

# **Nuclear Weapons in the Multipolar World**

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A handwritten signature in black ink, appearing to read "Henry H. Gaffney". The signature is written in a cursive, flowing style.

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## Foreword

In this paper, Dr. Sergey Rogov, Director of the Institute for USA and Canada Studies of the Russian Academy of Sciences in Moscow, lays out what might be considered some of the most serious consequences that may unfold from the nuclear weapons tests that first India and then Pakistan conducted in the spring of 1998. He points out that, with these initiatives, nuclear weapons have reentered the fabric of international politics. We had all hoped that the centrality of nuclear weapons would fade away after the end of the Cold War. Dr. Rogov also lays out some approaches to deal with the collapse of the non-proliferation regime. He sees the need for the major advanced countries to meet regularly and to coordinate their efforts. One great fear that Russians have, and that Dr. Rogov points out, is that Germany and Japan might one day be no longer content with their subordinate, nuclear-less status in world affairs.

It is especially noteworthy that he calls attention once more to the huge nuclear arsenals still maintained, and at great cost, by the United States and Russia. He makes yet another plea for the Russian Duma to ratify START-2. Even without START-2, he points out that the Russian arsenal will shrink. Yet, if proliferation continues, Dr. Rogov notes that Russia might have to make a costly new effort to rebuild its strategic nuclear forces.

For the American reader, it is worth noting that Dr. Rogov published these views first for the Russian audience. The Center for Naval Analyses' publication of his views is meant to continue the building of bridges to reconcile Russian and American strategic thinking. After the learning experiences of the Cold War, we found we could understand each other quite well. Now—as the Russian economy staggers from crisis to crisis, as Russians turn inward, and as the United States is diverted elsewhere—there is a danger that our strategic perspectives will diverge. We need to take every opportunity to ensure that this doesn't happen.

—H. H. Gaffney, CNA

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# Introduction

The nuclear weapon tests conducted by India and Pakistan constitute the most important event in global history since the end of the Cold War. These states joining the nuclear club might be considered the first event of the 21st century. It permits us to take the first glimpse of the future configuration of the global system and the conflicts that may occur in that configuration.

Attempts by the United States to play the role of the only superpower and to establish *Pax Americana* cannot prevent formation of a multipolar world. During world history, international relations with rare exceptions (Rome and Carthage, and the USSR and the USA) have practically always carried a polycentric character. The constant change of the balance of power among the largest states and their coalitions regularly resulted in infringements of the geopolitical balance and led to military conflicts, followed by rearrangements of the world in accordance with the new distribution of power.

Obviously, after the dissolution of the bipolar system of the Cold War, new structures of international security on global and regional levels were not created. As a result, the process of diffusion of power has turned out not to be under much control. The changes in the balance of economic power are obviously beginning more and more to be reflected in a correlation of forces in the military sphere. These changes can result in new attempts to redivide the world in accordance with the new geopolitical reality. Maintenance of stability in the multipolar world, where instead of two "superpowers," a dozen centers of power are actively defending their interests, is by definition a much more difficult task.

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## The political function of nuclear weapons

The huge destructive power of nuclear weapons and their relative cheapness allow countries to sharply accelerate the accumulation of military force. These weapons substantially narrow the differences and inequalities that are a consequence of the bias in the economic sphere. Fifty years ago, this was proven by the Soviet Union, which created a “balance of terror” with the United States despite inequalities between the two superpowers in non-military spheres.

Until the Cuban missile crisis, the USSR and the USA balanced on the brink of a nuclear war. After that crisis, they came to the conclusion that it was necessary to develop rules to regulate their nuclear rivalry. The American-Soviet nuclear race was stabilized only when the parties achieved such quantitative and qualitative parameters that nuclear escalation, either horizontally or vertically, could not provide any rational benefits. Thus, nuclear weapons acquired the function of deterrence, that is, prevention of the use of nuclear weapons and even of military force in general against each other.

The conditions of deterrence, or, as it came to be called, of mutually assured destruction, were ensured not only through the capability to destroy the aggressor in a retaliatory strike, but also by maintenance of a high level of combat readiness in nuclear forces. Both countries relied heavily on space- and ground-based early warning systems. These systems allowed the retaliator to attack the opponent upon the detection of the launch of the opponent’s missiles. This was called the ability to launch on warning, that is, in the Russian terminology, to deliver a “retaliatory-offensive” strike.

However, even after the model of mutual nuclear deterrence became operational, the Soviet-American strategic balance remained dynamic, as each country reacted to the destabilizing influences of the development of new counterforce offensive and defensive systems. For regulation of this rivalry, the Soviet Union and the United

States were compelled to conclude a number of agreements about the control of nuclear arms and the restriction of ballistic missile defense. These agreements allowed the two countries not only to prevent a nuclear war, but also to make their arms race more predictable and less costly.

Thus, the mechanism of mutual nuclear deterrence between the USA and the USSR was the basis for strategic stability in the period of the Cold War. While Great Britain, France, and China developed their own nuclear potentials, they did not try to compete with the Soviet Union and the United States in quantity and types of nuclear arms. They developed independent models of nuclear deterrence, which provided them with relative autonomy within the framework of the bipolar system of international relations.

This hierarchy of world policy provided special privileges to the five nuclear powers, as compared to all other participants of the international relations. The five were also coincidentally the permanent members of the UN Security Council. The Cold War system of arms control agreements not only maintained the stability of the military balance between the superpowers and their allies, but also guaranteed an enormous gap between the main acting players in the international arena and all other states. Legally this gap was formalized by the Non-Proliferation Treaty, which was to ensure the non-nuclear status of all other members of the world community.

The discipline of the bipolar world rigidly consolidated the inequality of the participants in international relations—the great majority of them were forbidden to do what was allowed to the superpowers. Any effort to openly violate these rules was senseless (who could compete in an arms race with the Soviet Union and the United States?) and dangerous (the superpowers could launch a preventive attack). Furthermore, regional conflicts were immediately transformed into confrontations between the superpowers supporting the opposing parties, and yet this guaranteed that these conventional conflicts would not escalate into a nuclear war.

Though a dozen medium-size and small states had begun their own nuclear programs, none of them decided to openly cross the nuclear “threshold.” The door to the nuclear club was tightly closed for them.

The non-proliferation regime legally consolidated a double standard for the superpowers. It made it impossible for all other countries to upgrade their status. This included not only the dozen threshold nuclear states, but also Japan and Germany, which had restored their economic power, but were deprived of any opportunity to build up corresponding military muscles.

Thus, the system of strategic stability we inherited from the previous period, had three levels:

- At the top level was the system of mutual nuclear deterrence between Moscow and Washington, which still have more than 10,000 strategic and tactical nuclear weapons;
- At the second level were the independent nuclear forces of China, the United Kingdom, and France, who had about 400–500 warheads each;
- At the lower level were all other countries, who were forbidden to possess nuclear weapons.

Could this system of stability be kept through the next century? Today it is exposed to threats both from above and from below.

Russia and the United States are no longer engaged in the ideological confrontation and global political rivalry that produced the need for mutual nuclear deterrence. Today and for the foreseeable future they do not have any reasons to maintain a nuclear confrontation. At the same time there is now a huge gap between Russia and the United States in the economic area, a gap that exceeds by many times the economic asymmetry that existed between the United States and the Soviet Union during the Cold War.<sup>1</sup>

In the meantime, new centers of power are no longer willing to be forever reconciled to minor status in the international arena. The termination of the opposition between two blocs has undermined the rigid discipline that the bipolar system imposed on all other countries. Iraq

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1. For the reader's convenience, Table 1, which follows the text at page 33, show selected countries' shares in the world's demographic, economic, and military resources.

was the first to try to break the old international hierarchy, by invading Kuwait in 1990. However this attempt showed that reliance solely on the usual conventional military forces was insufficient to break the hierarchy. Baghdad could not support its claims with nuclear weapons and suffered a shattering defeat. The subsequent imposition of rigid sanctions against Iraq by the international community have forced Iraq to accept a measure of international control over its aspirations to build nuclear weapons and other weapons of mass destruction.

For a while, it appeared that the war in the Persian Gulf had proven that it was possible to preserve the previous mechanisms of strategic stability in the post-Cold War system of international relations. North Korea was also compelled to make a serious concession not to continue development of nuclear weapons. Several other threshold states—South Africa, Brazil and Argentina—announced their decisions to terminate their military nuclear programs. In 1995 the NPT was indefinitely prolonged, and then it became possible for most countries to sign the treaty providing for a comprehensive ban on nuclear tests.

# Consequences of the collapse of the non-proliferation regime

Even though most countries signed the test-ban treaty, the non-proliferation regime had not become universal. Israel, Pakistan, and India had clandestinely built independent nuclear potentials during the Cold War. They had “kept the bomb in the basement.” That situation has inevitably created a mortal threat to the stability of the non-proliferation regime. The Indian and Pakistan precedent now shows that the threshold nuclear states can try to change their status at any moment without considering the consequences of their actions.

## The case of India and Pakistan

Such countries as India and Pakistan, which once played only a minor role in international affairs, will now stake claims for more important roles. The acuteness of ethnic, religious, and territorial conflicts between these two countries has already resulted in bloody wars in Southern Asia—three times in the last 50 years. Now this confrontation takes on a nuclear dimension. In the past, these countries resorted to violent means to resolve their problems—but without the use of nuclear weapons. Now it is impossible not to expect them to use these weapons. The collision of territorial and economic interests and acute ethnic and religious conflicts can result in the use of nuclear weapons.

The threat of a nuclear war between India and Pakistan because of their inability to find peaceful solutions to the numerous contradictions between them appears rather serious. It is impossible to guarantee that these new nuclear powers will consider nuclear weapons only as means of deterrence. There are no guarantees that the existence of nuclear weapons in India and Pakistan will result in the creation of a rather stable model of mutual nuclear deterrence by analogy with the Soviet-American relationship. The idea of parity with Pakistan in

anything, and especially in the nuclear sphere, is unacceptable for India. Unlike Moscow and Washington in the heat of the Cold War, New Delhi and Islamabad are not divided by oceans, or by a belt of satellite countries. The military confrontation in Kashmir can result in conflict escalation at any moment.

Both parties have incentives for a preventive strike. Of course, the test of a nuclear device does not yet mean the creation of nuclear weapons ready for battle application. However, the party that can deploy nuclear warheads on its rockets and airplanes first will be tempted to resolve its security dilemma by eliminating the nuclear infrastructure of the opponent before the opponent acquires a similar combat potential. Some leaders in Islamabad claim that nuclear warheads are already installed on Pakistani rockets.

India, for example, could try to use its overwhelming superiority in conventional arms and military forces, not only to rout the Pakistan army once again, but also to destroy Pakistan's nuclear facilities before Islamabad was ready to launch a pre-emptive nuclear strike on Indian nuclear facilities.

Furthermore, the evolution to the model of mutual nuclear deterrence is complicated by some technical considerations. The flight time of ballistic missiles to the targets of the opponent will not exceed three or four minutes, and for nuclear-capable attack aircraft not much more. At present, neither India nor Pakistan has any sophisticated early warning systems to detect a nuclear attack. With a limited quantity of nuclear means, one side may hope that a pre-emptive strike may disarm or to decapitate the opponent. Moreover, any measures by one party to increase the fighting readiness of its nuclear forces can be interpreted by the other party as preparation for an attack and could cause an immediate reaction.

We must take into account the fact that the rational paradigm of mutual nuclear deterrence can appear completely alien to other civilizations. It is already of great concern that both these states, which have decided at considerable cost to cross the nuclear threshold, belong to a group of countries with the lowest income per capita. They do not seem to be in any hurry to make a higher standard of living their priority for many millions of their citizens. Neither the

leaders of India nor those of Pakistan are rebuffed by the high price of a now-inevitable nuclear arms race between them or by the painful economic sanctions imposed by the United States, Japan, and international financial organizations. The rhetoric of threats that Delhi and Islamabad exchange on a daily basis testifies that their leaders poorly comprehend what a huge responsibility is imposed on them by the possession of nuclear potential.

## **Other possible consequences**

Unfortunately, other unpleasant scenarios are also quite possible. The Indian leaders do not hide the fact that they consider their nuclear weapons first of all as a counterbalance to the People's Republic of China. They have claimed that they need them to deter China, which has allegedly placed tactical nuclear weapons in Tibet where the two countries have conflicting territorial claims. China is also a de facto strategic ally of Pakistan and, as is known, has given it much technical assistance in developing its nuclear weapons. Western sanctions against Islamabad will probably strengthen cooperation between China and Pakistan even more.

Thus, it is impossible to exclude the possibility that Indian-Chinese relations can enter a phase of confrontation. This would result in disastrous consequences for all the world. Some experts are already predicting that the recent nuclear-weapon tests will push an arms race, not only between India and Pakistan, but also between India and China.

The acquisition of nuclear weapons by Pakistan can also have an important impact on the nuclear program of Iran, which has already been accused by the USA and Israel of secret attempts to obtain a nuclear bomb. If this is Iran's ambition, the recent developments will hardly result in its renouncing these ambitions. The appearance of the nuclear weapon in Iran (as in Israel) doubtlessly will cause a reaction in the Arabic world. It is difficult to expect that the sanctions against Iraq will persist forever. The close cooperation of Saudi Arabia with Pakistan in the military sphere is also known. Thus, the collapse of the non-proliferation regime in Southern Asia could lead to a chain of consequences in the Middle East.

Moreover, in the worst-case scenario, the nuclear chain reaction could roll over other countries of the Muslim world—from Turkey over to Malaysia and Indonesia. It is indicative that, at the conference on disarmament in Geneva, the Islamic countries refused to condemn the recent nuclear-weapon tests.

## **The consequences for Russia**

Thus, the collapse of the non-proliferation regime can result in a reversal of the process of nuclear disarmament begun in the 1980s and 1990s. In the worst-case scenario, almost a dozen countries in the first quarter of the next century will be the owners of nuclear arsenals and the means to deliver weapons of mass destruction. Some additional countries might acquire a limited nuclear potential or possess cheaper types of weapons of mass destruction (i.e., chemical and biological weapons).

But even if the proliferation of weapons of mass destruction does not result in their use in combat, the Russian Federation inevitably will appear to be a loser. It seems clear that the economic power of the country will not be restored until well into the 21st century. Political and social stability in Russia will not be established sooner. That means that Moscow may not be able to retain its nuclear superpower status, even though that status is almost the only unique argument for the maintenance of the status of the Russian Federation as one of the centers of force in the multipolar world. The breakdown of the non-proliferation regime and the drastic changes in the military balance of power between Russia and other countries essentially will undermine these claims.

That's why a passive approach to the non-proliferation regime hardly serves the interests of Moscow. It is impossible for Moscow to continue its easy-going attitude with regard to the practical control of the transfer of dual-use technologies to those countries that may aspire to create weapons of mass destruction and the means of their delivery. If Russia continues to regularly give the benefit of doubt to possible violators of the NPT, we will be contributing to very destabilizing developments.



Only the most primitive interpretation of Russian interests can lead to the false conclusion that Moscow will gain from these developments because it has close military-technological cooperation with this and that party. The short-term commercial benefit from such a mindless attitude to these questions can have the most severe impact on the vital interests of Russia in the long term.

The Soviet Union could not prevent a military conflict between the People's Republic of China and India in 1962. Soviet attempts to act as a mediator between India and Pakistan in the 1960s and 1970s were also unsuccessful.

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## **A new approach is necessary**

A completely new approach is needed to the solution of a problem of uncontrolled diffusion of power, and first of all the proliferation of nuclear weapons. Obviously, it will be not possible to restore the status-quo ante. It is impossible to expect that the economic sanctions will result in a denuclearization of India or Pakistan (especially as Russia, France, and many other countries refuse to apply sanctions). It is also difficult to expect that Israel (against which the United States will never use sanctions) will give up its "bomb in the basement."

It is probably senseless to pretend that nothing has taken place. It is time to recognize the reality of the present world—today there are not five, but eight, nuclear states. Therefore, the problem is to minimize the consequences of the expansion of the nuclear club that has taken place.

### **Steps to take with India and Pakistan**

Unconditionally, it is necessary to coerce Delhi and Islamabad to take up generally accepted international obligations and to join the NPT. Today they can join it only as nuclear-weapon states, which requires a revision of the text of the treaty. This step has considerable risk because it may turn out to be too difficult for the global community to reach a consensus on this revision. But the preservation of the present situation—keeping India and Pakistan outside the NPT—will be even worse.

To limit the negative consequences of the expansion of the nuclear club, India and Pakistan should immediately sign the Comprehensive Test Ban Treaty. If they do, some serious restrictions on their escalating their nuclear arms race will have been established. For one thing, the test series they conducted has probably given them insufficient technical information to begin mass production and deployment of not-so-reliable nuclear warheads.

Most important, it is necessary for us to focus our efforts on preventing an India-Pakistan armed conflict that might involve the use of nuclear weapons. It is expedient to stop the undeclared war in Kashmir, which at any moment can result in an escalation with unpredictable consequences. It is necessary to try to find ways for a political resolution of the Kashmir problem. Any resolution should be supplemented by confidence-building measures and arms control (for example, disengagement of forces and prevention of terrorist activities in buffer zones) along the entire line of opposition of Indian and Pakistani troops.

Is it possible to prevent a nuclear arms race between the two countries and to limit their arsenals so they would not exceed the level of several dozen warheads? To achieve that aim, it will be necessary to find political and economic incentives that provide sufficiently powerful benefits so that Delhi and Islamabad will accept restrictions on their nuclear forces. These would probably have to include adoption of measures that restrict conventional armed forces and weapons in a way that would relieve Pakistani anxiety concerning Indian military superiority and Indian fears about the military superiority of China.

Whether we recognize the nuclear status of Delhi and Islamabad or not, we have to recognize that global security will be affected by their future nuclear postures. What kind of specific concepts of nuclear deterrence should India and Pakistan develop? Though the Russian-American experience is not fully applicable to the unique situation in South Asia, the two nuclear superpowers could to some extent encourage their new colleagues to accept the rules of the game in such a delicate sphere. If Delhi and Islamabad were to choose postures that rely on counter-value targeting (which is much cheaper than reliance on counter-force targeting), the experience of France and the United Kingdom could be useful for them.

The Indian and Pakistani nuclear developments have special significance for the future of ballistic missile defense. It is possible to believe that India and Pakistan may have an increased interest in today's Russian and American tactical ABM systems that are capable of intercepting short- and medium-range missiles. One can also not exclude the fact that they may attempt to acquire their own analogues of the anti-

missile complexes “N-300” and “Patriot.” Would tactical ABM in South Asia play a stabilizing role, providing invulnerability of nuclear forces so that they can conduct a retaliatory strike, guaranteeing nuclear revenge on the aggressor? Or, as in case of the USSR and the United States, would ballistic missile defense provide a stimulus for a preemptive strike at the nuclear forces of the other party, in the hope that the rockets of the opponent that survived the first strike will be intercepted by the ABM systems?

## **Steps to take with other potential proliferators**

Another task is to convince other potential infringers of the non-proliferation regime not to follow the example of Delhi and Islamabad. According to the IAEA, there are 437 nuclear power stations in the world (with another 36 under construction), which account for approximately 17 percent of the global production of electric power. Thus there is huge potential for the manufacture of nuclear arms in about 50 countries of the world, including many of those which today do not aspire at all for a role as a center of power.

It is probably also necessary to think about “sanctions in reverse” that could provide positive economic incentives for the benefit of forbearance from military nuclear programs. This would be especially applicable to those countries that some years ago voluntarily gave up the creation of nuclear weapons. If these states were to conclude that Pakistan and India have gained from admission into the nuclear club, they might reconsider their decisions.

North Korea has already threatened to resume its nuclear program, because the United States and South Korea are dragging their feet in carrying out their promises to provide economic assistance as a reward for North Korea’s closing of reactors constructed by the Soviet Union. In the present situation it may be necessary to reconsider the conditions of these arrangements and to resolve the problem with the help of Russia. Under IAEA control, Russia could modernize the North Korean nuclear power stations in a way that would preclude their military use. Naturally, this program would be feasible only in the event that the World Bank or some other international financial

institution would be willing to pay for the project instead of South Korea, shaken as it is by its present financial crisis.

Obviously also, if the Western powers decided not to apply sanctions against India and Pakistan, it would be rather awkward to later apply such measures against any third country. For instance, how would such a decision affect the current international sanctions against Iraq? Would the United States continue its policy of containment of the nuclear program of Teheran, including the sanctions against the Russian companies ostensibly trading with Iran in dual-use technologies?

It is also necessary to recognize what huge damage to the non-proliferation regime has been rendered by the Israel's "bomb in the basement." It was Israel who established the precedent of the nuclear threshold state (i.e., not testing). Due to the obvious support of Washington, Israel has avoided any sanctions. If Israel were thought to be further extracting benefits from the India-Pakistan situation, its bad example will remain contaminating. It may well be high time for the United States to reconsider its policy of double standards. The nuclear weapons of Israel should also be put on the negotiating table, together with those of India and Pakistan.

## **Great Britain, France, and China**

The reactions of Great Britain, France, and especially China to the appearance of the new nuclear nations are also very important.

Many experts consider that only the People's Republic of China has the potential for transformation into a new superpower in the 21st century. It estimated that in a couple of decades China will bypass the United States in GDP (at the purchasing power parity rate). Already having the largest armed forces in the world in terms of manpower, Beijing is also carrying out an impressive conventional arms modernization program, including large-scale purchases of sophisticated weapons from Russia. Yet China still has only one ballistic missile-launching submarine, only about 100 medium-range missiles, and fewer than 20 ICBMs.

Will Beijing resist the temptation to quickly build up its nuclear potential through deployment of a new generation of strategic nuclear systems, including solid-fuel mobile DF-31 and DF-41 ICBMs with MIRVed warheads? Or will it resist manufacturing a large number of medium-range nuclear-capable ballistic missiles (M-9 and M-11)? Theoretically, China's nuclear arsenal could reach the level of 1,000 units or more during the coming decade. A Chinese-Indian arms race (including nuclear arms) would have more serious global consequences than an Indian-Pakistani confrontation, because Chinese nuclear systems can strike targets in the territory of both the Russian Federation and the United States, unlike the means of delivery that the South Asian nuclear countries may accumulate.

The nuclear prospects of China are causing serious concerns in the United States. According to public opinion polls, 21 percent of Americans consider that the People's Republic of China represents the greatest nuclear threat to the United States (as opposed to 2 percent for Iraq, 9 percent for Iran, and only 6 percent for Russia). Recently the U.S. House of Representatives, by a vote of 364 to 54, has forbidden the export of American satellites to China that were to be launched into orbit on the "Long March" commercial rocket. This rocket is similar to the Chinese ICBM in many aspects of its design. The members of Congress have concluded that China can exploit American technologies to develop both MIRVs for its ICBMs and space-based systems of combat control.

China had long abstained from participation in most of the international arms control regimes, but recently it has shown a readiness to accept some specific obligations. We cannot exclude that the transformation of India into a nuclear power will change China into an active supporter of nuclear arms control. Alternatively, Beijing may choose to increase its military cooperation in this area with Islamabad. In any case, it is now necessary to try to involve China in international efforts aimed at neutralizing the consequences of the Indian and Pakistani nuclear tests.

One more problem is connected to the nuclear allies of Washington. We cannot exclude that Paris and London will reconsider their recently adopted plans of partial reductions of their nuclear arms. It

is indicative that not only France, but also Great Britain, refused to join the United States in the efforts to impose sanctions against India and Pakistan, despite American pressure. A similar position was taken by other members of the European Union. This may be the most serious challenge to the unconditional political-military leadership of Washington inside the Western community since the end of the Cold War.

In these conditions, it seems rather doubtful that China, England, and France will enthusiastically join the Russian-American nuclear arms reduction talks even if they were invited. Anyway, it is difficult to expect them to be ready to agree to additional and more radical reductions of their nuclear forces. The unwillingness of these countries to accept any formal obligations and restrictions would also not promote deeper reductions in the nuclear arsenals of the Russian Federation and the United States.

## **The cases of Germany and Japan**

The admission of India and Pakistan into the nuclear club at last might also cause far-reaching consequences at the upper stages of the hierarchy of international relations. Two of today's economic superpowers—Japan and Germany—play relatively minor roles in the global military balance of power, though they could in a very short time become sizable nuclear powers. Their choice during the Cold War to refrain from possession of nuclear weapons was in fact imposed on them by the United States (and the Soviet Union). The truth is that Japan and Germany benefited from the so-called extended nuclear deterrence provided by the Americans, but it was also obvious that they could enjoy the protection of the American nuclear umbrella only as the loyal allies of Washington, implicitly recognizing American leadership.

Yet both these great powers, Germany and Japan, defeated by the Soviet Union and United States in the Second World War, seem to be the winners in the Cold War. Today, Japan and Germany, perhaps even more than India, want to increase their political status in order to bring it into conformity with their huge economic power. It is indicative that these states don't hide their desire to become permanent



members of the UN Security Council. Moreover, after the end of the Cold War they have begun to weaken, step-by-step, their restrictions on the use of their troops outside their own national territory.<sup>2</sup>

The stability of the system of international relations in the 21st century may be impossible to maintain if the new status of Japan and Germany in the list of the main centers of power in the multipolar world is not recognized. If it were to turn out in India's case that the acquisition of nuclear weapons is the ticket of admission to the club of great powers, Germany and Japan might well be tempted to take that course.

The new nuclear status of India and Pakistan is a serious blow to Tokyo. Before the introduction of the sanctions following their nuclear tests, Japan was actually the main creditor of these countries. To the extent that their influence was a function of their economic business with these countries, they could feel a loss of influence within the overall international system. While Germany might rather successfully resolve its foreign-policy aspirations through being the driving force of the European Union, Japan might feel frustrated by not being able to transform its economic power into political influence.

Today Japan is challenged by the growing power of China, which is trying to rely on both economic and military (including nuclear) instruments for influence. In the meantime, Washington is engaged in a search for a geopolitical compromise with Beijing. As Washington-Beijing relations improve, can Tokyo expect that the United States will always take into an account the interests of Japan? Today the American-Japanese alliance looks monolithic, but might this situation change under the pressure of the diverging economic interests of the two countries?

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2. Ed. comment: Notwithstanding Dr. Rogov's observation, many of the pressures for Germany and Japan to contribute to peacekeeping missions have come from the Americans and other Western nations. Germany and Japan are still reluctant to participate, especially in those countries in which they were involved in World War II.

If there is a difficult change of generations in the Japanese political leadership, new leadership might search for new approaches to Japan's role in the international system, not only to the problem of resumption of economic growth, but also for a new political-military role for the country. Anyway, it is impossible to conclude that there are no conditions under which Japan will not revise its nuclear policy. Taking into account the fact that for its energy needs Japan has accumulated over half of the global stocks of plutonium, Tokyo's departure from its present nuclear policy would have far-reaching global consequences.

Likewise, there can be no full warranty that Germany will be content with retaining a secondary military status. Will NATO, dominated by the United States, remain the mechanism of coordination of defense and foreign policies of the Western community, or will the distribution of power inside the North Atlantic alliance change to where the European pillar becomes comparable to the American one? Will the Germans always agree to keep on their soil both American troops and nuclear bombs?

It's too early to say that the national interests of Germany will be sublimated within the supranational institutions of the European Union or evolve in a contrary direction. Berlin could dominate, not only in economic, but also in the political and military bodies of an integrated Europe in which the American influence was lessened.

After the problems of economic consolidation of the EU are more or less successfully resolved, the integrated Community proclaims it will develop an independent security and defense identity. We can't know what particular forms this may take. Nowadays the tendency in Europe is to form multinational military units (multilateral brigades and even corps) and to merge their military-industrial complexes. Will the integrated Europe try to develop a more autonomous nuclear posture? Will this posture be based on the nuclear forces of Great Britain and France, or might the idea of multinational nuclear forces be revived? Does it mean that Germany in the future will receive access to the nuclear button in one form or another?

Priority should also be given to the preservation of the non-nuclear status of Japan and Germany. It may be necessary to allow them to

increase their political role through some institutionalized mechanism. One measure often mentioned would be to make them permanent members of the UN Security Council. But how could this be done while ignoring the claims of India, reinforced now by its own nuclear potential?

Two years ago, the nuclear summit in Moscow provided an opportunity for the participants to upgrade the status of Japan and Germany in global nuclear affairs, including giving them more weight in questions of restrictions and reductions of nuclear arms, even though they do not possess them. Unfortunately, this opportunity was not used. The meeting was limited to technical questions of nuclear safety instead of political and military security. In the aftermath of India's and Pakistan's nuclear tests, it might be possible to try to return to the broader approach. That is, we should find a way to give Tokyo and Berlin a vote in the decisions on questions of limitations and reductions of nuclear arms, not only by the new nuclear and threshold states, but also by the old members of the nuclear club.

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# Prospects for interaction of Russia and the United States

All of these factors extremely complicate the strategic situation for Russia. We will probably lose more than many other countries as a result of the collapse of the non-proliferation regime and the appearance of the new nuclear states in Eurasia. These recent developments have challenged two theses that had become the foundation stones of the security strategy of the Russian Federation.

First, nuclear deterrence had been formally proclaimed to be the main means to prevent aggression against Russia. But this correct conclusion has been misinterpreted in some political circles (though not among the professional military). Russians have come to consider nuclear weapons a kind of a panacea, a magic solution to all challenges (including conventional aggression) that Moscow confronts in the international arena. This emphasis has been reflected in many official documents, including the Concept of National Security that was accepted last year. It is also reflected in the persistent unwillingness of the State Duma to ratify such arms control treaties as START-2 and the nuclear test ban.

Second, it had been concluded in Moscow that a multipolar system of international relations would automatically ensure the protection of Russian interests in world politics. However, it is frequently overlooked that the maintenance of stability in this system demands the creation of a much more complex model of international security as compared to the bipolar system of the Cold War period. The new model should reflect the multilateral balance of power and the interests of various centers of influence. A failure to create this multilateral security mechanism could produce catastrophic results, as history has demonstrated many times.

Moreover, a polycentric system, in which Russia is *not* one of the great powers, but a weak and isolated country, encircled by more powerful states and coalitions, would threaten Moscow with extremely heavy trials. If the new centers of powers that are already superior to Russia in economic parameters were to get nuclear arsenals matching the Russian one, the reliability and credibility of the Russian nuclear deterrence potential would be substantially undermined.

Unfortunately, Russia's economic reality does not promise an early recovery. The unreasoned economic reforms in Russia have not only resulted in a disastrous collapse of GDP, but have also undermined the economic base for the maintenance of the military machine created during the Cold War. The nuclear forces of the Soviet Union and the United States at the height of the arms race were relatively cheap only in proportion to their overall inflated military budgets—which reached annual levels of \$300–350 billion (at present prices). Today the budget of Pentagon has been reduced to about \$270 billion. The defense expenditures of Moscow dropped to 80 billion rubles, as authorized in the FY 1998 budget law, but now since the recently declared reductions in federal expenditures they have dropped to approximately 60 billion rubles. At the current exchange rate, this is approximately \$10 billion, although at the purchasing power parity rate it may be the equivalent of \$20–30 billion. Thus, the Russian defense budget is no more than about one-tenth of American military expenditures.

According to Brookings Institution estimates, in fiscal year 1998 the Pentagon will spend \$20 billion for the operation and maintenance of its nuclear forces (including \$7.5 billion on strategic forces, \$1 billion on tactical weapons, and \$6 billion on systems of combat control). Another \$5 billion is spent by the Navy and the Department of Energy for the maintenance of nuclear reactors on submarines and surface ships. Another \$3.8 billion is allocated by the Department of Defense for the development of ballistic missile defenses. Another \$6 billion is spent on the decontamination of contaminated facilities and territories. Finally, the United States spends about \$400 million on the program of Cooperative Threat Reduction, which will be discussed later. Altogether the maintenance of the U.S. military nuclear

complex costs Washington something like \$35 billion in the present fiscal year.

On the other hand, Russia spends approximately 10 percent of its defense budget on its military nuclear complex. This money (\$3 billion) is sufficient neither for the maintenance nor for destruction of its nuclear weapons.

Because of its budget situation, Moscow was compelled to agree to such unprecedented steps as the sale to the United States of 500 tons of weapons-grade plutonium and to accept American assistance for the elimination of weapons of mass destruction provided to Russia under the Cooperative Threat Reduction program (the Nunn-Lugar program). The Pentagon has allocated for these purposes to date a total of more than \$1 billion. This is quite comparable to the appropriations of the federal budget that Russia has devoted to the reduction and destruction of arms.

The Nunn-Lugar program helps Russia avoid a dangerous disorder in its nuclear forces, which are still on alert and continue to carry out the function of deterrence of the United States. While some might consider it paradoxical, such “unnatural” cooperation corresponds quite well to the logic of mutual nuclear deterrence. That is, the destabilization of a system—based on a constant readiness for launch on warning—because of technical failures and malfunctions can lead to disastrous consequences for Americans as well as for Russians. Washington is also concerned about “loose nukes”—the threat of proliferation of uncontrolled Russian nuclear technologies and materials to so-called rogue states around the world.

The United States presently possesses approximately 12,000 warheads, including more than 8,400 deployed, 2,300 in storage in reserve, and about 1,300 prepared for dismantling at the facilities of the Department of Energy. The strategic forces of the United States total approximately 7,500 warheads, which are deployed on 550 ICBMs, 408 SLBMs (in 18 submarines), and 92 heavy bombers. The Pentagon can keep these forces without violating the provisions of the START-1, because it is permitted to count one heavy bomber, which can carry up to 20 bombs and cruise missiles, as only one warhead. In addition, the United States at presently has about 650 tacti-

cal nuclear bombs and about 400 stored warheads for SLCMs, that is, "Tomahawks."

While the federal budget of the United States exceeds \$1,700 billion, its expenditures on its military nuclear weapons complex do not exceed 2 percent of the total. Given also that the Clinton Administration has achieved a budget surplus this fiscal year, it is easy to reach the conclusion that the cost of preservation and strengthening this potential will not be prohibitive for Washington.

If the Duma ratifies the START-2 Treaty, the Pentagon will remove from service four Trident submarines with C-4 missiles and 50 Peacekeeper ICBMs, which would reduce U.S. nuclear forces to the level of 3,500 warheads. This reduction will bring to the Department of Defense savings on the order of \$800 million a year—that is approximately 4 percent of all its expenditures on military nuclear forces. A further reduction of strategic forces to the level of 2,500 warheads, as agreed at Helsinki in 1997, will save the U.S. budget another \$700 million per year. And if the START-3 Treaty establishes even lower ceilings, the Pentagon will save another \$500 million a year.

The situation in Russia is different because up to 70 percent of our strategic systems have already surpassed their original service lives. Today the Russian Federation has about 750 ICBMs, 384 SLBMs, and almost 70 heavy bombers. According to some American estimates, these strategic nuclear forces of Russia will drastically shrink by the end of the next decade.

At the present level of financing, the strategic nuclear forces of Russia will be reduced to a level of approximately 1,000 warheads by 2010. At that time, we will have no more than 200–300 ICBMs, 5–6 submarines with about a hundred SLBMs, and 10–15 bombers. In the most optimistic case, the nuclear arms of Russia will probably be reduced to a level of 1,000–1,500 strategic warheads and 2,000–3,000 tactical nuclear weapons by the end of the next decade. In the worst-case scenario, these numbers will be "the ceiling" instead of "the floor."

To get higher numbers Russia will need to allocate huge resources over the next ten years—at least \$50 billion of additional investments on R&D and procurement to develop and buy several hundred new



ICBMs and to construct 3–4 new strategic submarines. Even if these investments are made, the number of ICBMs will be reduced to 350–400, SLBMs to 76, and heavy bombers to 20–30. In total, these means of delivery will be able to carry a maximum of 2,000 warheads. But right now Moscow can hardly collect and allocate this amount of money.

Political games in Russia have transformed the START-2 Treaty into a hostage of the permanent confrontation between the executive and legislative branches of government. It is impossible to brand those games as anything less than extreme political irresponsibility. It's time to admit that we do not have a choice between "good" and "ideal." We can only choose between "bad" and "disastrous" scenarios.

The START-2 Treaty is the only way to synchronize Russia's inevitable unilateral reductions with a parallel and proportionate decrease of the nuclear potential of the United States. If we fail to ratify the treaty, Washington may choose another approach—to keep its nuclear forces at the level of the START-1 Treaty while quietly observing our nuclear potential decreasing to minimum parameters.

If the START-2 Treaty is ratified, we can possibly expect to quickly negotiate a START-3 Treaty at a level of approximately 1,000–1,500 warheads. This would permit the Russian Federation to keep numerical equality in strategic arms with the United States in the 21st century, while keeping an impressive superiority over China and other nuclear countries. Under a START-3 Treaty, each party could have about 1,000 warheads on ICBMs and SLBMs, and up to 400–500 nuclear weapons on heavy bombers. Besides we can still keep almost 2,000 tactical nuclear weapons. These numbers would be quite enough to ensure the credibility of the Russian nuclear deterrent for the foreseeable future. This force level is affordable in our budget, assuming we guarantee at least minimum financing for our strategic nuclear forces.

Therefore it is mandatory that one of the conditions for the ratification of the START-2 Treaty should be a law that guarantees the financing of the strategic nuclear forces. Moreover, it is quite possible to incorporate into this law a provision that the Government should report annually as to progress in implementing this law. This would

oblige the executive branch to inform the legislators that the continued fulfillment of the treaty corresponds to the security interests of the Russian Federation. The Government, on the basis of accounts of the Ministry of Defense, should offer two versions of financing for strategic nuclear forces—at the level of START-2 and at a lower level (for example, 1,000 warheads).

Other conditions that should be included in the ratification document would be a rigid linkage between the reductions of strategic offensive arms and observance of the ABM treaty, including the protocols signed last year that differentiate between strategic and tactical ballistic missile defenses.

Our interests also require additional measures of transparency, including those that should be related to “reserve” warheads. The so-called “sudden break-out” potential of the United States can consist of 3,000–4,000 nuclear weapons. This includes nuclear bombs for conventionalized heavy bombers, the warheads removed from Minutemen-3 ICBMs, and the Trident D-5 missiles and warheads removed in the framework of START-2. Naturally, the lower the officially permitted level of deployed warheads is, the more serious these additional stocks of weapons look. Therefore it is necessary to arrange measures with the United States that would reduce the sudden break-out potential. These measures might include, for example, destruction of the buses that can carry a greater number of MIRVs, information exchanges, and, probably, on-site inspections on a mutual basis.

At the same time, taking into account the consequences of the nuclear-weapon tests of Pakistan and India, it is necessary to look more seriously at some of the hidden problems built into the Soviet-American mutual assured destruction model that we inherited from the Cold War. If the actions of Delhi and Islamabad were to cause a geopolitical chain reaction and provoke a new nuclear arms race, not only the United States, but also the Russian Federation would have to respond. Should we maintain a capability to build up our nuclear potential again in order to neutralize attempts on the part of a third state to transform itself into a new nuclear super-power? And could all the problems we have with ABM systems look completely different if nuclear weapons on missiles appear on our borders?

## Conclusions

These conclusions may be premature now. The main problem is to prevent the undermining of the NPT from collapsing the entire complex of arms control agreements. The security of Russia depends on this complex today. Washington is as much interested in maintaining these arrangements as Moscow is. The present challenge gives us one more chance to build coordination between Russia and the United States in dealing with the problems of strengthening international security.

Washington should realize that the expansion of NATO and other steps that are damaging to the interests of the Russian Federation will not result at all in a readiness of Moscow to blindly follow the policy line of the United States. If the Americans really need Russian assistance in deciding key international problems, relations would have to be put on a more equal basis, instead of the Americans pressuring Russia to follow the lead of "the only superpower."

As to the problems of transparency, it is also time for us to understand that additional measures in this area are needed by Russia not less than by the United States. If we agree upon these measures with the Americans, there will be an opportunity to demand that other nuclear powers, including India and Pakistan, take corresponding steps. It has to be admitted that their criticism of the nuclear superpowers for their unwillingness to disarm is not unfounded in many respects. These other nuclear powers may agree to take the corresponding steps only if Moscow and Washington agree on the necessary steep reductions and restrictions of their own potentials. From this point of view, without ratification of the START-2 Treaty, it is impossible to neutralize the negative consequences of the enlargement of the nuclear club.

The meeting in June 1998 of the ministers of foreign affairs of the five permanent members of the UN Security Council in Geneva did not result in any significant change. Nonetheless, meetings of the official members of the nuclear club probably should be regularly scheduled. At some point it will be necessary to invite the new nuclear states to these meetings.

One more important international forum is the G-8, whose ministers of foreign affairs met in London on June 12. The G-8 can also assume an important role if they transform the group's agenda to include not only economic, but also political and military, questions. The full participation of Japan and Germany in discussions of nuclear questions is necessary. Moreover, after Russia's admission into this forum, it can evolve from an exclusive Western club into a broader coalition. At some point, China and some other countries could be invited to join the G-8.

The events of the last weeks show that, without the creation of a reliable system of international security, events in the world arena can go in an extremely dangerous direction. However it would be an error to judge that the 21st century will inevitably become an epoch of wars and conflicts, including the use of the most destructive weapons created by mankind. The present situation is dangerous, but not hopeless. In these conditions Russia, as a great power, can and should become one of the main initiators of the formation of a new global order, an order in which the interests of the various centers of force would be reconciled and would thus avoid a thermonuclear catastrophe.

Table 1. Share of some countries in world demographic, economic, and military developments

	GDP at PPP	Population	Central government expenditures	UN Regular budget	Military expenditures	Military manpower	Nuclear warheads
<b>World</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
United States	21.8	4.6	18.2	25.00	32.1	7.1	33.5
China	9.7	21.1	3.9	0.74	7.3	12.9	1.3
Japan	8.1	2.2	13.6	15.44	5.8	1.1	0.0
Germany	5.0	1.4	9.4	9.04	4.8	1.5	0.0
India	3.9	16.4	0.7	0.31	0.9	5.6	0.1
France	3.6	1.0	8.4	6.41	5.5	2.2	1.4
United Kingdom	3.3	1.0	5.3	5.32	3.9	1.0	1.1
Italy	3.3	1.0	6.2	5.20	2.2	1.9	0.0
Brazil	2.9	2.8	3.1	1.62	1.3	1.3	0.0
Indonesia	2.1	3.4	0.4	0.14	0.4	1.2	0.0
<b>Russia</b>	<b>2.0</b>	<b>2.6</b>	<b>2.8</b>	<b>4.45</b>	<b>8.9</b>	<b>6.1</b>	<b>62.5</b>
Canada	1.9	0.5	1.5	3.10	1.0	0.3	0.0
Mexico	1.8	1.6	0.5	0.79	0.3	0.8	0.0
South Korea	1.7	0.8	1.2	N.A.	1.7	2.9	0.0
Turkey	1.1	1.1	0.4	0.38	0.8	3.5	0.0
Iran	1.1	1.1	0.5	0.47	0.5	1.9	0.0
Pakistan	1.0	2.3	0.2	0.09	0.4	2.6	0.1
Nigeria	0.5	2.0	0.3	0.12	0.1	0.4	0.0
Israel	0.2	0.1	0.4	N.A.	1.0	0.8	0.2
Egypt	0.8	1	0.2	0.07	0.3	1.9	

Sources: U.S. Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers* (Washington, 1997); Institute for Economic Analysis, *Russia in the Changing World, 1997* (Moscow, 1997); National Resources Defense Council, *Nuclear Weapons Databook* (Washington, 1998).