations, on the territory of the Russian Federation there are currently no organized criminal rings that specialize in this area only. Neither Russian, nor foreign interested organizations and agencies have so far managed to trace at least one final buyer of nuclear material. All those people involved in scandalous cases and mentioned by the press were just mediators who had nothing to do with nuclear facilities and had no idea about material they traded. So far, there have been no cases when "rogue states" showed interest in nuclear material.

It appears that these people went into this type of illegal business for profit which has been exaggerated by incompetent information and often obvious misinformation published by the press, producing an impression of an existing "black market" for nuclear material. It appears that this kind of campaign might result in an uncontrollable growth of offers for illicit market of nuclear materials and in an increase in the number of people who want to get "easy money" by all means. And one of the dangerous accompanying elements of this process might be emergence of a considerable number of radioactive substances, dangerous to people's health and to the environment.

Q. Is Russia ready for full-scale cooperation with its G-8 partners in such a sensitive area as security at nuclear facilities?

A. Russia's leadership speaks for expansion of international cooperation and coordination to combat illicit nuclear trafficking. We assume that it is a responsibility of a sovereign state that has nuclear material to provide nonproliferation, physical protection, safety and security of such material, and it is liable for consequences if its disappearance, diversion or unauthorized movement. At the same time it is necessary to assist the IAEA in using its numerous capabilities to strengthen physical protection and to improve accounting and control systems. It is important to establish cooperation and coordination between law enforcement bodies of various states. We believe that the following principles should become a basis of bilateral coordination in preventing illicit nuclear trafficking. Number one, relevant data should be confidentially transmitted. Number two, cooperation should be based only on confirmed information, including on technical expertise. Number three, information regarding specific facts of illicit nuclear trafficking should be strictly controlled and, if necessary, closed for the mass media until investigations are over. Number four, samples of intercepted nuclear material should be examined under international control in a country where this material has been supposedly stolen, since laws of many countries stipulate that samples of stolen or smuggled material should be produced as evidence in court. Number five, sting operations that provoke criminal activities should be prohibited.

Law enforcement bodies and special services of interested states should be especially careful while creating and using the so called "controlled channels for illegal supplies of nuclear materials," since this might produce an impression of an existing "black market" for nuclear material and might increase the demand for fissile material on the part of criminal rings.

Q. What is your evaluation of such contacts with the United States and Germany?

A. Russia has the most close contacts in combatting illicit nuclear trafficking with Germany. Talks between the Federal Security Service in Bonn and Moscow and further contacts with the BKA representatives have made it possible to establish an operative information exchange, to coordinate joint actions, and, finally, to uncover individual nuclear dealers and prevent their criminal activity. In addition, the joint consultations between the FSS and BND/BKA officials regarding evaluating threats in this area allowed our positions to merge for mutual understanding on a number of debatable issues to be reached.

We have been expanding our cooperation with special services in a number of the former Soviet republics - Ukraine, Belarus, Moldova, Kazakhstan and Uzbekistan. There has been consultations with officials from special services of Poland, Romania, Hungary, France and Great Britain. At the same time Russia is ready for multilateral cooperation in the area of concept development and exchange of experience of how to strengthen protection of nuclear facilities and material and to create equipment systems to control and protect fissile material.

The Group for nonproliferation, which was set up by the G-8, is also concerned with the issues of combatting illicit nuclear trafficking. At its meeting in Ottawa in October 1995, the Group adopted a program to fight this phenomenon. Within the framework of the Group, a subgroup was set up to analyze intercepted nuclear material, which has held two organizational meetings (the first was in November 1995 in Livermore, USA, and the second - in January 1996, in Karlsruhe, Germany). At the international level the cooperation is carried out within the IAEA framework. The Agency adopted a program to combat illicit nuclear trafficking, which stipulates a whole range of appropriate measures.

Q. Though the issue regarding nuclear diversions has been exaggerated by the press, there were grounds for its posing. One cannot but admit that the level of nuclear material protection, control and accounting in Russia proved to be lower than the one required by full-scale reductions of nuclear weapons and widespread dispersion of fissile materials.

A. Indeed, we have been reviewing the present system of nuclear material protection, control and accounting. It is not accidentally that Presidential Decree On Priority Measures for the Improvement of the System of Accounting and Safeguarding of Nuclear Material # 1923 from September 15 of 1994 was adopted and Resolution of the Government of the Russian Federation On 1995 Priority Measures to Develop and Implement a State System of Nuclear Material Control and Accounting # 34 from January 13 of 1995.

During implementation of these documents, the main directions were defined to improve the system of nuclear material protection, control and accounting in the Russian Federation. The following belong to them: to create a national normative-legal basis and to improve an agency one; to develop and implement the federal purpose program; to develop information software; to improve equipment; to improve systems of safety and security of nuclear materials at installations and during their transportation; to develop state and agency inspections over nuclear materials; technical control devices for technological processes, inspection services, frontier and customs controls; to improve inspection services of federal executive bodies; to provide personnel, including education programs, retraining, creation of education centers.

In addition to The State Program of the Russian Federation for creating and equipping with physical protection systems facilities of the nuclear weapons complex, of atomic industry, of power engineering and research facilities of the Atomic Energy Ministry of the Russian Federation and facilities of the Defense Ministry of the Russian Federation, which is now being implemented; it is proposed to include this program into the list of presidential programs. There is The Federal Program for developing and implementing a state system of control and accounting of nuclear materials, which is in its final stage of development. Its draft project is to be submitted to the Government of the Russian Federation in the first half of this year.

Projects of federal laws On state regulating nuclear and radioactive safety and On compensation for nuclear damage and nuclear insurance are being prepared. A Concept of the state system of nuclear material control and accounting have been worked out and Regulations for the state system nuclear material control and accounting are being developed. Basic data for creating an information system and recommendations for improvements in the structure of inspection services in the area of nuclear material control and accounting, statute and composition of an education center for control and accounting. A Concept of physical protection is being developed.

Regulations of physical protection of materials and installations in the Russian Federation prepared by Russia's Minatom in cooperation with Russia's other ministries and agencies are at the final stage of coordination. This document sufficiently encompasses provisions and recommendations contained in the Convention on Physical Protection of Nuclear Materials and in IAEA recommendations regarding physical protection of nuclear materials.

International cooperation in the area of physical protection of unsafe nuclear facilities has been primarily carried out on a bilateral

basis because of the sensitive nature of information. The Russia/Germany and Russia/United States cooperation in this area has made the greatest progress.

A complex U.S./Russia program for nuclear material protection, control and accounting is currently being implemented. The joint statement On general principles of cooperation between the Ministry of Atomic Energy of the Russian Federation and the Department of Energy of the United States in the area of nuclear material protection, control and accounting signed in January 1996 during the work of the U.S./Russia Commission for economic and technological cooperation (the Gore-Chernomyrdin Commission) points out that the U.S./Russia cooperation on nonproliferation issues has expanded over the recent years.

Eleven largest centers and enterprises of Minatom, seven organizations that do not belong to Minatom, the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission, and six U.S. leading national nuclear laboratories have been involved in U.S./Russia cooperation in this area. There are government-to-government as well as lab-to-lab U.S./Russia efforts.

At the governmental level there has been activities to upgrade systems of material protection, control and accounting at the PO [Production Association] Mayak in Ozersk city, at the Mashinostroitelny Zavod [Machine-building plant] in Elektrostal, at the GNI NIIAR [the State Research Institute of Atomic Reactors] in Dimitrovograd, at the NPO [Research-Manufacturing Association] Luch in Podolsk, at the GNI FEI [the State Research Institute of Physics and Power Engineering in Obninsk], and at the RKP KI [the Kurchatov Institute Center], etc.

In particular, a computerized system of material physical protection, control and accounting has been developed and introduced in a production line of low-enriched uranium-based fuel at the Mashinostroitelny Zavod [Machine-building plant] joint-stock company of Russia's Minatom (Elektrostal). Americans delivered equipment to control access to nuclear material and Russians tested it. Both sides have jointly developed requirements to equipment for a system of material physical protection, control and accounting, they considered non-destructive control practices from the point of view of material properties and procedures of physical inventory.

Specialists from Russia's Gosatomnadzor [The Federal Nuclear and Radiation Safety Authority of Russia - Tr.] and the U.S. Nuclear Regulatory Commission have made a joint inspection of material control and accounting at the joint-stock company Mashinostroitelny Zavod [The Machine-building plant - Tr.]. At the next stage of cooperation it is planned to upgrade a production line

for highly-enriched fuel for fast-neutron reactors, and to create a unified system of physical protection at the enterprise, including organization of a pass control system.

More and more direct contacts have been established between U.S. national nuclear laboratories and Russian research organizations. Cooperative efforts at the Obninsk institute and the Kurchatov institute have proved that U.S./Russia cooperation in this area could be very effective.

Q. A year has passed since the Treaty on the Nonproliferation of Nuclear Weapons (the NPT) was indefinitely extended. How much importance does Russia attach to this international document?

A. The consensus decision on the indefinite extension of the NPT has convincingly proved that it is a reliable guarantor of national and global interests regarding peace and security. It is important to continue to effectively implement the Treaty and to attract as many countries as possible to it.

Russia has been concerned that not all states in South Asia and in the Middle East have been covered by the Treaty. "Rogue states" in these regions have carried out certain nuclear activities, which could strengthen the proliferation threat and slow down the process of all states adherence to the Treaty. Unfortunately, another dangerous tendency has emerged: some East European parties to the Treaty, allegedly not understanding the letter and the spirit of this important international document, have been expressing their readiness to deploy nuclear weapons of other states on their territories.

We believe that the realization of the New York Conference decisions needs to undertake activities to prevent "spreading" of nuclear weapons into East Europe alongside with the G-8 diplomatic efforts to make "rogue" states adhere to the Treaty. At the present stage it would be reasonable to promote jointly the idea of creating regional zones free of nuclear and other kinds of weapons of mass destruction. Moreover, given the interest that the international community has shown in creating such zones at the conference. The most promising regions in this respect are the Middle East, Africa (where a nuclear-weapon-free zone has already been created) and, probably, Central Europe in the future.

In order to enhance effectiveness of the NPT, one should strengthen national systems of information control to prevent dissemination of direct or indirect information regarding nuclear weapon design and its production technologies, and to develop a global automated system of control and accounting of material that goes on the international market of nuclear materials and services. It is high time we started to develop an international agreement on a system

of safeguards to non-nuclear-weapon states, which would eliminate the possibility of the use of nuclear weapons against non-nuclear-weapon states. Today the G-8 and a number of other states should join their efforts to work out an international program to reorientate specialists who design and operate nuclear weapons towards peaceful uses of nuclear energy and maintenance of the nuclear weapon nonproliferation regime.

Q. Under the Agreement on application of the IAEA's safeguards of June 10, 1985, the USSR on a voluntary basis gave the IAEA a list of peaceful nuclear installations to be placed under the IAEA's safeguards. At a number of these installations they were successfully applied. What steps will be next?

A. Russia continues close cooperation with the IAEA in the area of safeguards. In 1991 a BN-600 fast-neutron reactor of the Beloyarsk NPP, which the Agency finds interesting as a possible promising direction in development of the nuclear energy sector, was finally placed under the IAEA's safeguards. New Russian peaceful facilities were added to the list of Russian peaceful facilities, which the Agency could inspect.

The Russian Federation also assisted and cooperated with the Agency in its activities regarding safeguards by providing it highly-qualified specialists and experts to carry out inspections in Iraq within the framework of the Resolution # 687 of the UN Security Council, and to evaluate the former nuclear weapon program in South Africa. In addition, Russian experts worked in consultative groups to develop approaches to evaluate effectiveness of the safeguards application and to find out the best ways to upgrade technical safeguards means. They also took part in activities of the Standing consultative group for safeguards application.

Russia continues to contribute to technical development of safeguards through a considerable volume of works within the framework of its national program of scientific and research support of the IAEA's safeguards, which is aimed at developing ways and procedures and technical means used in safeguards. In 1990-1994, more than 600 million rubles was spent on funding works stipulated for in the Russian national program and carried out by leading Russian research institutes and organizations, in 1995 it was 1.1 billion rubles. In 1996, it is planned to allot 1.7 billion rubles. Much importance is being given to research regarding development of methods and equipment for destructive and nondestructive analyses of nuclear material.

In the Russian Federation it has become a tradition to annually conduct international educational courses for IAEA inspectors: for beginners at the Novovoronezh NPP, and for advanced students on placing new nuclear installations under the IAEA's safeguards. In

addition, Russian research institutions organize training for personnel in the area of national systems of material control and accounting.

According to Russian experts, the IAEA's new measures to enhance the safeguards system (the 93 + 2 Program) have yielded positive results, especially in the area of detecting undeclared nuclear weapon activities. The Russian Federation has been providing considerable support to the program. Research has been carried out regarding the possibility of environmental monitoring to detect undeclared activities associated with designing and testing nuclear explosive devices. There are plans to detect indications of nuclear weapon activity, to perfect methods of selection and analysis of environmental samples and to evaluate efficiency of application of this method in international safeguards.

Special interest has been drawn to the possibility of using confidential information, including information received through national intelligence services, in a control mechanism. Russian experts believe that participation of the national intelligence services in informational support of control activity is justified. They do not rule out the possibility of information exchange between special services of different states within the framework of international regimes and programs aimed at reduction of proliferation risks.

Q. As far as I can judge, a national regime of export controls has already formed up in Russia. How smooth does the dialogue with the Western partners proceed in this direction?

A. The dialogue is taking place, though one cannot call it a smooth one. The Russian Federation has been actively participating in the work of the Group for development of principles of control over nuclear export and import, as well as over export and import of dual-use equipment and material and appropriate technology used for nuclear purposes. Jointly with the other nuclear suppliers, it verifies and updates control lists.

Russia has been constantly improving national systems of export control in the area of nuclear export and export of dual-use technologies. It has been working toward unification of requirements in this area. Its export policy is based on the principle of full-scope safeguards as terms for new deliveries. Under the Russian President's Decree # 312 of March 27, 1992, in the Russian Federation it is prohibited to export nuclear products to states which have no agreement with the IAEA on application of its safeguards to peaceful nuclear activities.

In order to increase effectiveness of the control mechanism, parties of the Nuclear Suppliers' Group have been exchanging information

regarding violations of the regime of dual-use materials and equipment export, information on nuclear programs of non-parties to the NPT, on cases when competent national organs refused to give licenses for dual-use materials and equipment export. Leading Western states propose to expand for this purpose exchange of information, including confidential information which is received through the use of capabilities of national intelligence services.

The Russian Federation has been consistently speaking against establishing "black lists" of states. We believe that our decisions on export to any state should be guided by the UN sanctions, by the fact of whether this state is a member to the Treaty or not, and whether it has an agreement with the IAEA on full-scope safeguards. Introduction of other limits in regard to the parties to the Treaty could undermine the regime.

# A NUCLEAR-WEAPON-FREE ZONE IN EUROPE: POSSIBILITIES AND EXPECTATIONS

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For several years Europe has been unsettled by two opposite, but equally important events. First the dissolution of the Warsaw Treaty Organization led to the disappearance of the balance of forces paradigm, including its nuclear foundation. Then, equally swiftly, the euphoria of perestroika was replaced by perception of danger from the East, which was considerably enhanced by the crisis in the former Yugoslavia. Entry of the former people's democratic states into NATO - the only currently efficient security structure in Europe, became a logical consequence of this syndrome. Flat rejection of the Alliance's expansion prospects by Russia prompted analysts to discuss the danger of returning to the Russia-West confrontation. The Russian President's warnings regarding bringing back the cold peace and the appearance of nuclear arguments in Russian political rhetoric became notable milestones in this process. The results of the last Russian Duma elections, as well as the coming presidential elections have only aggravated Europeans' concerns. In this connection, one of the leading proponents of the realist school of international relations, John Mearsheimer, made the observation that military conflicts will inevitably arise in Eastern Europe. Not because of historic rivalries or a resurgence of nationalism, but simply because all states are driven to seek military protection (1). However, it is understandable that Europeans are not interested in confrontation as a possible basis for a new Europe's security system, to say nothing of the nuclear component becoming a basis of a new balance of forces. This uncomfortable situation can be avoided, first of all, if the nuclear subject is legitimately ruled out from discussions regarding Europe's geopolitical structure. A regional nuclear-weapon-free zone could become a mechanism for implementation of this idea. The creation of a zone would be a major step toward a new all-European security system. It is no easy matter, but its discussion could pave the way for a broader debate among interested states.

## The Nuclear Component of European Security

At the end of September 1995, in Brussels, occurred an event that triggered Russia's decision to review its nuclear strategy regarding the West: the official concept of the North Atlantic Alliance expansion was made public. The document sets forth objectives and principles for implementing expansion. It carefully evades the issues of which states will become new members and when - issues that are painful to Russia. However, this did not prevent some analysts from drawing the conclusion that Russia should return to forceful means of asserting itself in Europe (2). The following provision became the starting point for this review: NATO retains

the right "to change the disposition of its nuclear forces depending on circumstances." An additional irritant were the statements of officials from Central-European countries that they completely accepted NATO's requirements, including the possibility of the deployment of nuclear weapons on their territories if necessary (3).

Another alarming factor are unfavorable reports from Russian experts regarding nuclear assurances that are to be given to new European members of NATO (4). Russia considered the threat of the use of nuclear weapons, which could prevent the Russian Armed Forces from carrying out military operations against a European country with nuclear assurances, to be a problem. It is assumed that one can avoid such threats without renouncing participation in this kind of conflict. One should be able to adequately respond with a new generation tactical nuclear weapons (the so-called pure nuclear warheads with small and hyper-small yields). It is evident that this formulation of the issue turns Europe's geopolitical structure into a familiar scheme of military balance.

There has been alarming information in the Russian press regarding letters and analytical notes sent to the federal government by researchers, agencies and institutions favoring Russia's resumption of nuclear tests (5, 6). It is but natural that such proposals cannot but find full understanding within the community of military experts who are professionally interested in updating the stockpiles of nuclear warheads. All this makes noteworthy the supposition that "one cannot rule out that the Russian side will insist on the inclusion of withdrawal clauses in the document (the Comprehensive Test Ban Treaty) in case some extraordinary events related to the subject matter of the treaty have jeopardized its security." (7)

The West paid attention to the fact that Russia has been more and more relying on its military power in its relations with the NIS. It has been pointed out that while Moscow faced obstacles in reestablishing hegemony over the territory of the former USSR through new economic and political approaches, it has "made great progress in the military sphere toward restoring much of the CIS to its control" (8). It is clear that Western analysts are concerned not so much with this problem as with the possibility of this scenario occurring in Russian-Central European and Russian-Western relations.

Here a number of key issues arise. First of all, it needs to be ascertained how real the threat is. Or, in fact, is the nuclear subject just a strong move in an ordinary political game. In this connection one should find it out how effective existing nuclear nonproliferation structures and mechanisms are. Will they be able to put out a resurgent interest in nuclear weapons and to provide reliable guarantees for implementing already concluded

agreements? Loopholes in existing agreements and treaties, which allow the parties to legally exceed the set arms limits, should be investigated and analyzed. The current situation makes one think about nuclear nonproliferation prospects in general and about what initiatives in particular could be the most productive in this area.

Is the Nuclear Threat a Reality?

May 11, 1995, New York. An event of historic importance took place: parties to the Nonproliferation Treaty (the NPT) adopted the decision on its indefinite extension. This was an indisputable success in the world community's efforts to curb the nuclear threat. The Treaty is an essential, but not a sufficient factor in eliminating the possibility of a nuclear conflict. The main thing is to implement the Treaty's provisions in practice, which will be neither a simple, nor a swift matter. This was proven by the decision made at the Conference that the five-yearly Review Conferences will continue to be held. Moreover, in each of the three years prior to these Conferences there will be a shorter meeting of a Preparatory Committee on the implementation of the Treaty and on ways to advance it. In practice this will mean that starting from 1997 there will be an NPT meeting every year, except the year immediately following the Review Conference itself.

The forthcoming difficulties are quite natural: nonproliferation has strategic and military aspects; it is concerned with international trade and economics; it has scientific and technological features; it bears on the tasks of the military and the police; it involves national and international institutional matters - in short, it represents a kaleidoscope of concerns and activities (9). And Europe is, of course, no exception in this sense.

It should not be ruled out that Russia might restore nuclear weapons-based military planning, which will use new generation nuclear weapons. For example, there is a program on developing a unified high-accuracy mobile missile system for the Russian land forces. Tests of an operational-tactical missile not covered by the Treaty on ISRM [IMF] limits have proven that this program is being developed (10). Yet, expectations that Europe's getting rid of the nuclear ghost is an irreversible process appear to be more realistic. The hypothetical possibility of nuclear weapons deployment on the territories of the new NATO states is likely to remain so. According to many experts, the West is not interested in a renewed escalation of tensions that will bring about nothing but large and worthless expenditures. With the dissolution of the Warsaw Treaty and the signature of the ISRM [IMF] Treaty, Western Europe is practically beyond the reach of Russian missiles.

In the aforementioned publication (11), Russian experts voiced their concern regarding U.S. developments of a new generation

nuclear warheads with small and hyper-small yields, usable in local conflicts. However, funding of U.S. nuclear programs has been sharply reduced and is continuing to be cut. In addition, the United States (as well as Russia) support a comprehensive and complete nuclear test ban, while development of a new weapon requires such tests, at least a minimum number of explosions using the smallest yields.

The Russian military's resurgent interest in nuclear weapons is quite understandable. In their opinion, nuclear weapons could restore the Russian army's image of a powerful and combat-ready unit that has been lost over recent years. But it is hardly feasible to carry out a program of upgrading the nuclear forces during an economic crisis. According to experts, the main reason why the State Duma has been delaying the ratification of START II is shortfalls in financing the nuclear disarmament process. Thus, it is premature to announce the end of the threat of nuclear confrontation in Europe until the presidential elections in Russia are over.

These considerations make it possible to conclude that, given the unwillingness of the sides to push their political grievances into the confrontation stage involving nuclear arsenals, it would be equally advantageous for everyone to altogether eliminate nuclear weapons from Europe. The creation of a nuclear-weapon-free zone in Europe would help NATO avoid its most delicate issue regarding assurances to the bloc's new members. On the other hand, Russia would not so flatly resist the Alliance's expansion under such terms. And Central Europeans themselves would feel more secure.

Is the Idea of a Nuclear-Weapon-Free Zone Viable?

Any important political initiative may produce the desired effect only if it is linked to the current political situation. The creation of a European nuclear-weapon-free zone is no exception. Europe has already faced similar, and at the time unsuccessful, proposals. The 1957 Rapatsky Plan, the 1958 Tito Plan, and the 1963 Kekkonen Plan are only few of the anti-nuclear regional initiatives. Three decades have passed since the United Nations recognized a nuclear-weapon-free zone as a useful means of providing regional and international security and encouraged their creation in every way, and since the General Assembly adopted appropriate resolutions, calling on states to undertake necessary efforts to complete legalization of the existing and creation of new nuclear-weapon-free zones.

However, this has not been backed up with action in Europe. For other incentives dominated at that time. Those incentives were clearly described by David Fischer, "Several NATO states suspected that the proposals [concerning NWFZ in Europe - V.Ch.] were designed to denuclearize NATO's front-line states which would have undermined the NATO doctrine of flexible response. They might

also have decoupled the U.S. from Europe since the U.S. would not leave forces in the European theater unless they were protected by nuclear weapons against the greatly superior conventional forces of the erstwhile Warsaw Pact ("no nukes, no troops" as the saying went). Third was the reluctance of the U.S. Navy (and perhaps the Royal Navy) to allow its freedom of movement on the high seas to be impeded by the constraints of an international treaty" (12).

Today, just a few years later, the situation in Europe is crucially different. Number one, NATO's doctrine does not (at least so far) contain a definition of the red enemy in the East, and Russia's official concept does not consider the North Atlantic Alliance its potential enemy. All states are currently more concerned with subregional conflicts and the threat of their spreading. In this situation it would be better for all states - in the West and in the East - not to have nuclear weapons in Europe altogether, rather than to think what to do with them in case they end up in a war zone or how to stifle the temptation to use them to resolve a problem. Number two, NATO and the United States seem to feel uncomfortable about the hasty statements of the leaders of Central European states regarding their readiness to deploy NATO nuclear weapons on their territories. No matter how important the West holds all-European values, the danger of an open confrontation with the largest nuclear power is a far too serious factor to ignore. Number three, Central Europeans, who so ardently desire assurances, will hardly receive them in the nearest future for the aforementioned reason. But they are likely to receive such assurances, even legally binding ones, from nuclear-weapon powers if there is a nuclear-weapon-free zone in Central Europe. Number four, from the military perspective, there have been no targets for tactical nuclear weapons (Short Range Nuclear Forces (SNF), according to the Western classification) since Soviet troops were completely withdrawn from Central European countries in 1994.

So what is a nuclear-weapon-free zone? The UN General Assembly defined it as "any zone recognized by the General Assembly of the United Nations, which any group of nations in free exercise of their sovereignty, has established by virtue of a treaty or convention." Such a treaty must ensure of the "total absence of nuclear weapons on the territory of the zone" and must provide "an international system of verification and control to guarantee compliance with the obligation deriving from that statute" (13). In addition, the United Nations recommends that nuclear-weapon states, in view of the complete absence of nuclear weapons in such zones, not to violate in any way the zone's non-nuclear regime and to refrain from threatening to use nuclear weapons against any state within the zone.

The idea to create a nuclear-weapon-free zone in humanity's natural habitat was first implemented by the Treaty on the

Prohibition of Nuclear Weapons in Latin America and the Caribbean, which is presently known as the Tlatelolco Treaty and which was opened for signature in February 1967. The Treaty is a model in many aspects. Its development brought about the key ideological principles of a nuclear-weapon-free zone that were subsequently included in the above-cited UN formulas.

First, it convincingly demonstrated that linkage of a political initiative to a situation could be a powerful guarantor of its successful implementation. Second, despite an almost unanimous desire among Latin American states to remove the nuclear threat, the process of coordinating their national security interests proved to be long and complicated: Cuba, which was the last signatory, adhered to the Treaty only in the spring of 1995 and has not yet ratified it. Third, the Tlatelolco Treaty has for the first time introduced a verification mechanism for compliance. It stipulates for full-scope IAEA safeguards to control nuclear activities within the zone, which are in fact identical to the Agency's inspections under the NPT. In addition, the IAEA has the right to carry out special inspections. The verification mechanism was considerably enhanced by the regional Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL) whose task is to constantly monitor the Treaty's regime in the region.

Fourth, a non-nuclear behavior code in the nuclear-weapon-free zone was set up for all states, irrespective of whether they are parties to the Treaty or not, provided they have territorial responsibilities within the zone (Additional Protocol I to the Treaty). Fifth, a formula of relations between the parties to the nuclear-weapon-free zone and the nuclear-weapon powers was developed. The latter undertook not to violate the Treaty's provisions and not to use nuclear weapons or threaten to use nuclear weapons against parties to the Treaty (Additional Protocol II to the Treaty). Sixth, and it is almost the most significant achievement of the Tlatelolco Treaty, all extra-regional states concerned with the provisions of the protocols have signed and ratified them. The United Nations also supported the Treaty. Thus, the regional precedent was recognized and approved by the world community.

As a result, a mechanism for realizing the idea of non-nuclear regional community life has been for the first time developed, successfully technologically implemented and consolidated at the level of the highest international forum - the United Nations, on the basis of the Latin American zone. Today one can state with confidence that nuclear-weapon-free zones are becoming a common international practice as one of the most effective means to reach the final goal - global nuclear security. The way paved by the Treaty of Tlatelolco has been continuously broadened. The number of regional initiatives is growing, the legal basis of nuclear-weapon-free zones is being improved, and accumulated practical

experiences accelerate the difficult process of their creation. Thus, after the Latin American nuclear-weapon-free zone, there appeared a nuclear-weapon-free zone in the South Pacific. The idea was first voiced in August 1984, and the Rarotonga Treaty entered into force already in December 1986. By the summer of 1995, a group of fully empowered experts had completed preparations of the text of a Treaty on an African nuclear-weapon-free zone. The approved document, which was named the Pelindaba Treaty, was opened to signature at the Cairo conference in April of this year (14).

At first the process of creating a nuclear-weapon-free zone in South-East Asia was somewhat delayed: it began in December 1987, when this idea was approved of at a regular meeting of ASEAN states in Manila and experts began to discuss it. The treaty was signed by seven parties at the ASEAN fifth summit in Bangkok in December last year (15). It should be specially pointed out that the Bangkok accord was delayed mainly because of U.S. and Chinese objections, who felt somewhat restricted by the regional non-nuclear regime. Last year a number of experts discussed the idea of creating a limited nuclear-weapon-free zone in North-East Asia (16). Supposedly, the zone would include Japan, the Korean peninsula, the Taiwan island, the biggest part of North-East China, South-East of the Russian Federation, and a part of Mongolia. The border of the zone is supposed to be a circle with a radius of 12,000 miles with the center in the middle of the demarcation line between North and South Korea.

Today experts are thoroughly exploring the possibility of creating a nuclear-weapon-free zone in the Middle East (17). It is evident why, since regional tensions are not declining. Although there has been so far little resemblance in today's Europe to the Persian Gulf, does the Balkan tragedy differ from, let us say, what Lebanon has gone through? And is there any certainty that the settlement in the former Yugoslavia will be a less complicated matter than the Israeli-Palestinian settlement? In any case, given the fact that the Middle East, with its only one "rogue" state, requires prohibitive anti-nuclear measures, Europe, which is a crossing point of many nuclear-weapon states' interests, equally urgently needs non-nuclear status.

Nuclear weapons became a regular instrument of high politics. Nuclear weapons-related debates are a constant subject for many politicians and experts. Will they manage to avoid the European aspect? It seems that this will depend on how promising and productive the alternative will be. As far as Central Europeans, including non-nuclear Ukraine and Belarus, are concerned, a nuclear-weapon-free zone in Central Europe would remove their most serious national security problem. (Incidentally, the idea of a nuclear-weapon-free zone was voiced by Belarus's officials at the 1995 NPT Conference).

Given the fact that integration tendencies are gathering momentum and politics are obviously subordinated to economic interests in Western Europe, one might conclude that Central Europeans will prefer the non-nuclear status quo to the fragility of the nuclear umbrella. In this connection famous political scientist and philosopher F. Fukuyama made a very shrewd observation, "To think that the European order emerging out of the cold war will return to competitive great power behavior...is to be unaware of the thoroughly bourgeois character of life in present-day Europe. The anarchic state system of liberal Europe does not foster distrust and insecurity because most European states understand each other too well. They know that their neighbors are too self-indulgent and consumerist to risk death, full of entrepreneurs and managers, but lacking in princes or demagogues whose ambitions are sufficient to start wars" (18).

However, let us refrain from drawing precise borders of the prospective European nuclear-weapon-free zone. Given the precedent of the Bangkok Treaty's delay, it can be assumed that the future of the next initiated nuclear-weapon-free zone will to a great extent depend on the large nuclear-weapon powers' positions, even on those who are not parties to the zone, but have their strategic interests within it. In the European case, this primarily applies to the United States and Russia.

The forward to the U.S. National Security Strategy published in February 1995 reads, "If we realize our goal - existence of a peaceful, democratic, prospering and indivisible Europe, we should cooperate with our overseas partners to expand a zone of stability all over the region." This clause is capacious enough to include the concept of a regional nuclear-weapon-free zone. Analysts list seven conditions of implementation that could ensure Washington's support for the NWFZ idea (19):

- initiatives to create an NWFZ must come from the states in the region concerned;
- all states whose participation is deemed "important" should be included;
- the zone arrangement should provide "adequate" verification of compliance with the zone's provisions;
- the establishment of the zone should not disturb existing security arrangements to the detriment of regional and international security;
- the zone arrangement should effectively prohibit its parties from developing or otherwise possessing any nuclear explosive device for any purpose whatsoever;
- the zone should not seek to impose restrictions on the exercise of rights recognized under international law, particularly the principle of freedom of navigation; and

- the establishment of a zone should not affect the existing rights of parties to grant to other states transit privileges, including port calls and overflights.

It is evident that the last two conditions might require experts' imagination, but the rest appear quite feasible. It is obvious that many factors will determine Russia's stance toward the creation of a Central European nuclear-weapon-free zone. The key ones are its basic geostrategic orientation - to maintain and develop partnership relations with the West - or an aspiration to at any cost restore its role of superpower and, correspondingly, to once again become the pole of force in the divided region. On the one hand, some emerging and growing forces in Russia are interested in aggravating the relations with the West and with NATO in particular. On the other hand, if Washington and Moscow reach equal partnership cooperation, those ultra-nationalists will be satisfied as well. And the most important thing is that there will be no losers in this case.

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## A NUCLEAR-WEAPON-FREE ZONE IN CENTRAL ASIA AS THE KEY FOR REGIONAL SECURITY

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for Strategic Studies

According to a number of political scientists, Central Asia today appears to be a geopolitically loose structure without clear-cut integrity<sup>1</sup>. In spite of its enormous territory - Central Asia is one of the largest continental massifs on the Earth - this region is not self-sufficient because it has no direct access to the oceans and to the main trade routes of the world. So far, this has to a certain extent limited communications with the region and kept it outside the priority interests of the leading states. Neighbors of the Central Asian states have also not considered the region's total military potential to pose a threat to their security.

At the same time, the post-Soviet environment, in which the Central Asian states are "loose" from their traditional "geopolitical anchor" - Moscow, has naturally brought out inner (sometimes very acute) regional grievances regarding a number of economic and political problems, territorial and ethnic disputes, and strategic disagreements.

Researchers point out, for example, that the "multi-directional policy" to create a friendly "security belt" of neighboring countries is appropriate for Kazakhstan, which is the richest in resources and has the largest territory, but is also the most ethnically heterogeneous of all the Central Asian republics<sup>2</sup>. As far as Kazakhstan's neighbors are concerned, they are not so rich in resources, but they are not located closely to the great powers and civilizations, which means they have more freedom to choose priorities inside and outside the region. This cannot but bring about certain grievances among the Central Asian states, which results in insufficient coordination of their foreign policies.

However, despite the fact that analysts pay appropriate attention to internal regional grievances, experts usually consider the problem of stability in Central Asia in the regional context. The aforementioned regional limited communications and resulting vital need for patronage have to a certain degree paradoxically created foreign strategic interests in this region. It is a clash of great powers' interests that might bring about dangerous tensions in Central Asia.

For example, some analysts express the opinion that Pakistan sees the new Central Asian states as a promising "strategic rear" of the

Islamic world in the Middle East<sup>3</sup> . It is well known that Iran and Turkey have been claiming the role of regional leader. And Moscow has been attempting to prevent this by all means, in particular, through neutralization of both the pan-Turkism of Ankara and the fundamentalism of Teheran, which are equally unacceptable to Russia. At the beginning of 1992, when Kazakhstan had to decide on the future of its nuclear stockpiles, some Eastern states (of course, in pursuit of their own interests) advised it to keep its nuclear weapons. They offered financial aid with expenditures for maintenance of the nuclear forces and assistance in the organization of their control systems.

The undisguised interest that Moslem leaders from the Near and Middle East showed in Central Asia has naturally provoked a response from their permanent opponent, Israel. The latter could not remain indifferent to the prospect of the spread of Islamic influence, above of all over such a large "newcomer" as Kazakhstan, and in January, 1992, the two countries established diplomatic relations, which they maintain today. The importance of this event to Tel Aviv is evident in the context of its super-sensitive problem - Kazakhstan nuclear capabilities and possible contacts between Alma-Ata and Teheran in the area of nuclear materials and technologies. In its turn, Iran has been very much concerned with the prospects of an Israeli presence in the region. As was learned during the recent visit of Iran's Foreign Minister Ali Akbar Veyalati to Central Asia and Transcaucasia, Teheran suspects that Tel Aviv is intent on establishing Israeli influence over a large area, including Central Asia, the Caucasus and the Persian Gulf region.

China's interest in Central Asia has been one of the most explicit ones. Researchers believe that Beijing can become a serious alternative to Moscow regarding claims for dominance in the region<sup>4</sup> . Western experts express the opinion that by 2000 the PRC might oust the Russian Federation and become the leading trading partner of Uzbekistan, Kazakhstan and Kirgizia, "yielding" Tajikistan and Turkmenia to the South Asian region.

Experts point out the following priorities in Beijing's policy in Central Asia to curb pan-Turkic's and fundamentalists' influence; to expand trade and economic contacts with the regional states in order to preserve its presence there and to be able to set up "supporting bases" in the region; to maintain a balance of political forces that, on the one hand, would support the existing political regimes in the region and, on the other, would preserve their grievances<sup>5</sup>. So far, China has been satisfied with this kind of status quo. However, in the future, the Chinese leadership might undertake a more radical political strategy regarding Central Asia, which would be primarily determined by the need to preserve its internal political stability.

The pragmatic Americans are the most open and consistent in setting forth their interests in Central Asia. Analysts present them as follows<sup>6</sup> :

- U.S. interests connected with relations of the region's states among themselves and with the Russian Federation. Since instability in Russia's neighboring countries, growing nationalism or discrimination against the Russian-speaking population might provoke Russia to undertake an authoritarian or expansion policy, it is in the interests of the West and the United States, which would like Russia to be a stable and democratic country, to facilitate development of friendly relations between the Central Asian republics and Moscow:
- it is in the U.S. interest if the states in the region are able to counteract any negative influences, especially armed conflicts, separatism and religious extremism;
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Thus, even after a brief analysis of the political situation inside and outside Central Asia, one can state that the current dynamic changes in the geopolitical landscape and the emergence of new world and regional leaders have increasingly affected the new Central Asian states. Being one focus of "the strong players" interests, they might become either an apple of discord or a connecting link between civilizations. The first scenario is extremely dangerous in the century of nuclear weapons, high technologies and global interdependence. The second requires implementation of appropriate initiatives.

### The Problem of Security in Central Asia

According to experts' estimates, Central Asia has a large potential for conflict, despite its aforementioned "geopolitical dependence." Practically the whole of the region's periphery is considered to be unstable. The current armed conflict between Tajikistan and Afghanistan has only proven this. If the Chinese Communist party's power is weakened in the future, it is likely that ethnic minorities living in the western part of this country - Uigurs, Kyrgyzs and Kazakhs, who have ethnic and religious ties with the populations of the Central Asian republics - will be more persistent in asserting

their rights. Instability of the Russian Federation is considered to be one of the dangerous factors as well. Many experts consider the possibility of its disintegration, which would inevitably be followed by bloodshed. For the same ethnic reasons - since millions of ethnic Russians live on the other side of the Russian south-eastern border - this undesirable scenario is likely to develop in Central Asia. In this case the only possibility to localize the destructive process inside Russia's borders is to strengthen national security in the former Soviet Asian republics. The key objectives of these republics can be summarized as follows:

- to strengthen state sovereignty, territorial integrity, inviolability of borders, economic security, political independence and ethnic-political stability;
- to overcome disunity and to concentrate all efforts on developing integration processes in Central Asia, first of all in the economic sphere;
- to prevent all kinds of regional conflicts, to counter foreign attempts to involve the region in political games and in the struggle for access to the region's raw materials.

Experts from Kazakhstan's Institute for Strategic Studies point out that, the seriousness and complexity of security issues themselves in the new Central Asian states have been complicated by the absence of an appropriate forum for joint discussions of problems and development of recommendations. Such a forum would be similar to such regional mechanisms as the Organization on Security and Cooperation in Europe (OSCE), the Organization of American States, and the Organization of African Unity, etc.<sup>7</sup> .

The first effort to fill this gap was made by Kazakhstan's President Nursultan Nazarbayev who, at the 47th UN General Assembly in October 1992, put forward an initiative to set up and hold a Conference on cooperation and confidence-building measures in Asia (CCCBMA). Despite the support that this idea received from a number of states in the region, it has not gathered the expected momentum: the specific nature of Asian international relations, a great number of disagreements, mutual claims and an increased risk of conflicts became the main obstacle on the way to creation of the "Asian OSCE".

However, it is evident that the problem of nuclear weapons will be among the key ones at the CCCBMA. And this is not by chance. Central Asia is the only world region where strategic interests of four de jure or de facto nuclear-weapon powers might clash: the Russian Federation, the PRC, Pakistan and India, not to mention the considerable interests of the United States. In addition, there is Kazakhstan that became non-nuclear, but retained huge nuclear-related source materials, technologies and personnel. It is also known that one of the Asian nuclear-weapon powers has thus far refused to stop nuclear testing. There are suspicions that some

other Asian countries are involved in the development of nuclear weapons.

Thus, nuclear nonproliferation on the continent is essential for creation of an Asian security system. As the world's experience has demonstrated, a nuclear-weapon-free zone (NWFZ) is one of the most efficient instruments for reaching this goal.

#### On the Way to Nuclear Security

Today practically the whole southern hemisphere has become non-nuclear. There are three NWFZs: the South Pacific NWFZ, the Latin American NWFZ and the Antarctic NWFZ. Recently NWFZs have been created in South-East Asia, covering all the ASEAN states, and in Africa. The possibilities of the creation of NWFZs in the Middle East and Central Europe have been discussed by experts.

The growing popularity of NWFZs is easy to explain: such zones have turned out to be an even more effective mechanism to protect their parties against nuclear danger than the main instrument of Nuclear Nonproliferation - the NPT<sup>8</sup>. They establish the non-nuclear status of the territory, which banishes any nuclear weapons from the zone, including nuclear weapons of nuclear-weapon powers (which is not stipulated in the NPT); in addition, the states in the zone receive legally binding security assurances from nuclear-weapon powers (which non-nuclear-weapon parties to the NPT do not have if they are not allies to nuclear-weapon powers).

At the spring 1995 NPT Conference, Kyrgyzia presented an initiative on creation of a NWFZ in Central Asia. Kyrgyz representative Askar Aitmatov suggested the following paragraph on creation of the zone be included in the final declaration of the conference:

"The Conference takes note of the interest of Kyrgyzia in creating a nuclear-weapon-free zone in Central Asia and considers that a nuclear-weapon-free zone in Central Asia would contribute to the strengthening of peace, stability and security in this region."

Kyrgyz delegation expressed their firm belief that such a zone based on legally binding and unequivocal security assurances is the best way to ban activities related to nuclear weapons production. The zone will introduce more strict control measures over nuclear materials export, in particular, full-scope safeguards on the territories of importers, and increase their effectiveness through joint inspections. The delegation also expressed their hope that the creation of such a zone in Central Asia, which borders two nuclear-weapon powers, will make these powers reduce their nuclear arsenals of their free will and will enhance regional stability. The enhanced stability will extend in a southern direction, which is critical from the point of view of nuclear proliferation<sup>9</sup>.

The Conference responded to this initiative with the following entry in the Report of Main Committee II, "The Conference takes note of the interest of Kyrgyzia and Uzbekistan in creating a nuclear-weapon-free zone in Central Asia and believes that it should contribute to peace, stability and security in the region. Kyrgyzia and Uzbekistan will submit specific proposals in this regard and would welcome their consideration by other concerned States"<sup>10</sup> .

Kyrgyz initiative has not so far received a wide resonance in Central Asia. This appears only natural since the idea, no matter how timely and attractive, had not been properly prepared. Thus, experts believe that it is necessary to hold preliminary consultations of all potentially concerned regional states in order to find answers to the following questions:

- which regional states, apart from Kyrgyzia and Uzbekistan, might be interested in creating a zone? (primarily Kazakhstan, Turkmenistan, Tajikistan and, probably, Mongolia, the latter having unilaterally declared itself a NWFZ);
- what should be the minimum number of parties for a NWFZ to enter into force?;
- what should be the mechanism for new parties joining the zone? It could be a permission procedure to adhere to the treaty or a rule similar to the one adopted by the Tlatelolco Treaty (which established beforehand the maximum borders of the zone covering all regional countries and set forth preliminary terms for the treaty's full entry into force; all states in the region should have the right not to accept these terms and not to apply the treaty's force to their sovereign territories);
- what is the substance and scope of assurances given to parties to the zone? For example, it should be discussed which assurances are more acceptable: those contained in the Tlatelolco Treaty, in the Rarotonga Treaty, or in the Pelindaba Treaty. Other proposals should also be considered;
- what are the terms under which the states in the zone might preserve their right to carry out economically important nuclear activities for peaceful purposes and under international control, such as mining, processing and transporting of raw materials, as well as export-import transactions involving them?;
- whether there is a necessity, in addition to IAEA's inspections, to set up a regional structure responsible for implementation and verification of compliance with the Treaty's provisions. And if yes, is it necessary to determine its composition, responsibilities and rights?

It is important to note that the territory of Central Asia is already free from nuclear weapons. Kazakhstan was the only nuclear-weapon state in the region. And the last nuclear device was destroyed at the Semipalatinsk testing site on May 31, 1995. On June 2, 1995, at the joint press conference held by Kazakhstan's Foreign Ministry, Kazakhstan's Ministry for Science and New

Technologies and by Kazakhstan's Agency for Atomic Energy, Kazakhstan declared itself a de jure and de facto non-nuclear-weapon state.

Thus, since no regional state has nuclear ambitions, it is possible to assume that discussing the creation of a Central Asian NWFZ will not become a sensitive process for potential parties to a treaty and implementation of this idea will not face great difficulties, except, probably, financial ones. Nevertheless, it appears important to conduct a preliminary analysis of possible reactions of the concerned parties.

#### KEY DEBATES

Kazakhstan. As has already been pointed out, its geostrategic location in Central Asia is the most specific one. On the one hand, Kazakhstan finds itself right between two nuclear-weapon states - China and the Russian Federation, each attempting to become the republic's main patron. Turkey, constantly in opposition to Iran, has been equally active in Kazakhstan. The United States also includes Kazakhstan on the list of its Asian political priorities. In this complicated situation, Kazakhstan, whose policy is to establish friendly relations with all its regional neighbors and which is interested in the region's stability more than any other state, could play the key role in the creation of a NWFZ. However, Kazakhstan has not so far sponsored such an initiative.

The following are hypothetical motives for which Kazakhstan could initiate the creation of a NWFZ.

First, the republic would receive additional political dividends to its non-nuclear status. This could have a positive effect on its international image, which has been somewhat undermined by the dissolution of the parliament and the extension of presidential powers during the absence of free elections.

Second, Kazakhstan would be able to strengthen its security through additional assurances from China and the Russian Federation, as well as from other nuclear-weapon powers, in case they approve of the creation of the Central Asian NWFZ.

Third, such an important initiative would help Kazakhstan assert its role as the regional leader and would make it easier for its leadership to promote other regional initiatives.

With due consideration to the specific nature of Kazakhstani-Russian relations in the political-military area, it is important to point out that Russia could not consider this idea to be a deviation from Kazakhstan's declared policy regarding strategic partnership with the Russian Federation. On the contrary, the NWFZ would a

logical step in the nuclear nonproliferation process, in which Moscow has been playing an important role.

So far, this idea has been discussed only at the level of experts. As an official from Kazakhstan's Foreign Ministry said, so far one can make out only problems which Kazakhstan will have to face: the creation of the zone will entail creation of yet another bureaucratic structure that will require appropriate funding from the republic. At the same time, the official was sure that the NWFZ would considerably strengthen Kazakhstan's national security.

In our opinion, this reaction is quite natural since this potentially productive idea has thus far not been backed by serious motivation and convincing arguments. There are no well-grounded arguments because there has not been an appropriate research-based analysis of the problem.

Uzbekistan. It has been common knowledge that this republic supported Kyrgyz initiative. Moreover, Uzbekistan independently put forward an initiative regarding creating a UN regional center for security in Central Asia. Being one of the key states in the region, Uzbekistan is traditionally fighting for the role of regional leader. For this reason it is in its interest to promote any substantial initiative that would help build an image as an independent political player that determines the regional situation. Tashkent's active support of the NWFZ initiative would to a certain extent counterbalance Kazakhstan's influence, which the latter gained through a number of initiatives (such as proposals on a Eurasian union and on the CCCBMA) made by Kazakhstan's president at various large forums.

The Russian federation. Since Kazakhstan became a non-nuclear-weapon state, Russia has lost a de jure possibility to locate its strategic nuclear forces on Kazakhstani territory without Kazakhstan's permission. It is common knowledge that during Soviet times Moscow regarded Kazakhstan's territory as some sort of protective belt for the European part of the Soviet Union from the threat from the East. This threat was primarily identified with China. And its strategic nuclear forces must have been deployed there against China.

Today the situation has fundamentally changed: Moscow and Beijing are having quite friendly, if not close, relations. These two countries do not perceive each other as strategic enemies. Nevertheless, a certain inertia of political thinking remains, and there is certain caution in their relations. In this connection the official Kremlin might initially produce a cold reaction to the idea of a Central Asian NWFZ.

On the other hand, Moscow cannot but be concerned with the presence of yet another serious political force in the region - the Islamic Republic of Iran. According to some Russian diplomats, Iran is considered to be one of the most serious threats to stability in Central Asia because of its undisguised ambitions. (However, one should observe that the Russian Federation and Iran have been developing a very close partnership.) A Russian diplomat noted in a private talk that the Russian Federation might be interested in the creation of the zone if Iran became one of its parties<sup>11</sup>. Supposedly, overall regional security will be enhanced if Iran, in addition to its obligations under the NPT, becomes a party to the NWFZ.

On the whole, considering all the pros and cons regarding the creation of the NWFZ, it can be assumed that Moscow's final reaction to the idea will be positive, provided experts do the appropriate work.

China. Its influence over the current regional processes is one of the strongest.

China's relations with the Central Asian states have more than a two-thousand-year history. However, it is Chinese-Kazakhstani relations that are the most important from the aspect of security. In this context the agreement on borders signed for the first time by the Republic of Kazakhstan and the PRC in April 1994 can be viewed as an event of historic importance. Following the memorandum on security assurances to Kazakhstan, signed by the leaders of the Russian Federation, the United States and Great Britain in December of the same year in Budapest, Beijing declared that it also gives security assurances to Alma-Ata. In particular, its memorandum reads, "China fully understands Kazakhstan's desire to receive security assurances. The consistent position of the Chinese leadership is to unconditionally refrain from the use of nuclear weapons or the threat of their use against non-nuclear-weapon states and nuclear-weapon-free zones. This position of principle applies to Kazakhstan as well. The Chinese government calls on all nuclear-weapon states to undertake the same commitment in order to enhance the security of all non-nuclear-weapon states, including Kazakhstan...China respects the independence, sovereignty and territorial integrity of Kazakhstan and is ready to make efforts to develop friendship and cooperation between China and Kazakhstan on the basis of the five principles of peaceful coexistence"<sup>12</sup>.

Chinese political scientists express the opinion that China will probably agree to extend these principles to the whole of Central Asia, in particular by creating a NWFZ.

It is evident that the creation of such a zone would correspond to Chinese interests for yet another reason: this scenario would rule out the hypothetical possibility that the Russian nuclear forces might be located on Kazakhstan's territory in case of changes in the regional and/or global situations.

Pakistan. Since the former Soviet Asian republics became independent, Pakistan has been among the first states to make their way into the region of the "newcomers". On the one hand, this can be explained with Pakistan's desire to outdo India in their traditional rivalry for influence and sales markets. On the other hand, the Islamic state claims a certain trusteeship over the new sovereign "brothers-in-faith". For this reason it is particularly interested in everything that is going on in the region.

Pakistan has already supported Kazakhstan's initiative regarding a CCCBMA and it is very likely to support the idea of a Central Asian NWFZ. However, Islamabad will provide active support to the initiative only if Delhi becomes involved: since Pakistan links all its national security-related problems to the threat which, in its opinion, comes from India. And the latter did not support the idea of a NWFZ in Central Asia. At the Conference on confidence-building measures in South Asia, which took place in Alma-Ata in February this year, the process of developing basic documents for this organization was brought to a standstill because of India's refusal to support the creation of a NWFZ on the territories of states parties to the Conference.

So far, the international community has not succeeded in persuading the unofficial nuclear-weapon powers, India and Pakistan, to adhere to the NPT as non-nuclear-weapon states. Their involvement in the project on creating a NWFZ in the center of the Asian continent might help solve this most sensitive problem in the area of nuclear nonproliferation.

Iran. This country could enrich its political assets if it supported the idea of a Central Asian NWFZ. Firstly, Iran could once again demonstrate its adherence to peace-loving policies. Secondly, the country has to seek alternatives because of the West's on-going blockade. One of the alternatives is to establish and maintain relations with the post-Soviet republics, primarily with the Central Asian ones. The opening of the Tejen-Serakhs-Meshkhed transport main road, which would connect Iran and Turkmenistan, provides Teheran with direct access to the entire Central Asian region. But the volume of goods traffic on the new transport road to the southern seas will depend on stability in Central Asia. Third, undertaking limiting obligations in addition to its NPT obligations, Iran could count on more international assistance in implementing its national nuclear program.

However, despite attractive political bonuses, there is a serious obstacle for Iran's active participation in creating a NWFZ. It is Israel and its policy regarding nuclear weapons. In other words, experts believe that it is very important to resolve Iranian-Israeli grievances in order to attract Iran to the project.

Turkey. In comparison with the other "main characters", which will determine the future of the Central Asian NWFZ, it appears that this country not only should have no objections to the creation of such a regional structure, but, on the contrary, it should be one of its most active sponsors.

First, Turkey's official foreign policy has always been in favor of strengthening regional and global security through peaceful means only. Its participation in another large-scale peaceful initiative would be a logical step in the Asian direction, which is a priority to Turkey.

Second, economic expansion has been the key credo chosen by Turkey for its assertion as a regional leader. It will be easier to implement on Asian territory, which is very attractive to Ankara, if this territory becomes militarily and politically secure. In any case, the creation of the zone would help reduce Russia's concerns over Turkish aspirations in Asia to "pipeline" disputes only.

Third, given Iran's possible hesitation regarding its participation in the NWFZ initiative, Turkey's support for this idea would provide the country with a considerable political advantage in the constant rivalry between these countries for leadership in Central Asia.

The United States. The United States links global and regional security first of all with nuclear nonproliferation. For this reason it is expected to welcome and support any initiatives promoting nuclear nonproliferation. This also applies to NWFZs.

Washington is concerned with the growing power of the Asian superstate - the PRC. It is also concerned with instability and political unpredictability of another large Eurasian nuclear-weapon power - the Russian Federation. That is why it is in U.S. strategic interests to undertake efforts that would help eliminate the very possibility of a conflict between these two states and to banish "dangerous objects" from the potential zone of conflict.

The United States has also been very suspicious about Iran. For this reason Washington would welcome any of Iran's nonproliferation-related activities.

The creation of a NWFZ would lift suspicions regarding illicit proliferation of fissile materials and nuclear and critical technologies through Central Asia.

There is also another consideration in favor of the creation of a Central Asian NWFZ, which is not directly related to the nuclear nonproliferation problem. Judging by the accumulated experience of such zones, the increased attention of national and international structures that verify compliance in a NWFZ make it possible to find out and prevent other forms of illicit activities. In Central Asia, it is drug business and the possibility of transfer of conventional arms to rogue states in the south and south-eastern parts of the continent.

The above considerations are far from being complete and will probably raise more questions than provide answers to the question put in the title. Research on this problem has just begun and its detailed discussion is still ahead.

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4 Kazakhstan and the World Community, # 3(4) 1995, pp. 30-31.

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6 Fuller G.E. Central Asia. The New Geopolitics. - S.Monica: RAND, 1992.

7 Kazakhstan and the World Community, # 1 (2), 1995.

8 Yaderny Kontrol, #12, 1995, p. 8.

9 Excerpt from Summary Records of Main Committee II: (NPT/CONF.1995/MC.II/SR.6), p. 7.

10 Excerpt from Report of Main Committee II (NPT/CONF.1995/MC.II/1, 5 May 1995).

11 Speech of Ambassador O.A. Grinevsky at the workshop on December 12, 1995 in the Monterey Institute of International Studies, Monterey, USA.

12 Kazakhstanskaya Pravda, February 9, 1995.

## A NUCLEAR-WEAPON-FREE ZONE IN CENTRAL ASIA AS THE KEY FOR REGIONAL SECURITY

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According to a number of political scientists, Central Asia today appears to be a geopolitically loose structure without clear-cut integrity<sup>1</sup>. In spite of its enormous territory - Central Asia is one of

the largest continental massifs on the Earth - this region is not self-sufficient because it has no direct access to the oceans and to the main trade routes of the world. So far, this has to a certain extent limited communications with the region and kept it outside the priority interests of the leading states. Neighbors of the Central Asian states have also not considered the region's total military potential to pose a threat to their security.

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According to experts' estimates, Central Asia has a large potential for conflict, despite its aforementioned "geopolitical dependence." Practically the whole of the region's periphery is considered to be unstable. The current armed conflict between Tajikistan and Afghanistan has only proven this. If the Chinese Communist party's power is weakened in the future, it is likely that ethnic minorities living in the western part of this country - Uigurs, Kyrgyzs and Kazakhs, who have ethnic and religious ties with the populations of the Central Asian republics - will be more persistent in asserting their rights. Instability of the Russian Federation is considered to be one of the dangerous factors as well. Many experts consider the possibility of its disintegration, which would inevitably be followed by bloodshed. For the same ethnic reasons - since millions of ethnic Russians live on the other side of the Russian south-eastern border - this undesirable scenario is likely to develop in Central Asia. In this case the only possibility to localize the destructive process inside Russia's borders is to strengthen national security in the former Soviet Asian republics. The key objectives of these republics can be summarized as follows:

- to strengthen state sovereignty, territorial integrity, inviolability of borders, economic security, political independence and ethnic-political stability;
- to overcome disunity and to concentrate all efforts on developing integration processes in Central Asia, first of all in the economic sphere;
- to prevent all kinds of regional conflicts, to counter foreign attempts to involve the region in political games and in the struggle for access to the region's raw materials.

Experts from Kazakhstan's Institute for Strategic Studies point out that, the seriousness and complexity of security issues themselves in the new Central Asian states have been complicated by the absence of an appropriate forum for joint discussions of problems and development of recommendations. Such a forum would be similar to such regional mechanisms as the Organization on Security and Cooperation in Europe (OSCE), the Organization of American States, and the Organization of African Unity, etc.<sup>7</sup> .

The first effort to fill this gap was made by Kazakhstan's President Nursultan Nazarbayev who, at the 47th UN General Assembly in October 1992, put forward an initiative to set up and hold a Conference on cooperation and confidence-building measures in Asia (CCCBMA). Despite the support that this idea received from a number of states in the region, it has not gathered the expected momentum: the specific nature of Asian international relations, a great number of disagreements, mutual claims and an increased risk of conflicts became the main obstacle on the way to creation of the "Asian OSCE".

However, it is evident that the problem of nuclear weapons will be among the key ones at the CCCBMA. And this is not by chance. Central Asia is the only world region where strategic interests of four de jure or de facto nuclear-weapon powers might clash: the Russian Federation, the PRC, Pakistan and India, not to mention the considerable interests of the United States. In addition, there is Kazakhstan that became non-nuclear, but retained huge nuclear-related source materials, technologies and personnel. It is also known that one of the Asian nuclear-weapon powers has thus far refused to stop nuclear testing. There are suspicions that some other Asian countries are involved in the development of nuclear weapons.

Thus, nuclear nonproliferation on the continent is essential for creation of an Asian security system. As the world's experience has demonstrated, a nuclear-weapon-free zone (NWFZ) is one of the most efficient instruments for reaching this goal.

#### On the Way to Nuclear Security

Today practically the whole southern hemisphere has become non-nuclear. There are three NWFZs: the South Pacific NWFZ, the Latin

American NWFZ and the Antarctic NWFZ. Recently NWFZs have been created in South-East Asia, covering all the ASEAN states, and in Africa. The possibilities of the creation of NWFZs in the Middle East and Central Europe have been discussed by experts.

The growing popularity of NWFZs is easy to explain: such zones have turned out to be an even more effective mechanism to protect their parties against nuclear danger than the main instrument of Nuclear Nonproliferation - the NPT<sup>8</sup>. They establish the non-nuclear status of the territory, which banishes any nuclear weapons from the zone, including nuclear weapons of nuclear-weapon powers (which is not stipulated in the NPT); in addition, the states in the zone receive legally binding security assurances from nuclear-weapon powers (which non-nuclear-weapon parties to the NPT do not have if they are not allies to nuclear-weapon powers).

At the spring 1995 NPT Conference, Kyrgyzia presented an initiative on creation of a NWFZ in Central Asia. Kyrgyz representative Askar Aitmatov suggested the following paragraph on creation of the zone be included in the final declaration of the conference:

"The Conference takes note of the interest of Kyrgyzia in creating a nuclear-weapon-free zone in Central Asia and considers that a nuclear-weapon-free zone in Central Asia would contribute to the strengthening of peace, stability and security in this region."

Kyrgyz delegation expressed their firm belief that such a zone based on legally binding and unequivocal security assurances is the best way to ban activities related to nuclear weapons production. The zone will introduce more strict control measures over nuclear materials export, in particular, full-scope safeguards on the territories of importers, and increase their effectiveness through joint inspections. The delegation also expressed their hope that the creation of such a zone in Central Asia, which borders two nuclear-weapon powers, will make these powers reduce their nuclear arsenals of their free will and will enhance regional stability. The enhanced stability will extend in a southern direction, which is critical from the point of view of nuclear proliferation<sup>9</sup>.

The Conference responded to this initiative with the following entry in the Report of Main Committee II, "The Conference takes note of the interest of Kyrgyzia and Uzbekistan in creating a nuclear-weapon-free zone in Central Asia and believes that it should contribute to peace, stability and security in the region. Kyrgyzia and Uzbekistan will submit specific proposals in this regard and would welcome their consideration by other concerned States"<sup>10</sup>.

Kyrgyz initiative has not so far received a wide resonance in Central Asia. This appears only natural since the idea, no matter how timely and attractive, had not been properly prepared. Thus, experts

believe that it is necessary to hold preliminary consultations of all potentially concerned regional states in order to find answers to the following questions:

- which regional states, apart from Kyrgyzia and Uzbekistan, might be interested in creating a zone? (primarily Kazakhstan, Turkmenistan, Tajikistan and, probably, Mongolia, the latter having unilaterally declared itself a NWFZ);
- what should be the minimum number of parties for a NWFZ to enter into force?;
- what should be the mechanism for new parties joining the zone? It could be a permission procedure to adhere to the treaty or a rule similar to the one adopted by the Tlatelolco Treaty (which established beforehand the maximum borders of the zone covering all regional countries and set forth preliminary terms for the treaty's full entry into force; all states in the region should have the right not to accept these terms and not to apply the treaty's force to their sovereign territories);
- what is the substance and scope of assurances given to parties to the zone? For example, it should be discussed which assurances are more acceptable: those contained in the Tlatelolco Treaty, in the Rarotonga Treaty, or in the Pelindaba Treaty. Other proposals should also be considered;
- what are the terms under which the states in the zone might preserve their right to carry out economically important nuclear activities for peaceful purposes and under international control, such as mining, processing and transporting of raw materials, as well as export-import transactions involving them?;
- whether there is a necessity, in addition to IAEA's inspections, to set up a regional structure responsible for implementation and verification of compliance with the Treaty's provisions. And if yes, is it necessary to determine its composition, responsibilities and rights?

It is important to note that the territory of Central Asia is already free from nuclear weapons. Kazakhstan was the only nuclear-weapon state in the region. And the last nuclear device was destroyed at the Semipalatinsk testing site on May 31, 1995. On June 2, 1995, at the joint press conference held by Kazakhstan's Foreign Ministry, Kazakhstan's Ministry for Science and New Technologies and by Kazakhstan's Agency for Atomic Energy, Kazakhstan declared itself a de jure and de facto non-nuclear-weapon state.

Thus, since no regional state has nuclear ambitions, it is possible to assume that discussing the creation of a Central Asian NWFZ will not become a sensitive process for potential parties to a treaty and implementation of this idea will not face great difficulties, except, probably, financial ones. Nevertheless, it appears important to conduct a preliminary analysis of possible reactions of the concerned parties.

## KEY DEBATES

Kazakhstan. As has already been pointed out, its geostrategic location in Central Asia is the most specific one. On the one hand, Kazakhstan finds itself right between two nuclear-weapon states - China and the Russian Federation, each attempting to become the republic's main patron. Turkey, constantly in opposition to Iran, has been equally active in Kazakhstan. The United States also includes Kazakhstan on the list of its Asian political priorities. In this complicated situation, Kazakhstan, whose policy is to establish friendly relations with all its regional neighbors and which is interested in the region's stability more than any other state, could play the key role in the creation of a NWFZ. However, Kazakhstan has not so far sponsored such an initiative.

The following are hypothetical motives for which Kazakhstan could initiate the creation of a NWFZ.

First, the republic would receive additional political dividends to its non-nuclear status. This could have a positive effect on its international image, which has been somewhat undermined by the dissolution of the parliament and the extension of presidential powers during the absence of free elections.

Second, Kazakhstan would be able to strengthen its security through additional assurances from China and the Russian Federation, as well as from other nuclear-weapon powers, in case they approve of the creation of the Central Asian NWFZ.

Third, such an important initiative would help Kazakhstan assert its role as the regional leader and would make it easier for its leadership to promote other regional initiatives.

With due consideration to the specific nature of Kazakhstani-Russian relations in the political-military area, it is important to point out that Russia could not consider this idea to be a deviation from Kazakhstan's declared policy regarding strategic partnership with the Russian Federation. On the contrary, the NWFZ would be a logical step in the nuclear nonproliferation process, in which Moscow has been playing an important role.

So far, this idea has been discussed only at the level of experts. As an official from Kazakhstan's Foreign Ministry said, so far one can make out only problems which Kazakhstan will have to face: the creation of the zone will entail creation of yet another bureaucratic structure that will require appropriate funding from the republic. At the same time, the official was sure that the NWFZ would considerably strengthen Kazakhstan's national security.

In our opinion, this reaction is quite natural since this potentially productive idea has thus far not been backed by serious motivation and convincing arguments. There are no well-grounded arguments because there has not been an appropriate research-based analysis of the problem.

Uzbekistan. It has been common knowledge that this republic supported Kyrgyz initiative. Moreover, Uzbekistan independently put forward an initiative regarding creating a UN regional center for security in Central Asia. Being one of the key states in the region, Uzbekistan is traditionally fighting for the role of regional leader. For this reason it is in its interest to promote any substantial initiative that would help build an image as an independent political player that determines the regional situation. Tashkent's active support of the NWFZ initiative would to a certain extent counterbalance Kazakhstan's influence, which the latter gained through a number of initiatives (such as proposals on a Eurasian union and on the CCCBMA) made by Kazakhstan's president at various large forums.

The Russian federation. Since Kazakhstan became a non-nuclear-weapon state, Russia has lost a de jure possibility to locate its strategic nuclear forces on Kazakhstani territory without Kazakhstan's permission. It is common knowledge that during Soviet times Moscow regarded Kazakhstan's territory as some sort of protective belt for the European part of the Soviet Union from the threat from the East. This threat was primarily identified with China. And its strategic nuclear forces must have been deployed there against China.

Today the situation has fundamentally changed: Moscow and Beijing are having quite friendly, if not close, relations. These two countries do not perceive each other as strategic enemies. Nevertheless, a certain inertia of political thinking remains, and there is certain caution in their relations. In this connection the official Kremlin might initially produce a cold reaction to the idea of a Central Asian NWFZ.

On the other hand, Moscow cannot but be concerned with the presence of yet another serious political force in the region - the Islamic Republic of Iran. According to some Russian diplomats, Iran is considered to be one of the most serious threats to stability in Central Asia because of its undisguised ambitions. (However, one should observe that the Russian Federation and Iran have been developing a very close partnership.) A Russian diplomat noted in a private talk that the Russian Federation might be interested in the creation of the zone if Iran became one of its parties<sup>11</sup>. Supposedly, overall regional security will be enhanced if Iran, in addition to its obligations under the NPT, becomes a party to the NWFZ.

On the whole, considering all the pros and cons regarding the creation of the NWFZ, it can be assumed that Moscow's final reaction to the idea will be positive, provided experts do the appropriate work .

China. Its influence over the current regional processes is one of the strongest.

China's relations with the Central Asian states have more than a two-thousand-year history. However, it is Chinese-Kazakhstani relations that are the most important from the aspect of security. In this context the agreement on borders signed for the first time by the Republic of Kazakhstan and the PRC in April 1994 can be viewed as an event of historic importance. Following the memorandum on security assurances to Kazakhstan, signed by the leaders of the Russian Federation, the United States and Great Britain in December of the same year in Budapest, Beijing declared that it also gives security assurances to Alma-Ata. In particular, its memorandum reads, "China fully understands Kazakhstan's desire to receive security assurances. The consistent position of the Chinese leadership is to unconditionally refrain from the use of nuclear weapons or the threat of their use against non-nuclear-weapon states and nuclear-weapon-free zones. This position of principle applies to Kazakhstan as well. The Chinese government calls on all nuclear-weapon states to undertake the same commitment in order to enhance the security of all non-nuclear-weapon states, including Kazakhstan...China respects the independence, sovereignty and territorial integrity of Kazakhstan and is ready to make efforts to develop friendship and cooperation between China and Kazakhstan on the basis of the five principles of peaceful coexistence"<sup>12</sup> .

Chinese political scientists express the opinion that China will probably agree to extend these principles to the whole of Central Asia, in particular by creating a NWFZ.

It is evident that the creation of such a zone would correspond to Chinese interests for yet another reason: this scenario would rule out the hypothetical possibility that the Russian nuclear forces might be located on Kazakhstan's territory in case of changes in the regional and/or global situations.

Pakistan. Since the former Soviet Asian republics became independent, Pakistan has been among the first states to make their way into the region of the "newcomers". On the one hand, this can be explained with Pakistan's desire to outdo India in their traditional rivalry for influence and sales markets. On the other hand, the Islamic state claims a certain trusteeship over the new

sovereign "brothers-in-faith". For this reason it is particularly interested in everything that is going on in the region.

Pakistan has already supported Kazakhstan's initiative regarding a CCCBMA and it is very likely to support the idea of a Central Asian NWFZ. However, Islamabad will provide active support to the initiative only if Delhi becomes involved: since Pakistan links all its national security-related problems to the threat which, in its opinion, comes from India. And the latter did not support the idea of a NWFZ in Central Asia. At the Conference on confidence-building measures in South Asia, which took place in Alma-Ata in February this year, the process of developing basic documents for this organization was brought to a standstill because of India's refusal to support the creation of a NWFZ on the territories of states parties to the Conference.

So far, the international community has not succeeded in persuading the unofficial nuclear-weapon powers, India and Pakistan, to adhere to the NPT as non-nuclear-weapon states. Their involvement in the project on creating a NWFZ in the center of the Asian continent might help solve this most sensitive problem in the area of nuclear nonproliferation.

Iran. This country could enrich its political assets if it supported the idea of a Central Asian NWFZ. Firstly, Iran could once again demonstrate its adherence to peace-loving policies. Secondly, the country has to seek alternatives because of the West's on-going blockade. One of the alternatives is to establish and maintain relations with the post-Soviet republics, primarily with the Central Asian ones. The opening of the Tejen-Serakhs-Meshkhed transport main road, which would connect Iran and Turkmenistan, provides Teheran with direct access to the entire Central Asian region. But the volume of goods traffic on the new transport road to the southern seas will depend on stability in Central Asia. Third, undertaking limiting obligations in addition to its NPT obligations, Iran could count on more international assistance in implementing its national nuclear program.

However, despite attractive political bonuses, there is a serious obstacle for Iran's active participation in creating a NWFZ. It is Israel and its policy regarding nuclear weapons. In other words, experts believe that it is very important to resolve Iranian-Israeli grievances in order to attract Iran to the project.

Turkey. In comparison with the other "main characters", which will determine the future of the Central Asian NWFZ, it appears that this country not only should have no objections to the creation of such a regional structure, but, on the contrary, it should be one of its most active sponsors.

First, Turkey's official foreign policy has always been in favor of strengthening regional and global security through peaceful means only. Its participation in another large-scale peaceful initiative would be a logical step in the Asian direction, which is a priority to Turkey.

Second, economic expansion has been the key credo chosen by Turkey for its assertion as a regional leader. It will be easier to implement on Asian territory, which is very attractive to Ankara, if this territory becomes militarily and politically secure. In any case, the creation of the zone would help reduce Russia's concerns over Turkish aspirations in Asia to "pipeline" disputes only.

Third, given Iran's possible hesitation regarding its participation in the NWFZ initiative, Turkey's support for this idea would provide the country with a considerable political advantage in the constant rivalry between these countries for leadership in Central Asia.

The United States. The United States links global and regional security first of all with nuclear nonproliferation. For this reason it is expected to welcome and support any initiatives promoting nuclear nonproliferation. This also applies to NWFZs.

Washington is concerned with the growing power of the Asian superstate - the PRC. It is also concerned with instability and political unpredictability of another large Eurasian nuclear-weapon power - the Russian Federation. That is why it is in U.S. strategic interests to undertake efforts that would help eliminate the very possibility of a conflict between these two states and to banish "dangerous objects" from the potential zone of conflict.

The United States has also been very suspicious about Iran. For this reason Washington would welcome any of Iran's nonproliferation-related activities.

The creation of a NWFZ would lift suspicions regarding illicit proliferation of fissile materials and nuclear and critical technologies through Central Asia.

There is also another consideration in favor of the creation of a Central Asian NWFZ, which is not directly related to the nuclear nonproliferation problem. Judging by the accumulated experience of such zones, the increased attention of national and international structures that verify compliance in a NWFZ make it possible to find out and prevent other forms of illicit activities. In Central Asia, it is drug business and the possibility of transfer of conventional arms to rogue states in the south and south-eastern parts of the continent.

The above considerations are far from being complete and will probably raise more questions than provide answers to the

question put in the title. Research on this problem has just begun and its detailed discussion is still ahead.

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- 6 Fuller G.E. Central Asia. The New Geopolitics. - S.Monica: RAND, 1992.
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- 9 Excerpt from Summary Records of Main Committee II: (NPT/CONF.1995/MC.II/SR.6), p. 7.
- 10 Excerpt from Report of Main Committee II (NPT/CONF.1995/MC.II/1, 5 May 1995).
- 11 Speech of Ambassador O.A. Grinevsky at the workshop on December 12, 1995 in the Monterey Institute of International Studies, Monterey, USA.
- 12 Kazakhstanskaya Pravda, February 9, 1995.

## THE NUCLEAR WEAPONS COMPLEXES OF THE NIS

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To assess technical feasibility for creation of nuclear warheads (NWH) one needs:

1. A detailed understanding of the structure of a nuclear weapon system up to elaboration and production of NWH components and their functions;
2. Detailed design information on each nuclear weapon component up to facilities that constitute the technological chain of production of fissile materials and NWH components;
3. Data regarding the availability of necessary nuclear weapon components and facilities in the technological chain of production of this or that NWH component.

Flowchart 1 shows the stages that are essential for the design and production of a NWH and their relationships, as demonstrated in the experience of nuclear-weapon states (NWS).

Considering the flowchart, we should point out the following. According to estimates, creation of a NWH requires approximately 1,300 engineers and 500 scientists, not more than 10% of whom should be nuclear scientists. In other words, a country should have approximately 100 highly-qualified nuclear scientists from various fields in order to create a nuclear weapon. Of course, this is an approximate estimate. However, it makes it possible to analyze the feasibility of creation of a nuclear weapon in a specific country.

Flowchart of NWH components production and NWH assembly.

Experiences of NWH creation by NWSs proves that the following things are essential for the NWH production:

1. facilities for production of NWH uranium components if NWHs are to be produced on the basis of weapons-grade uranium;
2. facilities for production of NWH plutonium components, if NWHs are to be produced on the basis of weapons-grade plutonium;
3. the first and the second type of facilities if NWHs of more complex designs are to be produced on the basis of weapons-grade uranium and plutonium;
4. facilities for production of NWH non-nuclear components;
5. facilities for NWH assembly.

Flowchart 2 shows a complex for NWH production. On the one hand, a flowchart of a nuclear industry should reflect a complex that is a multiphase and very intricate technological process of collaboration among various production units, while, on the other hand, it should make it possible to single out those production stages that can be replaced by external resourcing, if necessary.

### Analysis of the Flowchart of Uranium Production

The experiences of many countries proven the fact that not all countries need necessarily all links of the production technological chain. Today sales of uranium ores, concentrates and even metallic natural uranium have developed in international trade. It is also possible to sell tetrafluoride of uranium, which is a firm crystalline substance, easy to transport and store.

The nature of the next technological process - after processing uranium tetrafluoride - precludes the possibility of substituting domestic production with importation.

This is determined by the fact that all current industrial methods of uranium isotope separation require its transition to the gas phase, which is done through fluoridation of uranium (through the phase of receiving uranium tetrafluoride) up to processing uranium hexafluoride. Uranium hexafluoride is a substance that is solid below 56 degrees Celcius, but sublimes at 56 degrees. That is why the processing of uranium hexafluoride, isotope separation and the processing of enriched uranium oxides are, as a rule, technologically (and territorially) amalgamated into one complex. Thus, the technological chain of enriched uranium production can be divided into a stage that can be partly substituted by imports and another stage that must be completed domestically by any country that produces enriched uranium (flowchart 3).

Plutonium production is, as a rule, understood to be production of weapons-grade plutonium (e.g., plutonium composition does not contain more than a few percent of plutonium-240; in the United States, maximum plutonium-240 content is 6 percent). A production nuclear reactor, which is the crucial link in this chain, generally uses heat-extracting components from metallic uranium (which makes radiochemical reprocessing after irradiation considerably easier) and works in conditions of incomplete fuel burn-out (which facilitates accumulation of plutonium with a low content of plutonium-240 in the heat-extracting components). If a country has or is building such a reactor, it means it intends to produce its own NWH. At the same time, it is also possible to use plutonium produced in the heat-extracting components of nuclear power plants (NPPs) in order to create a nuclear charge. That is why it is reasonable to consider the production chain of reactor-grade plutonium in the flowchart of plutonium production. It should be kept in mind that it is as difficult to use reactor-grade plutonium in a NWH charge as to process weapons-grade plutonium for it. The main difficulties are:

1. At present it is difficult to imagine that a country without a developed nuclear industry can decide to independently build up a nuclear power plant (NPP) and to maintain it. Though this idea is possible, it is beyond reasonable limits from the economic point of view. Construction of an NPP with the help of foreign companies and its operation is controlled by the IAEA. That is why irradiated fuel from a NPP is also under the IAEA's control and its open

reprocessing is fraught with political repercussions, while its secret reprocessing is almost impossible. That is why while assessing the possibilities of military use of reactor-grade plutonium, special attention should be paid to international and other limitations.

3. Reactor-grade plutonium can be used in the creation of a nuclear weapon in two ways: directly as fissile material for a nuclear charge (though with low operational specifications) or through isotope separation to process a product with a high content of plutonium-239. Separation of plutonium isotopes is most feasible on the basis of the laser method. This method has been developed in U.S. laboratories and is currently being put into operation. Other countries cannot use this method.

Flowchart 4 shows the technological chain of plutonium production. Its first link is a plant for the production of reactor heat-extracting components. Methods of uranium production - natural as well as enriched - have been considered above. In principle, it is possible to substitute this link with imports of heat-extracting components. The other links of the technological chain are obligatory for a country that wants to set up weapons-grade plutonium production. Reactor-grade plutonium production makes it possible to first export irradiated fuel from NPPs for radiochemical reprocessing to another country and afterwards to import reactor-grade plutonium (this poses a problem, since practically all radiochemical plants in developed countries are under the IAEA's control).

Analysis of the Possibility That a NWH Can Be Created in the NIS

The potential for production in the NIS is analyzed using the following parameters. Nuclear materials (highly enriched uranium (235), plutonium, tritium): ore mining, enrichment, processing of plutonium and tritium, metallurgy, materials production.

Nuclear weapon electronic components: materials, elementary basis and experience in designing electric instruments for automation systems (systems of demolition, of neutron initiation, protective devices, actuating devices).

Explosive components: demolition charges, demolition systems, experience in elaboration of demolition charge components.

Measuring instruments: instruments for measuring isotope composition and chemical composition of all applied structural materials, for measuring fast explosive electro-physical processes. Scientists, designers and technological personnel. Specialists in the area of explosion physics, electrophysics, isotope separation, reactor equipment, radiochemistry.

Nuclear weapon delivery systems: missiles, bombs, means of overland transportation. This section considers the possibility of

obtaining (stealing or buying) nuclear materials and components, but not the possibility of obtaining a complete nuclear explosive device. Flowchart 5 presents analysis of the possible nuclear activities in the NIS. The countries can be grouped according to their activities as follows:

1. Possession of nuclear materials (ore, concentrate): Kazakhstan, Ukraine, Uzbekistan, Tajikistan.
2. Possession of nuclear materials (semi-products): Kazakhstan, Ukraine.
3. Stocks of weapons-grade plutonium in NPP fuel: Kazakhstan, Ukraine, Lithuania.
4. Possession of technologies and production capacities to reprocess nuclear materials: Ukraine (technologies).
5. Nuclear weapon electronic components: Ukraine (it has technologies, but does not have ready components), Latvia (in part).
6. Explosive components: Ukraine and Kazakhstan (experience and industries), Georgia (experience).
7. Measuring instruments: Ukraine, Latvia, Lithuania.
8. Personnel: Ukraine (in all fields), the rest do not have highly-qualified specialists in all nuclear weapon-related fields.
9. Information: Ukraine has information on physical principles of weaponry of the first and, probably, of the second generation, as well as on technology of nuclear materials production. It can obtain information through intelligence channels and has all information available through open international channels. The rest of the countries might possess primarily information available through open international channels.

Flowchart 5 lists data on nuclear complex facilities and institutions in the near abroad. The table is based on open source material. According to the data shown, none of the near abroad countries has a closed nuclear complex structure necessary for NWH design and production. Though some of them, especially Kazakhstan and Ukraine, have capabilities useful in creating them.

Let us consider Kazakhstan's capabilities.

Research potential. On Kazakhstan's territory there was the Semipalatinsk test site where the main bulk of Soviet-designed NWHs were been tested. The Production Association Luch was located on the territory of the test site. It carried out research on nuclear rocket engines. There was also the Baikal reactor complex, which included two research reactors of various designs. In addition, there was a research uranium-graphite reactor, which allows one to assume that Kazakhstan had and could retain engineers and scientists able to work in the nuclear physics area. This might have brought about the creation of a NWH. In addition, the test site might have the necessary experience and material basis to carry out model tests for developing specific components of NWH design. At the same time, it has become known that a U.S./Kazakhstan agreement regarding complete demilitarization of

all facilities of the former Soviet testing ground in Semipalatinsk has been concluded and is being implemented.

Production potential. Here one should distinguish (see the flowchart) between the capabilities 1) to produce NWH components and to assemble NWHs and 2) to produce weapons-grade fissile materials. There are no direct signs that Kazakhstan has facilities that produce NWH nuclear and non-nuclear components and assemble NWHs. However, Kazakhstan has developed a high-precision instrument-making industry, the basis for production of modern machines and assembly lines, metal working and chemical industries. All of this makes it possible to establish a high-precision factory, which is characteristic of facilities producing NWH nuclear and non-nuclear components and assembling NWHs.

As a result of integration and differentiation practices in the Soviet nuclear weapons complex, Kazakhstan developed a basis for uranium mining and enrichment. According to flowchart 1, at least three Kazakhstan-located facilities were involved in mining, processing and enriching uranium for military purposes. There are no direct data on the availability of uranium isotope separation facilities in Kazakhstan. However, at least two questions are raised by Kazakhstan's recent sale of 600 kilograms of 90-percent enriched uranium to the United States.

Number one. What kind of enrichment was it, based on uranium-238 or on uranium-235? If this was pure natural uranium (enrichment based on uranium-238) which is not costly, then it is unclear what aim the Americans pursued in this transaction. According to mass media, the transaction was worth \$20 million. It means that the product cost was \$30,000 per kilo, which appears to be too high a price. It was also pointed out that Kazakhstan first suggested that the Russian Federation (RF) buy the uranium at \$14,000 per kilo. This makes it possible to assume that the enrichment was based on uranium-235.

Number two. How could uranium with this enrichment degree based on uranium-235 appear in Kazakhstan? Here two ways were possible. The first one is that the uranium had been enriched at facilities for uranium isotope separation, which means Kazakhstan has such facilities. The second is that the uranium had been transported from separation plants in Russia and brought into Kazakhstan. The second way is much more difficult to explain.

As to the production and accumulation of uranium, available research reactors are unlikely to process plutonium in the amounts necessary to create a NWH.

In conclusion, one can state Kazakhstan can produce weapons-grade uranium-based nuclear warheads, provided an appropriate political decision is made and national resources are mobilized.

The Provisional regulations for Russian Federation facilities on the procedure for using military-purpose ERPs that are produced in the near abroad countries entered into force January 1, 1995. The Regulations require:

1. Mutual supply of materials, semi-finished products, and acquisition products necessary for weapons and materials production will be carried out between the RF and the CIS countries within the framework of the established cooperative relations and based upon agreed inventories.
  2. Items delivered under the agreement's inventories is not subject to quotation and licensing.
  3. For the duration of the current agreement, the RF Committee on defense industries, on the Russian side, and the industrial ministries of the CIS countries, on the other side, in the agreed order determine procedures and terms for curbing production at facilities listed in the appendix.
  4. On a mutually beneficial basis and in accordance with legislation of the countries, the sides preserve the locations and specializations of their facilities that manufacture products for military purposes, as well as the type of products in accordance with the inventory.
  5. In case of the privatization of a facility listed in the inventory, it preserves its specialization for the duration of the agreement.
  6. The current agreement will be valid for three years and will be further automatically extended for one-year terms.
- Yet, the Regulations will work only if appropriate intergovernmental agreements on coordination between defense industries are adopted.

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