CONTEMPORARY NUCLEAR DOCTRINES

Foreword by Academician Alexander A. Dynkin at the Conference “Contemporary Nuclear Doctrines”

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Contemporary Nuclear Doctrines
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FOREWORD by Academician Alexander A. Dynkin, Director, Institute of World Economy and International Relations (IMEMO) of the Russian Academy of Sciences

First of all, I would like to welcome all the participants in the Conference which rounds off this year’s cycle of forums on deep nuclear disarmament under the joint NTI-IMEMO project. Our fourth conference is dedicated to a most vital, complex and challenging issue – the evolution of the modern nuclear-weapons states’ doctrines.

If we were to follow the textbooks of military academies, we would have to start the whole 2010 project with the aforementioned issue. That would seem logical enough: military doctrines – strategy and operational planning – military policy and military programs – talks on disarmament and non-proliferation – cooperation in weapons development and use of military force.

However, from the very start we tried to draw from the political realities and the actual security-building objectives. Thus, our first priority was other military political and military technical issues with military doctrines as a sort of a cross-cutting issue in all our previous discussions. Even so, as we bring our 2010 project to a close, we could not dismiss this topic without paying special attention to it.

It is commonly known that military doctrines, including nuclear postures, have both internal and external dimensions. Externally, they send a warning to potential adversaries as to what actions by the latter may cause a state to resort to force, including the use of nuclear weapons. At the same time, they guarantee protection for the allies against certain threats.

While the actual use of nuclear weapons is perceived as an unlikely option due to their massive destructive consequences, official declarations on this issue have become primarily an element
of foreign policy on a global scale. Indeed, representatives of both the military and the diplomatic circles often say that nuclear weapons are “rather a political weapon than a military one”. This is a highly speculative point; however it does not make nuclear doctrines a less important instrument of foreign policy.

Internally, the doctrine aims to show the citizens that the state provides for their security against external enemies and is not squandering away the huge sums allocated to defense. Finally, the doctrines to a certain extent set targets for the armed forces and defense industries as regards the probability and the nature of potential wars, the aims and objectives of the armed forces’ involvement in such wars, as well as combat training and weapon acquisition programs.

The key issue of nuclear doctrine is under what circumstances the state will use nuclear weapons. Of particular importance is when and in what manner the first use of nuclear weapons may occur, since it is precisely the moment at which nuclear war actually starts.

It is clear that the declarations made by different states as to against who and under what circumstances they may use nuclear weapons are not necessarily in exact accordance to the actual operational plans and military and technical capabilities. For example, the obligation of no-first-use of nuclear weapons declared by the USSR in 1982 found little trust among non-Warsaw Pact countries and non-partners of the USSR. In just the same way, similar official statements of the Peoples Republic of China are presently questioned by the global community, and the credibility of Russia’s current doctrine as regards first use of nuclear weapons is disputed by the experts, primarily at the national level.

Nevertheless, these official positions, exactly owing to their immense political charge, are of great importance for a number of reasons.

First, they reflect the state’s perception of the role nuclear weapons play in ensuring nation’s security and defense capacity, as well as in pursuing international policy. This indicates the role of this type of weapons in maintaining the status and the global image of a state.

Second, the doctrines have a profound effect on the desire of non-nuclear-weapon states to acquire or not to acquire nuclear
weapons. This is to say, the doctrines are important in terms of non-proliferation policy. It is no coincidence that resolutions on negative security assurances for non-nuclear-weapon states have been adopted at each NPT Review Conference and their Prepcom, and starting 1978 – at each annual session of the UN General Assembly. The said assurances imply the non-use of nuclear weapons against non-nuclear-weapon states. However, the numerous reservations that the nuclear-weapons states tend to include in such obligations virtually rob the latter of any constructive power.

Third, this element of the doctrine influences strategic stability, since it relates the probability and possibility of a first nuclear strike.

Fourth, nuclear doctrines are indirectly linked to the prospects of nuclear disarmament and advancing towards a world without nuclear weapons (according to the obligation of the states under the famous Article VI of the NPT). Indeed, if there is a commitment that nuclear weapons will be used only in retaliation, a state could logically renounce nuclear weapons, provided that other states agree likewise. If a first (preventive) strike is deemed acceptable, nuclear disarmament would seem more complicated.

Fifth, inasmuch as they influence on the progress in nuclear disarmament, the doctrines indirectly impact the nuclear weapons non-proliferation regime. Therefore, the doctrines to a certain extent affect the situation in national and international security.

The revival of the idea of nuclear disarmament that was triggered by the well-known article co-authored by the four prominent U.S. public figures ¹, has logically restored the issue of no use of nuclear weapons at top of the international discussion agenda. This topic was prolonged and developed in Russia in the article of four wise men which appeared in October 2010 ².

² Yevgeny Primakov, Igor Ivanov, Yevgeny Velikhov, Mikhail Moiseev, From Nuclear Deterrence to Universal Security (Izvestia, 15 October 2010). Примаков Е., Иванов И., Велихов Е., Моисеев М. От ядерного сдерживания к общей безопасности// Известия. 15.10.2010 (The Russian text of the article is available at http://www.izvestia.ru/politic/article3147325).
Further, in its 2009 report, the International Commission on Nuclear Non-Proliferation and Disarmament (ICNND) initiated by Australia and Japan and co-chaired by the two countries’ former foreign ministers, Gareth Evans and Yoriko Kawaguchi, wrote as follows: “On doctrine, the Commission’s preferred position, pending the ultimate elimination of nuclear weapons, is that every nuclear-armed state makes a clear and unequivocal “no first use” declaration…, keeping them [nuclear weapons] available only for use, or threat of use, by way of retaliation following a nuclear strike against itself or its allies…This would be a declaration to the effect that the sole purpose of the possession of nuclear weapons is to deter the use of such weapons against one’s own state and that of one’s allies” 3.

However, the nuclear-weapons states – but for few and questionable exceptions – have abstained from undertaking such a commitment. This is yet another indication of both the importance and the complexity of the issue.

I would like to thank all the participants for being here at the Conference, in particular Mr. Jules Silberberg of the U.S. Embassy who kindly agreed to present the U.S. perspective on the issue.

I wish you every success.

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SUMMARY

Generally, a state military doctrine, including its nuclear aspect, has a dual nature. On the one hand, it is a guide to action for the country’s armed forces and defense industry inasmuch as it defines the type of potential wars and conflicts and their probability, as well as the aims and objectives of the country’s military operations and the corresponding combat training and equipment programs for the army and navy. On the other hand, a doctrine sends a message to other countries, both potential adversaries and allies, and contains a warning to the former and a set of guarantees to the latter, while explaining under what circumstances and in what manner the state will resort to military action. Given the huge stockpiles of nuclear weapons that had been accumulated during the Cold War, the world came to realize that using such weapons on a large scale is unacceptable. Thus, the task of defining the ways to deter the adversaries from resorting to nuclear weapons became a top priority of a military doctrine agenda: to prevent a nuclear war either through an intended attack or resulting from the escalation of conventional military operations.

The U.S. Nuclear Posture Review was released on April 6, 2010. The Review outlines the approach of Barack Obama Administration to the implementation of the President’s Prague agenda, for reducing nuclear dangers and advancing towards a world free of nuclear weapons.

The analysis and conclusions of the NPR were driven by the changed and changing international security environment. Several key factors were taken into account: today's most urgent nuclear threats that are posed by nuclear proliferation and nuclear terrorism; the removal of Cold War rivalries - although there is an enduring challenge in preserving strategic stability with existing nuclear powers, most notably Russia and China; and the growth of unrivaled U.S. conventional military capabilities and major improvements in theater missile defenses systems.
According to the latest U.S. document, the role of nuclear weapons is to deter nuclear attack on the United States and their allies and partners. However, the commitment not to use nuclear weapons does not apply to nuclear powers and the states violating their obligations under the NPT. The United States would still consider a nuclear retaliation if there is WMD attack against their allies.

Russia’s current Military Doctrine defines the conditions of using nuclear weapons as follows: “The Russian Federation preserves the right to use nuclear weapons in response to an attack against itself or its allies with the use of nuclear and other weapons of mass destruction and in case of aggression against the Russian Federation with use of conventional weapons when the very existence of the state is threatened” 4.

In comparison to the country’s previous official Military Doctrine of 2000, a distinctive feature of the most recent document is a more reserved and conservative language as regards the use of nuclear weapons in a response to a non-nuclear aggression.

However, it should be noted that on the whole the three military doctrines released since 1993 give a rather fragmented idea of Russia’s nuclear policy which do not allow a comprehensive and definite assessment. All the relevant provisions should be reflected in arms programs adopted on the state level. However, these tend to have a high degree of classification. The nuclear deterrence principles which the Russian Federation abides by, as well as the main instrument of these principles – strategic and non-strategic nuclear forces, their state and development programs – require greater transparency. The more so, given the context of the US-Russian strategic arms reduction treaties and the two countries’ possible consultations on limiting non-strategic nuclear weapons and their cooperation on ballistic missile defense.

China is the only great power that remains bound by a commitment on no first use of nuclear weapons, without any reservations. It is generally believed that a nuclear power that has committed itself to nuclear no first use is drawing on the concept of

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and means for a retaliatory (second) strike. However, according to the generally accepted estimates, the Chinese strategic nuclear forces, as well as missile early warning systems and combat control and communications infrastructure, are too vulnerable and could not guarantee a possibility for a retaliatory strike after a potential disarming nuclear attack by the United States or Russia.

In the light of these considerations, the experts regard the official doctrine of the People's Republic of China primarily as an instrument of politics and propaganda (similar to the 1982 Soviet commitment on no first use of nuclear weapons), which does not reflect the actual operational planning of strategic nuclear forces that are in reality geared to preempptive strike.

The publication includes a systematic classification of nuclear doctrines in terms of using nuclear weapons for a retaliatory (second) strike following a nuclear attack by the adversary. In addition, the states are estimated and ranked with respect to their preparedness to use nuclear weapons in a first strike.

Further, the variety of nuclear-related objectives was thoroughly analyzed. On the basis of the analysis, it was defined that there are five major military and political objectives that different states may assign to nuclear weapons: (1) maintaining prestige and status in terms of international policy (all eight nuclear-weapons states, excluding Israel); (2) prevention of a nuclear attack (all eight nuclear-weapons states, possibly excluding Israel); (3) deterring and countering an attack with the use of other types of weapons and armed forces (relevant for six nuclear-weapons states and not relevant for the People’s Republic of China and – with reservations – for the U.S. and India); (4) security guarantees and influence on the allies (for Russia, the U.S., the UK and France); (5) bargaining chips when negotiating other issues with other countries (for Russia, the Democratic People’s Republic of Korea, and potentially, Israel).

The new NATO Strategic Concept released late in November 2010 did not live up to the optimistic expectations of a number of experts. The new document still spells NATO’s commitment to traditional deterrence as the cornerstone of security with the U.S. guarantees preserved in full. Moreover, as to the nuclear part of the Strategic Concept, there is practically nothing new: almost all the provisions related to nuclear weapons are represented in the same
wording as in the 1999 Strategic Posture. It is as if the newly-expanded Alliance failed to agree on a new language for the issues related to nuclear weapons, and therefore the old wording remained unchanged.

The Alliance could have applied a more innovative approach, if it had not been for a number of factors:

First, in the 1990s and early in the 2000s, relations of NATO with Russia were quite unstable. Therefore, it was not possible to achieve a long-term positive trend in the relations between the two sides that could have a telling impact on the language of the Strategic Concepts of the recent decades, in 1991, 1999 and 2010.

Second, during that period the legacy of the Cold War affected the relations between the West and Russia.

Third, the political elites of the new NATO members have not dismissed the phobias about Russia that were engrained in their relations with a post-Soviet Moscow.

The situation may only be improved by practical cooperation, as it has been outlined in the recent years and mapped at the NATO-Russia Summit in Lisbon in November 2010.

The idea of a world free from nuclear weapons has become increasingly popular. Without steps in that direction, it would be impossible to curb nuclear proliferation, to prevent terrorists from getting access to nuclear weapons or to come to agreement on the new weapon systems development.

Needless to say that it is of key importance to fundamentally reshape the legacy of the Cold War in nuclear strategies, as well as to ensure a more intensive integration of effort in order to address the new challenges and threats.
INTRODUCTION

This publication prepared as part of the project under the general topic “Russia and Deep Nuclear Disarmament” addresses a wide range of issues related to modern nuclear doctrines. Given the development of the global political environment, the positive changes that are taking place in the relations between nuclear powers and the strengthening of international security, it would seem logical that the military doctrines should have changed accordingly.

However, this is not the case, or at any rate the progress in this field has lacked the scope required by the current political relationship and the objectives of cooperation to counter the new threats of the 21st century. Military doctrines are still based upon the concept of mutual nuclear deterrence. The irony of the situation is that this principle is pronounced by both the U.S. and Russian policy documents, while the heads of nations claim that building partnership is the aim of the two countries’ interaction. Meanwhile, deterrence cannot secure a state against truly acute and growing threats such as nuclear proliferation and terrorism. A tragic manifestation of the fact was the catastrophic terrorist attack of September 11, 2001 perpetrated against today’s mightiest nuclear power.

The doctrines could really take into account the positive developments at the global level, if it was not for a number of factors. These factors include the lack of stability in the development of Western-Russian relations. Political miscalculations and short-termism of certain political initiatives of both sides have also added to the general picture. Further, one cannot overlook the Cold War mindset upheld by the older generation of political leaders who established themselves during that period. There are also political forces that have made the whipping up of tensions a part of their political creed. As the result, the glaring inconsistencies that persist in the provisions of military doctrines make changes of the views on nuclear weapons much more difficult to achieve.
A military doctrine at large, as well as its nuclear component is meant to serve two different aims. It must be taken into account by the national military and defense leaders as it defines the nature and the level of probability of potential wars and conflicts, the aims and objectives of the country’s own military activities, the relevant combat training principles and the required equipment programs for the armed forces. At the same time a doctrine is aimed at other countries – both potential adversaries and allies – it sends a warning to the former and security guarantees to the latter while explaining under what circumstances and in what manner the state may resort to military action.

Given the huge stockpiles of nuclear weapons that had been accumulated during the Cold War, the world came to realize that using such weapons on a large scale was unacceptable. Thus, the task of defining the ways to deter the adversaries from resorting to nuclear weapons became a top priority of military doctrines: to prevent a nuclear war that may either stem from follow an intentional attack or result from the escalation of conventional military operations.

The military doctrines of the United States and Russia present the most conspicuous, although controversial, position on the role of nuclear weapons. A detailed account of each of the two countries’ military doctrine will be given in the two separate chapters below. Of particular interest is the contribution of Mr. Jules Silberberg, Head of Political-Military Unit of the U.S. Embassy, at the conference at IMEMO RAN on October 21, 2010 addressing the new U.S. nuclear policy.

In the modern context, with the actual use of nuclear weapons perceived as an unlikely option, possessing a nuclear weapons capability has become increasingly a matter of politics and status. However, there is still a number of military roles that military-political leaders assign to nuclear weapons. A separate chapter provides thorough analysis of such roles.

For the experts and politicians striving for a deep improvement in the international security situation, it is clear that the world is in need of a deep overhaul of the entire system of doctrines related to nuclear weapons. Besides, for Russia (as well as for China), progressing to a higher level of transparency is in line with the long-
term interests. It would allow a more accurate estimate of the nuclear deterrence principles that Russia abides to, as well as of the main instrument of these principles – the strategic and non-strategic nuclear forces, their state and development programs. Progressing to a higher level of transparency is especially important in the context of the US-Russia relations in the sphere of strategic offensive arms reduction, potential consultations on the limitation of non-strategic nuclear weapons and cooperation on missile defense. In addition, it has a direct influence on the possibility for further reductions of nuclear weapons.

The article co-authored by Russia’s four most prominent public figures reads: “The paradox of nuclear deterrence is that it is aimed at the threats of the past century. Today, however, the possibility of a major armed conflict between the largest world powers and their allies in our increasingly globalized and multipolar world is close to zero… Nuclear deterrence is impotent in the face of the new threats of the 21st century, namely: proliferation of weapons of mass destruction and their delivery systems, international terrorism, ethnic and religious conflicts, trans-border crime, etc. Moreover, in some cases, nuclear deterrence encourages the proliferation of weapons of mass destruction and missile technology, or impedes deeper cooperation between powers in their struggle against these threats (for example, the joint development of ballistic missile defense systems)”.

Without continuous transformation and, eventually, renunciation of mutual nuclear deterrence, including its ideology, it will never be possible to proceed to full-scale cooperation and partnership between Russia and other nuclear powers in order to consolidate the efforts to counter the real new threats to international security.

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5 See Yevgeny Primakov, Igor Ivanov, Yevgeny Velikhov, Mikhail Moiseev. See note 2.
The 2010 Nuclear Posture Review was released on April 6. It outlines the Administration's approach to promoting the President's Prague agenda for reducing nuclear dangers and pursuing the peace and security of a world free of nuclear weapons. The review identifies the steps needed to sustain a safe, secure, and effective nuclear deterrent as long as nuclear weapons exist.

This is the third comprehensive review of U.S. nuclear policies and posture since the end of the Cold War. It has been a truly interagency effort conducted by the Department of Defense in close consultation with the Departments of State and Energy. The President has been directly engaged and provided clear guidance to focus the review. The release of this report better aligns U.S. nuclear policies and posture with the current security environment, emphasizing the need to focus on today's most pressing security challenges: nuclear proliferation and nuclear terrorism.

The NPR lays the strategic foundation for a comprehensive approach to these challenges. The President signed New START in Prague on April 8; the Nuclear Security Summit was held on April 12-13, in Washington; and the Nuclear Non-Proliferation Treaty Review Conference convened in New York on May 3. During the course of the NPR, the U.S. consulted extensively with their allies and partners. Washington will work closely with them in its implementation.

The analysis and conclusions of the NPR were driven by the changed and changing international security environment. There are several key factors: today's most urgent nuclear threats are posed by nuclear proliferation and nuclear terrorism; the easing of Cold War rivalries - although there is an enduring challenge in preserving strategic stability with existing nuclear powers, most notably Russia.
and China; and the growth of unrivaled U.S. conventional military capabilities and major improvements in missile defenses against regional threats.

Changes in the nuclear threat environment have altered the hierarchy of our nuclear concerns and strategic objectives. In coming years, we must give top priority to discouraging additional countries from acquiring nuclear weapons capabilities and stopping terrorist groups from acquiring nuclear bombs or the materials to build them.

At the same time, we must continue to maintain stable strategic relationships with Russia and China. We must also strengthen deterrence of regional threats, while reassuring our allies and partners that our commitments to their defense remain strong.

These objectives can be met with reduced reliance on nuclear weapons and with significantly lower nuclear force levels than was true in the past. Therefore, even as we strengthen deterrence and reassurance, we are now able to shape our nuclear weapons policies and force structure in ways that will better enable us to meet our most pressing security challenges.

The findings and recommendations of the NPR support five policy objectives:

The first objective is to prevent nuclear proliferation and nuclear terrorism. To support this objective, the NPR calls for:

- leading international efforts to strengthen the nuclear non-proliferation regime, including revitalizing the Nuclear Non-Proliferation Treaty (NPT), strengthening the International Atomic Energy Agency (IAEA), seeking ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty (CTBT), the Fissile Material Cut-Off Treaty (FMCT), and, of course, seeking ratification and implementation of New START;

- increased nuclear security efforts, including increased funding in FY2011 for DOE nonproliferation programs by $2.7 billion, or more than 25%;

- accelerating efforts to implement the President's initiative to secure all vulnerable nuclear materials in four years, and increasing our ability to detect and interdict nuclear materials;

- initiating a comprehensive national research and development program to support continued progress toward a world free of
nuclear weapons, including expanded work on verification technologies and the development of transparency measures.

The NPR also clearly attests to the commitment of the United States to fulfill its obligations to the NPT, including its Article VI obligations.

The Administration is also renewing the U.S. commitment to hold fully accountable any state, terrorist group, or other non-state actor that supports or enables terrorist efforts to obtain or use WMD, whether by facilitating, financing, or providing expertise or safe haven for such efforts.

The second objective is to reduce the role of U.S. nuclear weapons. Since the end of the Cold War, the United States has been able to reduce the role of nuclear weapons in deterring non-nuclear attack on themselves, their allies and partners. However, today the U.S. believe they can and must do more. The fundamental role of U.S. nuclear weapons is to deter nuclear attack on the United States and their allies and partners. The United States would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.

The Administration is strengthening the long-standing U.S. «negative security assurance» associated with the NPT, by declaring the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations.

The recently completed Quadrennial Defense Review and Ballistic Missile Defense Review direct further investments that will strengthen deterrence while reducing the role of nuclear weapons, including investments in missile defenses, counter-WMD capabilities, and other conventional military capabilities. One objective of these investments is to help create the conditions that would make it possible, over time and in close consultations with allies and partners, to declare that the sole purpose of U.S. nuclear weapons is to deter nuclear attack.

The third objective is to maintain strategic deterrence and stability at reduced nuclear force levels. The Administration is committing to continuing the process of reducing Cold War nuclear arsenals and to doing so in partnership with Russia in a way that
promotes strategic stability at ever lower numbers. The New START is an important step in accomplishing that priority.

The NPR determined some of the guidelines for U.S. negotiators on what objectives would meet the requirements of strategic stability. With the treaty now successfully agreed, we seek the Senate's quick ratification. The United States and Russia agreed to limits of 1,550 accountable strategic warheads, 700 deployed strategic delivery vehicles, and a limit of 800 deployed and non-deployed strategic launchers. The U.S. will retain the nuclear Triad under New START, and «de-MIRV» our ICBMs to one warhead each, to enhance strategic stability.

The U.S. seeks a continuing dialogue with Russia on future additional reductions, with the objective of limiting all the weapons of both sides, not just strategic, but also non-strategic weapons, as well as deployed and non-deployed weapons. It also seeks high-level dialogues with Russia and China aimed at promoting more stable and transparent strategic relationships. With Russia, this includes future bilateral reductions as well as measures to increase stability and mutual confidence. With China, the purpose of a dialogue on strategic stability is to provide a venue and mechanism for each side to communicate its views about the other's strategies, policies, and programs on nuclear weapons and other strategic capabilities.

The fourth objective is to strengthen regional deterrence and reassurance of U.S. allies and partners. The NPR reflects a commitment to strengthen deterrence against the range of 21st century threats. In particular, deterrence must be strengthened to deal with regional actors seeking nuclear weapons in violation of their treaty obligations and in defiance of the international community.

As the NPR notes, deterrence can be strengthened in many ways, most of them non-nuclear. The administration is committed to working with its allies and security partners to strengthen regional deterrence by enhancing conventional capabilities, fielding missile defenses, and improving counter-WMD capabilities.

But a nuclear component must remain in these regional security architectures so long as nuclear threats to U.S. forces and allies remain. To support this commitment, the NPR reflects a series of decisions, including modernization of the capability to forward deploy U.S. nuclear weapons on tactical fighters and heavy bombers,
and full scope life extension of the associated B-61 bomb. This does not prejudge future NATO decisions, which should be taken through NATO consensus.

Having conducted close consultation with allies, we will retire the nuclear-equipped sea-launched cruise missile (TLAM-N). We continue to be able to extend our nuclear umbrella through forward-deployable fighters and bombers, as well as U.S. ICBMs and submarine-launched ballistic missiles (SLBMs). We will continue close consultations with allies and partners to ensure the credibility and effectiveness of the U.S. extended deterrent in years to come.

The fifth objective is to sustain a safe, secure, and effective nuclear arsenal. As the President has said, we will sustain a safe, secure, and effective nuclear arsenal as long as nuclear weapons exist. Several key principles will guide future U.S. decisions on stockpile management:

The U.S. will not conduct nuclear testing, and will seek ratification and entry into force of the Comprehensive Nuclear Test Ban Treaty:

The United States will not develop new nuclear warheads. Life Extension Programs (LEPs) will use only nuclear components based on previously tested designs, and will not support new military missions or provide for new military capabilities.

The United States will study options for ensuring the safety, security, and effectiveness of nuclear warheads on a case-by-case basis, consistent with the congressionally mandated Stockpile Management Program. The full range of LEP approaches will be considered: refurbishment of existing warheads, reuse of nuclear components from different warheads, and replacement of nuclear components.

In LEPs, the United States will give strong preference to options for refurbishment or reuse. Replacement of nuclear components would be undertaken only if critical Stockpile Management Program goals could not otherwise be met, and if specifically authorized by the President and approved by Congress.

The U.S. will modernize the nuclear weapons infrastructure and sustain the science, technology and engineering base - over a 13% funding increase over FY 2010. This investment is critical to addressing our aging infrastructure, sustaining our deterrent, and
enhancing our efforts against nuclear proliferation and terrorism. It will also allow the U.S. to reduce many nondeployed warheads currently kept as a technical hedge.

Finally, the NPR notes the importance of recruiting and retaining the “human capital” needed in DoD and DoE for the nuclear mission, and proposes building on current efforts.
2. RUSSIA’S NUCLEAR POLICY

Extracts from the Russian nuclear policy are officially represented in the new Military Doctrine of the Russian Federation approved by President Dmitry Medvedev on February 5, 2010 and in the National Security Strategy of the Russian Federation through 2020 approved by the Russian President on May 12, 2009.

The Military Doctrine refers to nuclear threats, the role of nuclear policy, its aims and objectives in most of its sections. In particular, it is noted that despite the fact that a large-scale war involving the use of conventional and nuclear weapons is less likely to be unleashed against Russia, there are areas where military threats have increased. The threats include the creation and deployment of strategic missile defenses undermining global stability and undermining the balance of powers in the missile-nuclear sphere, as well as militarization of outer space, deployment of strategic conventional high-precision weapons, proliferation of weapons of mass destruction, missiles and missile technologies, an increase in the number of nuclear-weapons states. Other threats include hindering the functioning of civil and military authorities, disrupting the operation of strategic nuclear forces, missile attack early warning systems, space surveillance, nuclear weapons storage facilities, nuclear power facilities, nuclear and chemical industry facilities and other potentially hazardous installations.

According to the Military Doctrine, in case of a military conflict involving conventional capabilities (large-scale war, regional war) and threatening the very existence of the nation, the availability of nuclear weapons can lead to the escalation of this conflict to a nuclear armed conflict. For this particular reason nuclear weapons will remain an important factor preventing nuclear armed conflicts and armed conflicts involving conventional arms, while the primary objective of the Russian Federation is the prevention of nuclear or other kinds of military conflicts.
Therefore, the major tasks facing Russia in terms of deterring and preventing armed conflicts include “maintaining sufficient level of strategic stability and nuclear deterrence capability”. According to the Military Doctrine, the condition for the country’s using nuclear weapons is as follows: “the Russian Federation retains the right to use nuclear weapons in response to an attack against itself or its allies with the use of nuclear and other weapons of mass destruction and in case of aggression against the Russian Federation with use of conventional weapons when the very existence of the state is threatened” 6.

To this effect, the document sets the task to maintain the composition and state of combat and mobilizational readiness and training of the strategic nuclear forces, their infrastructure and command and control systems at a level guaranteeing the infliction of the assigned level of damage on an aggressor under any conditions of war initiation. Other tasks include maintaining nuclear deterrence potential at the prescribed level and ensuring introduction of up-to-date systems of weapons, military and specialized equipment to the strategic nuclear forces.

The threats listed in the National Security Strategy include “the policies of a number of leading foreign states, directed at achieving predominant superiority in the military sphere, primarily in terms of strategic nuclear forces, by developing high-precision, informational and other advanced means of warfare, strategic non-nuclear arms, as well as by unilaterally creating a global missile defense system and militarizing space” 7. This may result in yet another cycle of the arms race and lead to the proliferation of nuclear, chemical and biological weapons, and their delivery vehicles.

The document also specifies that the negative impact on the military security of the Russian Federation and its allies is aggravated by the departure from international agreements on the limitation and reduction of weapons, as well as by activities aiming at undercutting to shake the stability of civil and military command-

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control systems, missile early warning and space surveillance systems and disruption operation of strategic nuclear forces, nuclear weapons storage facilities, nuclear power plants, nuclear and chemical, as well as other potentially hazardous installations.

In this regard, it is noted that “the primary task in terms of strengthening national defense in the mid-term perspective is the transition to a brand new image of the Russian Armed Forces while preserving the strategic nuclear forces’ capabilities”\textsuperscript{8}.

Comparing the Military Doctrine and the National Security Strategy in terms of military threats, including nuclear threats, reveals the flexibility of the wording, i.e. the way it adjusts to the changing environment. For example, the Strategy lists among the threats the superiority “of the leading foreign states… in terms of strategic nuclear forces” and the departure “from international agreements on the limitation and reduction of weapons” that are missing in the Military Doctrine. This can be explained by the fact that in May 2009, the prospect of signing a new START Treaty between the United States and Russia seemed more remote than it did in February 2010, when negotiations were in full swing and there was no longer any doubt that the new START Treaty equalizing the U.S. and Russia’s strategic nuclear capabilities would be eventually signed and would enter into force.

\textbf{Evolution of the Russian nuclear doctrine.} Of particular interest is the way the Russian doctrine has evolved since 1993, when the General Provisions of the Military Doctrine of the Russian Federation were approved. The General Provisions declared that “Russia will not use nuclear weapons against any non-nuclear state that is party to the Treaty on the Non-Proliferation of Nuclear Weapons, except when:

\begin{itemize}
  \item[a)] such a state being allied to a nuclear-weapon state perpetrates an attack against the Russian Federation, its territory, the Armed Forces and other military forces or against its allies;
  \item[b)] such a state, jointly with a nuclear-weapon state, perpetrates or supports an invasion or an armed attack against the Russian
\end{itemize}

\textsuperscript{8} Ibid.
Federation, its territory, Armed Forces and other military forces or against its allies” 9.

This wording dates back to the 1960s; it is associated with the efforts to strengthen the regime of the Treaty on the Non-Proliferation of Nuclear Weapons by providing security guarantees to non-nuclear-weapon states that were signatories to or were intending to sign the Treaty.

Since then, the wording referred to as “negative security assurances” to non-nuclear-weapon states has been reiterated by representatives of the official members of the nuclear club with only the slightest variations. However, neither the Conference on Disarmament in Geneva, nor the United Nations have succeeded in agreeing on the general formula of the negative assurances. Negative assurances were expressed in the wordings similar to the one contained in the 1993 General Provisions on the Military Doctrine of the Russian Federation, in the unilateral statements by the Foreign Ministries of Russia, the U.S., the UK and France. Yet, apart from Russia, neither of these countries has included a similar wording in their doctrines.

The text of the 2000 Military Doctrine of the Russian Federation included new conditions for the use of nuclear weapons: “The Russian Federation reserves the right to use nuclear weapons in response to an attack using nuclear and other types of weapons of mass destruction, as well as in response to large-scale aggression with conventional weapons in situations critical to the national security of the Russian Federation” 10.

In fact, this wording replicated the principles that the United States, the United Kingdom and France have adhered to for quite a number of years. These states have never denied the possibility of a first use of nuclear weapons in the context of significant superiority of the Warsaw Treaty states led by the Soviet Union in general-purpose forces. Starting in 1991, NATO has enjoyed a decisive superiority in this respect and has also intended to expand the Alliance’s area of responsibility.

In Russia’s new Military Doctrine of 2010 the main condition for using nuclear weapons has undergone a change that was insignificant in form but very important in terms of the implication. The end of the phrase that used to read “in response to large-scale aggression with conventional weapons in situations critical to the national security of the Russian Federation” was replaced by “in case of aggression against the Russian Federation with use of conventional weapons when the very existence of the state is threatened”\(^\text{11}\). The latest wording, at least on the declarative level, has raised the threshold of using nuclear weapons.

**The issue related to information protection.** It should be admitted that all the three military doctrines published since 1993, present a rather fragmented idea of Russia’s nuclear policy which does not allow for a comprehensive and mature assessment. Practical nuclear policy is not so much a matter of declarations related to threats of and conditions for using nuclear weapons. Instead, it is a matter of adopting programs for maintaining and developing the strategic nuclear triad, non-strategic nuclear weapons and missile defense, including specific budgets allocated to each component, the levels of operational capabilities defined (operational and technical characteristics) and the stages specified for the introduction of new systems and the retirement of the old ones.

All the above should be included in the decennial state arms programs. However, in Russia this data is traditionally assigned a high degree of classification and is not presented even at closed sessions of the State Duma (Russian Parliament, lower house) and the Council of Federation (Russian Parliament, upper house) Committees when they are discussing the state defense orders for the coming year. Moreover, it seems that these days the parliament members display no interest in obtaining and assessing this data.

In this respect what is referred to as Russia’s nuclear policy is far different from, for example, the U.S. nuclear policy reflected in quadrennial nuclear posture reviews that invariably include all the details on the status of nuclear weapons and the plans for their development and supporting systems with the Congress discussing and adopting their respective budgets. This deep-rooted weakness of

Russia’s nuclear policy is only partially and barely offset by the data that may be obtained from separate statements by official representatives of the Defense Ministry and the military-industrial complex. However, this information may at times be quite inconsistent.

For example, there is information that four class 955 ballistic missile submarine designed to carry Bulava-30 SLBMs will be introduced within the next 10 years with another four SSBNs to follow in the future. However, no data on the required appropriations is provided. There is contradictory data on the retirement periods of the ‘heavy’ RS-20 missiles and the ‘light’ RS-18 ballistic missiles currently in the inventory of the Strategic Missile Forces (the assumed periods vary from 2016 to 2020). Even vaguer is the outlook for the development of a new strategic bomber system to replace the TU-95MS heavy bombers. Meanwhile, it has been announced that a new ‘heavy’ ballistic missile will be developed, which seems to be an obvious strategic miscalculation.

The information on the current composition of Russia’s nuclear triad could be obtained primarily from the results of data exchanges between the United States and Russia under the START I Treaty.

It is rather difficult to get an insight into Russia’s actual nuclear policy compared to the situation of openness in the developed democratic states possessing nuclear weapons. The reason is that Russia’s nuclear policy is excessively closed not only from the public and independent experts, but also from the main legislative body of the state. Nuclear deterrence principles that Russia adheres to, as well as the primary instrument of these principles – strategic and non-strategic nuclear assets, their state and development programs require a higher level of transparency. The more so, given the context of the US-Russian strategic arms reduction treaties and the two countries’ possible consultations on limiting non-strategic nuclear weapons and their cooperation on ballistic missile defense, which has a direct effect on the possibilities for further nuclear arms reductions.

Most importantly, moving away from totalitarian practice of taking the decisions in secrecy and proceeding with developing democracy in Russia is inseparable from increasing the transparency of military policy and military organization, including their nuclear
component. The parliament and the society have the right to know how and on what the state’s huge material and intellectual resources are spent, how it contributes to the country’s defense capability and reduces the possibility of the most dreaded catastrophe – the nuclear war. In this regard, ‘more’ does not necessarily mean ‘better’. For example, the parliament might inquire how much (including potential costs overruns, as was the case with class 955 SSBN and the Bulava-30 SLBM) it will cost to develop, test, produce and deploy the new heavy ICBM, against whom it will be targeted and how vulnerable it will be in fixed silos for nuclear or high-precision conventional weapons of a potential adversary. It would also be of use to calculate how many well-proven mobile and stationary Yars-type ICBMs with multiple reentry vehicles could be deployed using the same budget and/or how much the effectiveness of missile attack warning systems (including space-based systems) and strategic nuclear forces combat command control systems could be improved.

All this requires rather an inclusive and open discussion and independent expert estimates, in order to avoid strategic miscalculation. For example, the secrecy in the policy-making resulted in miscalculations in 2000-2001, when the decision was made to abruptly curtail the ICBM land-based forces and their modernization programs. Similar miscalculations may happen again in relation to the new heavy ICBM or the issue of withdrawing from the Intermediate-Range Nuclear Forces Treaty (INF Treaty) of 1987.

It is also essential in terms of finally proceeding to transform such a legacy of the Cold War as mutual nuclear deterrence which is obstructing the consolidation of the efforts of the two nuclear superpowers to counter the real new threats. The mentioned article co-authored by four Russian prominent political figures also notes that mutual nuclear deterrence runs counter to the U.S. and Russian interests. This viewpoint is also expressed in the resolution by the U.S. Senate Foreign Relations Committee on the ratification of the new START Treaty signed in Prague.

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12 See Yevgeny Primakov, Igor Ivanov, Yevgeny Velikhov, Mikhail Moiseev. See note 2.
3. **EVOLUTION OF NATO NUCLEAR DOCTRINE**

Changes in political situation both within and outside Europe bring about changes in the position of the North Atlantic Alliance with regard to nuclear weapons, traditionally outlined in a document titled NATO Strategic Concept. Still, it should be emphasized, that the transformation of this position is lagging far behind the improvement in the relations between Russia and the West.

True, one cannot deny that in the 1990s and early in the 2000s, Russia’s relations with NATO were quite unstable. There was no long-term positive trend that could have a telling impact on the language of the Strategic Concepts of 1991, 1999 and 2010.

Moreover, during that period the legacy of the Cold War still affected relations between the West and Russia.

Besides, the political elites of the new NATO member-states have not abandoned the phobias about Russia in their relations with a post-Soviet Moscow.

Generally, two groups of geopolitical realities influenced the provisions of the new NATO Strategic Concept throughout the period of its development. The first one includes the perception of the level of traditional threats, primarily the nature and dynamics of relations with the former potential adversary, that is, Russia. The second embraces the perception of the so-called new challenges and threats. This refers first and foremost to the perception of the conflicts in the regions adjacent to Europe, the threats of the proliferation of WMD and terrorism.

Western expert community remains concerned over both political stability within Russia and the consistency of the course towards cooperation with NATO, pursued by Russia in its foreign policy.

This was reflected, in particular, in the most important document specially intended to outline major ideas of the future Strategic Concept (“NATO 2020”) - the report of the Group of Experts headed by Dr. Madeleine Albright. It stresses that “because
Russia’s future policies toward NATO remain difficult to predict, the Allies must pursue the goal of cooperation while also guarding against the possibility that Russia could decide to move in a more adversarial direction. According to many politicians, it is nuclear weapons that remain the most stable and reliable guarantee in today's world. It is likely that this particular reasoning have prompted the desire to preserve the role and place of nuclear weapons in the new Strategic Concept of NATO.

Alexander V. Grushko, Deputy Minister of Foreign Affairs of the Russian Federation referred to the report by Madeleine Albright's group in the following way: "During the extensive consultations with the alliance and with individual NATO nations and the Wise Men, we very clearly told them of our vision of the main elements of NATO's strategic concept. The first and perhaps most important thing is that NATO should avoid ambiguity in the formulation of its attitude to Russia. Up until now, NATO's position was characterized by ambivalence: on the one hand, they argued that Russia was a partner. On the other hand, more or less covertly they would suggest that Russia could be a problem in the field of security and even a direct threat."

In only a short time, Russia's complaints were once again confirmed. As a result of unauthorized disclosure of diplomatic mail through WikiLeaks in December 2010, the public got access to NATO's secret plans to protect the Baltic States against potential threat posed by Russia. Russian Foreign Minister Sergey Lavrov stated that in these circumstances one could rightfully ask in which case NATO was sincere: talking about partnership or discussing plans to defend against Russia.

In the 1990s some senior officials of the US Department of State made statements in this vein explaining that the expansion of NATO was necessary in case of possible development of a negative

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scenario in Moscow. In response throughout 1990s and 2000s Russian political and expert community tended to perceive with great suspicion and hostility this very expansion of NATO.

Despite infinite optimistic statements of NATO officials on building partnership with Russia, the 2010 Russia's Military Doctrine gave quite a negative assessment to the results of the two decades of attempts to establish partnership with NATO. It implies that 15 years after the expansion commenced, Moscow continues to consider “the desire to endow the military potential of the North Atlantic Treaty Organization (NATO) with global functions carried out in violation of the norms of international law and to move the military infrastructure of NATO member countries closer to the borders of the Russian Federation” as the main external military danger. It is first on the list of other military dangers in the Doctrine. According to the majority of Russian experts (including liberal ones), it is the thoughtless policy of the expansion of NATO that inflicted the greatest damage to Russia-NATO relations.

Apparently, certain progress has been made in the relations between Russia and the West during the current Obama-Medvedev political cycle. Nevertheless, the recent positive developments appear insufficient to lay the groundwork for a radical and irreversible change in the relations between Russia and NATO and, more generally, Russia and the West.

The assessment by Russian Prime Minister Vladimir Putin are notable, taking into account his broad support in political elite and public at large. In one of his interviews of late summer 2010 (i.e. after major steps in resetting US-Russian relations) he expressed...

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16 See: Oznobischev S. Russia-NATO: real partnership or virtual confrontation? World Economy and International Relations. 2006. No.1. p. 18
Oзнобищев С. Россия – НАТО: реалистичное партнерство или виртуальное противостояние? // МЭ и МО. 2006. № 1. С.18
certainty that his famous 2007 Munich speech criticizing the Western countries' position with regard to Russia, remained quite up-to-date.\textsuperscript{19}

As for the second group of threats, it is obvious that NATO's concern over these grows. The Alliance's spokespersons constantly highlight the increasing risks of WMD proliferation and terrorism.

Political and expert community had had certain optimistic expectations as to the new NATO Strategic Concept. Yet those were right who had predicted that Brussels would not resolve to significantly modernize its nuclear strategy and would be more likely to confine itself to merely cosmetic changes consistent with the current situation (i.e. expressing support to the idea of a future world free of nuclear weapons).

The final result was quite disappointing compared to the opportunities of the unprecedented process of elaboration of the document presented in Lisbon. There were numerous consultations in different formats involving representatives of Western and Russian political and expert communities and devoted to the main provisions of the document. Unfortunately, one can hardly find any trace of this intense and unique brain-storming in the new document. Most of it proved to be slightly modified provisions that had been included in previous Strategic Concepts in 1999 and 1991.

Moreover, the new 2010 Strategic Concept has turned out much more conservative than the recent US Nuclear Posture Review containing many novelties as to Washington's intention to reduce the role of nuclear deterrent and its readiness to take more active steps towards strengthening non-proliferation regime and continue nuclear arms reductions and limitations.

To give objective assessment to the major provisions of the new Strategic Concept related to nuclear weapons, one should compare it to the NATO document of 1999 based on the following list of criteria:

- What are the threats NATO nuclear weapons should address?


• What are the ways to ensure security with the help of nuclear weapons?
• On what nuclear weapons the Atlantic Alliance counts in its strategy?
• How high is readiness to talks on nuclear weapons reduction and limitation?
• What is the impact of nuclear weapons on relations with Russia?

The last point is directly linked to nuclear weapons, as NATO has traditionally had nuclear weapons in the context of its military relations with the USSR and subsequently Russia.

Security threats. In the 2010 Strategic Concept, the so-called “nuclear tradition” turns out to be the most important factor. As it goes in the first lines of the Strategy, “as long as there are nuclear weapons in the world, NATO will remain a nuclear Alliance” 20. There was no such provision in the 1999 Strategic Concept, although nothing challenged the necessity of nuclear weapons. At the same time it should be acknowledged that the Alliance decided to keep up with the recent “fashion” in this sphere, which will be discussed in greater detail below.

To justify the need to maintain an efficient nuclear capability the authors of the Strategic Concept point to the fact that the modern security environment contains “a broad and evolving set of challenges to the security of NATO”. At the same time they note that the threat of a conventional attack against NATO territory “is low”, although “the conventional threat cannot be ignored”. These provisions, although with a slightly different wording were in the 1999 Strategic Concept. In fact, Russian national security documents has also stated almost the same since 1990-s.

Statements of the kind are quite equivocal and may stay so for indefinite time, as the movement of NATO towards Russia's borders has made a direct armed conflict with it or at the post-Soviet space hypothetically possible.

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It is nothing more than just an inertia of strategic mentality, directed towards the threats of the past century, rather than new and real dangers. An act of “catastrophic terrorism” of September 11, 2001 was aimed against the most powerful nuclear-weapon state, the United States of America. This obviously challenged the adequacy of post-Cold War nuclear deterrence, as it is pointless to use nuclear weapons in the fight against terrorism, and all the deterrence principles just do not work in this case.

Nevertheless, the novelty of the situation failed to bring about a fundamental review of positions with regard to nuclear deterrence in the official documents of the five nuclear-weapon states. They stick to various pretexts for retaining nuclear weapons, including terrorist threat, while in reality these weapons are tied to the basic mutual nuclear deterrence tasks of Cold War era. One can find numerous evidence of the persistence of this deterrence pattern both in official documents and in the works of the leading US and Russian experts.

Relevant recent Russian documents (the Military Doctrine of the Russian Federation adopted on February 5, 2010, Strategy of the National Security of the Russian Federation through 2020 adopted on May 13, 2009) imply but not explicitly mention the U.S. as a part of rationale for maintaining and modernizing nuclear capability. The recent US Nuclear Posture Review says frankly that “Russia’s nuclear force will remain a significant factor in determining how much and how fast we [the U.S. — authors] are prepared to reduce U.S. forces”.

According to respected U.S. experts, common view in political and academic community holds that “Russia’s nuclear weapons remain the greatest military danger to the United States” 22. These views within the main nuclear power of the North-Atlantic Alliance are affecting the corresponding nuclear policy of NATO. A senior military expert Brigadier General Klaus Wittman stressed that the concept of “Extended deterrence, including forward basing of some

nuclear systems by the United States,” adopted by NATO, is directly connected with "Russian weapons of this kind"23.

All this attests to the fact that despite geopolitical and other changes in recent decades, Russia remains the main “object” of nuclear deterrence for the Alliance.

The new Strategic Concept also pays considerable attention to new threats: the proliferation of nuclear weapons and other weapons of mass destruction and terrorism that “poses a direct threat to the security of the citizens of NATO countries”24. In this context, there are increasingly common references to “cyber attacks” against critical communication networks, as well as statements recognizing the growing dependence on foreign energy supplies (although NATO plays a disputable role in preventing these threats).

On the whole, like Russian national security documents, the Strategic Concept states that “the Alliance does not consider any country to be its adversary”. This language follows almost word for word the similar provision of the 1999 Strategic Concept, but it does not reflect NATO actual nuclear operational planning and force structure. The Concept notes that “no one should doubt NATO’s resolve if the security of any of its members were to be threatened”25.

Ways to ensure security with nuclear weapons and NATO’s nuclear assets. Taking in consideration the geopolitical and geostrategic changes that took place in Europe in recent 20 years, one could expect NATO to announce that the only purpose of the Alliance's nuclear weapons on the continent is to deter the use of nuclear weapons by other powers.

Instead, the new Strategic Concept abounds in ambiguities. On the possibility of use of nuclear weapons it notes that the circumstances “in which any use of nuclear weapons might have to be contemplated are extremely remote”26. This vague statement duplicates corresponding phrases of Russian and US doctrines (despite NATO unique geostrategic position of conventional

24 See: Active Engagement, Modern Defence…
25 Ibid.
26 Ibid.
superiority and absence or real military aggression threats in Europe) and reproduces exactly the wording from the 1999 Strategic Concept. Moreover it stresses that “the supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States; the independent strategic nuclear forces of the United Kingdom and France, which have a deterrent role of their own, contribute to the overall deterrence and security of the Allies”\(^\text{27}\) (this provision also reproduces the phrasing of the 1999 Strategic Concept). A series of measures is envisaged to ensure the full range of capabilities necessary to deter and defend against any threat. Those include primarily the “appropriate mix of nuclear and conventional forces”\(^\text{28}\) — also a used formula from the 1999 Strategic Concept.

As the new Strategic Concept highlights, to ensure the maximum credibility of the deterrence, the broadest possible participation of Allies “in collective defense planning on nuclear roles” is required, which involves “peacetime basing of nuclear forces”, and command, control and consultation arrangements\(^\text{29}\). This provision (para. 19, 2010 Strategic Concept) is an exact copy of the language from the 1999 Strategic Concept (para. 63)\(^\text{30}\). Both 1999 and 2010 nuclear-conventional postures of NATO have a déjà vu effect as relics from the times when Soviet shock tank armies stood at a distance of a few days of march from la Manche.

The only profoundly new element of the Concept is the focus on ballistic missile defense. This can be explained by the recognition of threats posed by the proliferation of nuclear weapons (first and foremost, Iranian missile and nuclear programs), new technical capabilities, and Washington's desire to deploy missile defenses in Europe. The authors of NATO military policy announced that the Alliance would develop the capability to defend their populations and territories against ballistic missile attack “as a core element of our collective defence”\(^\text{31}\).

\(^\text{27}\) Ibid.
\(^\text{28}\) Ibid.
\(^\text{29}\) Ibid.
\(^\text{31}\) Ibid.
In this context, the prospects of cooperation with Russia which promotes a cooperative BMD since late 1990s, gains special importance. The announced intention to actively seek cooperation with Russia in ballistic missile defense is a new and refreshing declaratory element of the Concept. The document also states the Alliance's resolve to step up political consultations and practical cooperation on this subject.

**Readiness to negotiate. Relations with Russia.** The new Strategic Concept stresses that “NATO seeks its security at the lowest possible level of forces” (para. 26). This provision, except for a couple of words was also borrowed from the 1999 Strategic Concept (para. 40). This definition drives one to the conclusion that nothing has changed in NATO's policy in these 11 years, although the Alliance proclaims its desire for “seeking to create the conditions for further reductions in the future”.

It is mentioned that since the end of Cold War NATO has “dramatically reduced the number of nuclear weapons stationed in Europe” and lowered the “reliance on nuclear weapons in NATO strategy”. The first part of this statement is shared by experts who assume that besides nuclear capabilities of the UK and France, there remain about 200 nuclear tactical gravity bombs located in five European countries.

However, no official data is given in this connection. Leaving this issue apart, as well as the criteria and methods of assessment, the new Strategic Concept insists on the existing disparity with Russia's stockpiles of tactical nuclear weapons. NATO is instructed “in any future reductions... to seek Russian agreement to increase transparency on its nuclear weapons in Europe and relocate these weapons” away from the territory of NATO members. (The question is where – towards the territories of China or Japan, and to what effect taking into account the capabilities of modern transportation to bring them back.) This language seems unconvincing and smacks of politics and propaganda, which is far from facilitating dialogue on this matter.

When possible content of the future NATO Strategic Concept was discussed, political and expert community expressed doubts as to whether the Alliance resolved to declare the purpose of progressing towards the world free from nuclear weapons. However,
it seems that after the majority of the five nuclear-weapon states leaders (including Russian) recognized the need to jointly move towards this aim, it turned out inappropriate to pass off this issue. Moreover, in relation to this declaration the European leaders are not required to take any urgent steps.

It is noted in this context that the cooperation between NATO and Russia is of strategic importance. The document stresses that the Alliance poses no threat to Russia: “On the contrary, we want to see a true strategic partnership between NATO and Russia, and we will act accordingly, with the expectation of reciprocity from Russia”. It also recognizes that “a strong and constructive partnership based on mutual confidence, transparency and predictability” can best serve common security.

No doubt, NATO's desire to step up cooperation with Russia is welcome. However, Russian presidents have repeatedly hinted at the possibility of Russia's directly acceding to NATO, which implies a much higher level than “strategic” or any other partnership. For example in June 2001, after the first US-Russian Summit, during their joint press-conference Vladimir Putin reminded George W. Bush that a year before the Summit he (Vladimir Putin) was asked whether it was possible that Russia joined NATO somehow. He had answered “Why not”. He also recalled that former US Secretary of State Dr. Madeleine Albright who had been “some place on a trip to Europe” had said to this “look, we're not talking about this right now”.

Addressing the Council on Foreign Relations in November 2008 (with the Madeleine Albright as a moderator) President Dmitry Medvedev said that the situation was far from conducive to Russia's accession to NATO, but mentioned a saying: “never say never”.

Nonetheless heads of NATO chose to ignore these messages by the top Russian leaders.

Taking into account the resetting of US-Russian relations and building up cooperation on BMD, Afghanistan and Iran it might be expected that the new NATO Concept could at least contain a proposal to engage in serious consultations on the possibility, conditions and timeframe of Russian alliance-type relations with NATO (as well as formal recognition of CSTO and expanded cooperation with it on Afghanistan).

Instead, on this issue NATO Concept confined itself to repeating amorphous and non-committing formulation, made many times in the past with very little practical steps following such statements. Indeed the call to build “a strong, stable, enduring and equal partnership” was included in the NATO-Russia Founding Act adopted as far back as in 1997.

For more than 15 years, one of the major obstacles to cooperation (let alone partnership) has been the policy of NATO expansion towards the East. For all this time Russia's concerns have never been taken into account nor discussed at the official level. The new document introduced no changes to this policy of Brussels. The Strategic Concept says in a tone of approval that “NATO’s enlargement has contributed substantially to the security of Allies; the prospect of further enlargement and the spirit of cooperative security have advanced stability in Europe more broadly”. This statement is erroneous from Moscow's point of view, if the relations with Russia are to be viewed as an inalienable part of ensuring stability at the continent.

Thus, the new NATO Strategic Concept continues to declare the Alliance's commitment to traditional nuclear deterrence as a basis of ensuring security while preserving the “trans-Atlantic link”, that is, nuclear assurances by the United States. What is more, the nuclear part of the Strategic Concept contains very few if any new provisions, compared to the 1999 NATO Strategic Concept. It appears that as the number of the Alliance members has grown - including France’s returning to NATO military structure with its ambitious national nuclear doctrine - coming to a consensus on

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tangible innovations on important subjects like nuclear strategy and policy has become that much more difficult.

All in all there is no reason for Russia to perceive this new document as a turn in relations with NATO, which might correspond to the changes in its relations with the United States.

Achieving a radical change in relations implies taking practical steps which were announced at the Lisbon NATO-Russia summit. After the meeting of Dmitry Medvedev and Anders Rasmussen specific instructions were given to the bureaucracies to develop a comprehensive joint analysis of future framework conditions for cooperation on ballistic missile defense, and specify steps of cooperation on common security challenges of the 21st century 35. If, in contrast to the past, these instructions are fulfilled at a practical level - there may be a real change of NATO and Russia’s nuclear strategies, and their radical departure from the Cold-War principles.

4. COMPARATIVE ANALYSIS OF MODERN NUCLEAR DOCTRINES

Generally, any state’s military doctrine, including its nuclear aspect, has a dual nature. On the one hand, it is a guide to action for the country’s armed forces and defense industry inasmuch as it defines the type of potential wars and conflicts and their probability, as well as the aims and objectives of the country’s military operations and the corresponding combat training principles and weapon programs. On the other hand, a doctrine sends a message to other countries, both potential adversaries and allies, and contains a warning to the former and a set of guarantees to the latter, while explaining under what circumstances and in what manner the state will resort to military action. Given the huge stockpiles of nuclear weapons that had been accumulated during the Cold War, the world came to realize that using such weapons on a large scale is unacceptable. Thus, the task of defining the ways to deter the adversaries from resorting to nuclear weapons became a top priority of a military doctrine agenda: to prevent a nuclear war either following an intended attack or resulting from the escalation of conventional military operations.

The relation between these two aspects in military doctrine varies from state to state. It may also change in one state's military doctrine over time. Indeed, official military doctrine of the USSR was mainly an instrument of propaganda and had little relation to actual military strategy and operational planning. In today's Russia this relation is more tangible, which does not make the military doctrine free from internal contradictions (and possibly makes them more visible - reflecting actual problems of military planning, technical development and budgeting).

Nuclear-weapon states' doctrines may be classified despite the variety of official strategic concepts, considerable differences in the weight of their political and propaganda elements, as well as in the extent to which they reflect actual plans of using nuclear weapons.
Nuclear strategy of the leading states. As for the circumstances in which the use of nuclear weapons is deemed justified, the situation is as follows. New Russian and U.S. doctrines adopted in 2010 contain very similar languages with this regard.

The United States. According to the new U.S. doctrine, “the fundamental role of U.S. nuclear weapons, which will continue as long as nuclear weapons exist, is to deter nuclear attack on the United States, our allies, and partners”. The U.S. will “consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners”. Besides, the role of nuclear weapons in deterring attack with the use of conventional, chemical and biological weapons will be reduced. The U.S. is prepared to declare that they “will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations”\(^{36}\). However, this obligation does not apply to NPT nuclear weapon states and the states breaching their obligations under the NPT.

Apparently, implying allied assurances for Japan and South Korea, the U.S. strives to retain the possibility of a nuclear retaliation in case of an attack involving conventional weapons or other types of WMD (for “a narrow range of contingencies”, as the documents says). In other words, the use of nuclear weapons is admitted not only globally (as a basis for deterring a nuclear attack against the U.S.), but also for the purposes of deterrence at the regional level in response to an attack against the allies involving nuclear weapons, and, in certain cases, in response to an attack using other types of WMD or conventional arms and armed forces.

The United States is therefore “not prepared at the present time to adopt a universal policy that the “sole purpose” of U.S. nuclear weapons is to deter nuclear attack on the United States and our allies and partners, but will work to establish conditions under which such a policy could be safely adopted”\(^{37}\).

Russia. Current Russian military doctrine says: “The Russian Federation ensures constant readiness of Armed Forces and other


\(^{37}\) Ibid.
troops to deterring and preventing armed conflicts, ensuring armed protection of the Russian Federation and its allies in accordance with the norms of international law and the international treaties of the Russian Federation... Preventing nuclear armed conflict, as well as any other armed conflict, is the main task of the Russian Federation” 38.

The military doctrine envisages the use of nuclear weapons under the following circumstances: “The Russian Federation reserves the right to use nuclear weapons in response to the use of nuclear weapons and other weapons of mass destruction against it or its allies, as well as in case of aggression against the Russian Federation using conventional weapons, when the very existence of state is threatened” 39.

In other words, first, the nuclear forces of Russia are intended for nuclear retaliation in case of a nuclear strike against Russia and/or its allies. Second, they are intended for the first use of nuclear weapons in response to an attack against the Russian Federation (or its allies) using chemical, bacteriological or radiological weapons. Thirdly, for the first use of nuclear weapons in the face of inevitable catastrophe as a result of strike against the Russian Federation (but not its allies) using conventional armed forces and arms. The latter, apparently, refers to the threats posed by the superiority of the expanding NATO in general-purpose forces and high-precision conventional arms, and, possibly, probable threats posed by the strategic situation in the East which is changing to the detriment of Russia.

In comparison to the country’s previous official Military Doctrine of 2000 (nuclear “response to large-scale aggression with conventional weapons in situations critical to the national security of the Russian Federation”), a distinctive feature of the most recent document is a more reserved and conservative language as regards the use of nuclear weapons in a response to a non-nuclear aggression. It is also notable that the new Doctrine lacks a number of “novelties” of the 2000 military doctrine, in particular, the task of “de-escalation of aggression... through the threat of or direct delivering strikes using

39 Ibid.
conventional and/or nuclear weapons”. Neither it provides for “discriminating use of certain components of Strategic Deterrent Forces”, demonstrating the resolve by “increasing their combat readiness, conducting exercises and relocating certain components”\(^{40}\).

The attention of commentators, especially foreign ones, was drawn to the following passage of the new Doctrine: “in case of a military conflict involving conventional capabilities (large-scale war, regional war) and threatening the very existence of the nation, the availability of nuclear weapons can lead to the escalation of this conflict to a nuclear armed conflict”\(^{41}\).

The sense of this provision is not quite clear. If it refers to the possibility of use of nuclear weapons in a regional way by the nuclear-weapon states in South Asia, Middle East of Far East, this statement raises no objection. However, as it makes part of the Military Doctrine of the Russian Federation, it definitely lacks the description of the danger posed to Russia by such events and the military response to them.

If it refers to the possibility of use of nuclear weapons by Russia in the course of regional conflict (as it has been interpreted by many experts), it is not quite clear how a regional conflict, even at the post-Soviet space, may threaten “the very existence of the nation”, that is, Russia. This is even less true in case of armed confrontation between Russia and other powers in remote regions (for instance, Latin America, Persian Gulf region, or in South-East Asia). Further, if a conflict between Russia and NATO, or Russia and the U.S. and their allies in the Far East is meant, this war would certainly be global rather than regional. One can hardly imagine a war involving the U.S. and their allies in the Atlantic region while peace is preserved in the Pacific (or visa-versa). Finally, the conflict


with other countries at the post-Soviet space, or in the adjacent regions would hardly threaten “the very existence” of Russian state.

However, there is one exception, a hypothetical war with China. It would be of a regional nature, would be fraught with Russia's defeat in conventional warfare and could jeopardize “the very existence of the state” through the loss of territories in the Far East and Siberia. One can expect that Russia uses nuclear weapons in order to prevent such catastrophe.

Nevertheless, it is far from obvious that the authors of the new doctrine intended any hidden meaning in its provisions, in particular, by failing to mention the possibility of use of nuclear weapons in case of conventional aggression against Russia's allies, or admitting the possibility of use of nuclear weapons in regional war against China. It is possible that the collective process involving military theoreticians and various agencies, excess of scholastic and irrelevant provisions - brought about some ambiguities and inconsistencies in the final text and allowed for logical interpretations that would be unexpected for the authors of the Doctrine.

**China** is the only great power that remains bound by a commitment on no-first-use of nuclear weapons, without any reservations. However, it is generally believed that a nuclear power that has committed itself to no-first-use of nuclear arms is relying on the concept of and means for a retaliatory (second) strike. According to the generally accepted estimates, the Chinese strategic nuclear forces, as well as missile attack early warning systems and combat command-control and communications infrastructure, are too vulnerable and could not survive to ensure a retaliatory strike after a potential disarming nuclear strike by the United States or Russia.

In the light of these considerations, the official doctrine of the People’s Republic of China is regarded primarily as an instrument of politics and propaganda (similar to the 1982 Soviet commitment on no-first-use of nuclear weapons), which does not reflect the actual operational planning of strategic nuclear forces which are actually intended for a preemptive strike. Nevertheless, in the foreseeable future, Chinese nuclear forces modernization programs will increase its survivable retaliation capability if China reduces the vulnerability of nuclear weapons at their launching sites, as well as the vulnerability of its early warning systems, combat command and
control sites and develops reliable systems to prevent unauthorized use (which would allow to give up the practice of separate storage of warheads and their delivery vehicles).

Classification of nuclear doctrines. As for the retaliatory (second) use of nuclear weapons in response to a nuclear strike, it should be stressed that all nuclear-weapon states are prepared to use nuclear weapons in response to such attacks against them. Besides, the U.S. and Russia intend to resort to nuclear weapons in case of nuclear aggression against their allies.

As regards the first use of nuclear weapons, the situation is as follows:

− Russia, France, India (and possibly, Israel) intend to use nuclear weapons in a response to attack against them with the use of other (chemical, bacteriological and radiological) WMD;
− Russia allows for the use of nuclear weapons in case of a WMD attack against its allies. The new U.S. nuclear doctrine of 2010 does not provide for a nuclear retaliation to the use of other WMD against the U.S. and its allies (apparently, with the exception of defending Japan and South Korea against such aggression on the part of DPRK);
− Russia, Pakistan (and most likely Israel) are ready to use nuclear weapons if there is a danger of their catastrophic defeat in a conventional warfare;
− The UK and France, and the U.S. before 2010 (in the framework of NATO strategy) planned to use nuclear weapons to prevent the defeat of their general-purpose forces. The new U.S. nuclear doctrine does not envisage the use of nuclear weapons in this case;
− All powers, except for China and India, tacitly envision the use of nuclear weapons in a preemptive strike in order to destroy missiles and other means of delivery of WMD of the threshold states, especially those breaching their NPT obligations;
− Previously, the U.S. planned selective use of nuclear weapons against terrorist facilities and in other situations at their discretion, while the new nuclear doctrine makes no mention of that;
− apparently Russia may use nuclear weapons in response to conventional strike against its strategic forces, missile attack early
warning systems, administration centers, nuclear and other hazardous
and critical facilities, and vital industries and infrastructure.

In all cases, potential strikes will be aimed against targets in the
territory of adversary, its allies, especially those on whose territory
nuclear weapons are deployed, as well as where foreign military
facilities, bases and troops are located.

**First nuclear strike.** The powers' readiness to the first use of
nuclear weapons makes it, in addition to deterrent, an actual
instrument of war and means of achieving success in it, whatever the
latter means. The plans of the first use of nuclear weapons are much
more than just nuclear deterrence, or, at least, are quite a broad
interpretation of deterrence (including a preemptive strike).

As opposed to deterrent that implies retaliatory nuclear strike,
the concept of the first use is usually associated with the strategy of a
disarming (counterforce) strike. Moreover, the first nuclear strike
may be considered as necessary to counter adversary's superior
general-purpose forces (by preventive strike) or to avoid the
adversary's disarming nuclear strike (by preemptive strike).

It should be noted, however, that the focus on the first use of
nuclear weapons does not necessarily demonstrate the aggressiveness
of a state's military and, more generally, foreign policy. Although
very important, nuclear strategy is merely an element of a whole
most complicated and dynamic picture of global and regional
military balance.

On the other hand, the degree of reliance of any state on the
concept of first use of nuclear weapons has profound implications in
a number of respects. First, it affects a probability of nuclear war in a
crises situation, in which one state may be under pressure to employ
nuclear weapons, if the “red lines” defined by the doctrine are
crossed by an opponent - while the latter may choose a nuclear
preemption to prevent an imminent nuclear attack or to reduce its
ensuing damage. Nuclear first strike concept may look an attractive
“macho-type” and comforting instrument in peacetime, but can turn
into a recipe for disaster in a real crisis.

Second, even in peacetime the first use concept cannot but
negatively affect political relations between states and hinder their
cooperation on security issues. Indeed it is hard to imagine joint
defense systems (like BMD) or large-scale military operations (like
counter-proliferation or counterterrorist) if the countries are seriously planning to initiate (and have weapons and forces for) a nuclear attack on each other under certain circumstances.

Third and last, but not the least, this concept is a doctrinal obstacle to nuclear disarmament. A purely retaliatory (second strike) strategy does not preclude nuclear disarmament if other states join this process and control regime is reliable. Removal of nuclear weapons of other states makes nuclear attack impossible and thus does away with the need for nuclear retaliation. However, if a given state has a concept of first nuclear strike (i.e. strives to achieve other than purely retaliatory goals), then nuclear disarmament of other countries would not remove the need for its nuclear weapons. In this case other countries would not agree to disarm and nuclear disarmament would be impossible.

Ranking the modern nuclear powers in terms of their readiness to the first use of nuclear weapons, judging by both their official doctrines and their objective geostrategic situation and probable operational planning, the following conclusions may be offered.

Israel's and Pakistan's nuclear potentials are of the unequivocally offensive nature with their exceptional reliance on the first use due to both strategic necessity and technical characteristics.

Russia apparently occupies the second place based on this criterion. Its relative nuclear power vis-à-vis its hypothetical adversaries (NATO, China and the U.S. in the Far East) will decrease in the future, while its inferiority in general-purpose forces, modern non-nuclear weapons, accompanied by its regional vulnerability encourage concepts and planning of the first use of nuclear weapons.

The third position tentatively belongs to the U.S. Due to their objective situation and military capability they have no serious incentives for the first use of nuclear weapons. However, the provisions of their doctrine, their allied obligations and enormous superiority of their nuclear counterforce capability determine continuous reliance on the concept of the first use of nuclear weapons in the new 2010 Nuclear Posture Review.

The U.S. is followed by India with its obligation of no-first-use. It is most likely that in practice it will continue to maintain capability to mount a disarming strike against Pakistan, but be vulnerable for a counterforce strike on the part of China. Apparently,
India assumed the obligation of no-first-use in order to avoid provoking a preemptive strike on the part of China or Pakistan. The latter is also corroborated by the fact that India's conventional capability and forces will be quite enough to deal with Pakistan without resort to nuclear weapons.

The fifth position in this list goes to China. It assumed a declarative obligation of nuclear no-first-use without any reservation. However, China's retaliation strike capability (in accordance with its declaration) so far has seemed insufficient as compared to superior forces of the U.S. and Russia. Over time China will certainly accumulate such potential vis-à-vis the U.S. and Russia and improve offensive (counterforce) capabilities of its nuclear forces against India and, possibly, against Russia later on.

The sixth one is France, whose doctrine relies rather aggressively on nuclear deterrence for vast variety of purposes, including the first use of nuclear weapons. Yet neither its actual nuclear forces, nor its geostrategic situation (in the center of NATO zone) imply either feasibility or necessity of such «romantic” nuclear posture.

The UK occupies the last, seventh position. Several years ago the country gave serious consideration to completely renouncing not only the first-use concept, but its nuclear weapons in general. With the geostrategic situation and capability similar to those of France, the UK, as opposed to it, defines in quite a vague manner the concept of the first use, probably deeming it unnecessary but trying to avoid additional political complications for NATO and with the U.S.

Finally, there is North Korea, which so far could not fit in the above ranking due to the fact that apparently it has not yet developed a nuclear warhead compact enough to be carried by a missile or an aircraft. Its capability can be characterized mainly as “provocative” or “subversive” (that is, carried by non-traditional delivery means such as civilian vessels and aircraft).

Certainly, all nuclear-weapons states view nuclear weapons as a legitimate and indispensable pillar of their own security and the security of their allies, as well as an attribute of a special status and political influence in the world. Each of them gives irrefutable reasoning in support of this, at least, from their viewpoint. At the same time, they find all claims for the right to nuclear weapons on
the part of other countries as groundless, unacceptable and
dangerous.

To sum up, after the end of the Cold War the inequality
between the nuclear-weapon states and non-nuclear-weapon states
has been deepened and legalized, rather than downgraded. The
military strategies of most nuclear-weapon states lowered the
threshold for the use of nuclear weapons (that is, conditions in which
nuclear weapons may be used) instead of raising it. Needless to say,
none of them has renounced the first-use concept (at least at
practical, if not declaratory level) and the nuclear deterrence doctrine
and philosophy in general.

**The variety of nuclear-related objectives.** From political and
military perspective, there are five major objectives that different
states may alternatively assign to nuclear weapons:

1. maintaining prestige and status internationally (all eight
   nuclear-weapons states, excluding Israel);
2. preventing a nuclear attack (eight nuclear-weapons states,
   possibly excluding Israel);
3. deterring and countering an attack with the use of other
types of weapons and armed forces (relevant for six nuclear-weapons
   states and not relevant for the People’s Republic of China and – with
   reservations – for the U.S. and India);
4. security guarantees and influence on the allies (adopted by
   Russia, the U.S., the UK and France);
5. a bargaining chip when negotiating other issues with other
countries (Russia, DPRK, and potentially, Israel).

Logically, the listed reasoning and material interests brought
about the formation of nuclear-related political and lobbyist groups
within the countries, which usually turn into an additional internal
factor favoring nuclear weapons.

The table in Annex 1 outlines these objectives and groups them
for each nuclear-weapon state while describing them in greater
detail. The term “prevention” of an attack may apparently refer to the
planning of both retaliatory and preemptive strikes, and the term
“countering” an attack may be interpreted as either successful
defense against aggression using nuclear weapons, or escalation of
hostilities to a higher (nuclear) level. The U.S. reservations related to
maintaining nuclear capability to deter attack against their allies with
the use of other WMD, refer to possible aggression of North Korea against Japan and South Korea. Question marks indicate vagueness and ambiguity of a state's official doctrine, or the probability of its changes in the future.

As the table demonstrates, different countries assign different sets of objectives to their nuclear weapons. Currently, Russia is the only state with a nuclear strategy that includes all five of these objectives. These Russia's specific doctrinal concerns, obligations and provisions need to be taken into account while planning long-term and realistic policy of building a world without nuclear weapons. One cannot expect any serious progress towards this end unless these obstacles are removed through agreements or by other measures.

However, Moscow should also realize that without advancing towards a world free of nuclear weapons it would be impossible to curb the proliferation of nuclear weapons and the scientific and technological progress of advanced states in other military spheres. The said two processes will eventually render nuclear weapons and nuclear deterrence incapable of performing the tasks that Russia is presently assigning to them.
CONCLUSIONS

1. The fundamental provisions of nuclear doctrines of contemporary states are extremely resistant to change, in particular to discarding the legacy of the Cold War; they tend to preserve previously adopted concepts, primarily nuclear deterrence. Today, this concept is an obvious anachronism in the official documents of Russia, the United States and other world powers which proclaim the goal of forging relations of partnership and broad cooperation on common security. At the same time, it has become increasingly evident that the deterrence does not work against today’s most serious threats – the proliferation of weapons of mass destruction and possible catastrophic terrorism.

2. On the one hand, a military doctrine, including its nuclear aspect, represents the guidelines for the country’s armed forces and defense industry inasmuch as it defines the type of potential wars and conflicts and their probability, as well as the aims and objectives of the country’s military operations and the corresponding combat training and weapon programs for the armed forces. On the other hand, a doctrine is aimed at other countries, both adversaries and allies. It contains a warning to the former and security guarantees to the latter, by explaining under what circumstances and in what manner the state may resort to military action, including use of nuclear forces.

Despite the fact that nuclear doctrines do not always and in full reflect real military operational planning, they are an important element of national and international security. Most significant is the degree of reliance of states’ doctrines on the concept of the first use of nuclear weapons.

First, it affects a probability of a nuclear war in a crises situation, in which one state may be under pressure to employ nuclear weapons, if the “red lines” defined by the doctrine are crossed by an opponent - while the latter may choose a nuclear preemption to prevent an imminent nuclear attack or to reduce its
ensuing damage. Nuclear first strike concept may look an attractive “macho-type” and comforting instrument in peacetime, but can turn into a recipe for disaster in a real crisis.

Second, even in peacetime the first use concept cannot but negatively affect political relations between states and hinder their cooperation on security issues.

Third, this concept is a doctrinal obstacle to nuclear disarmament. A purely retaliatory (second strike) strategy does not preclude nuclear disarmament if other states join this process and control regime is reliable. However, if a given state has a concept of first nuclear strike (i.e. strives to achieve other than purely retaliatory goals) - nuclear disarmament would be impossible.

In terms of the conditions under which the use of force may be considered, the doctrines adopted by the United States and Russia in 2010 have much more in common than the two countries’ previous documents.

3. The Russian Military Doctrine prioritizes the deterrence and prevention of armed conflicts and treats nuclear weapons as weapons of last resort. The provisions of the Russian Military Doctrine suggest that Russia’s nuclear forces are intended for a retaliatory nuclear strike in response to a nuclear strike by the adversary upon itself and/or its allies.

A second possibility is Russia’s first use of nuclear weapons in response to an attack against itself or its allies with the use of chemical, bacteriological or radiological weapons.

Third, nuclear weapons may be used if there is an imminent threat to the very existence of Russia’s state as a result of an aggression with the use of conventional armed forces and weapons against Russia (the allies are not mentioned here).

The last-mentioned option apparently relates to threats arising from the superiority of the expanded NATO in general-purpose forces and high-precision conventional weapons, as well as to threats posed by the evolution of the strategic situation in the East to the detriment of Russia.

4. According to the U.S. new doctrine (Nuclear Posture Review), Washington would only consider the use of nuclear weapons in extreme circumstances to defend the vital interests of the United States or its allies and partners.
First of all the task of nuclear weapons is to deter nuclear attack against the U.S., their allies and partners. It is declared that deterring attacks with general-purpose forces or other kinds of WMD is virtually dismissed, although there are several reservations in this regard. It is proclaimed that the U.S.A. will not use nuclear weapons against non-nuclear NPT states, but this obligation does not apply to NPT nuclear powers and the states breaching their obligations under the NPT. The latter apparently refers to countries like Iran and North Korea and implies security assurances to Japan and South Korea to protect them against DPRK. In this particular context the U.S. allegedly retains the option of nuclear retaliation in response to an attack using conventional arms or other WMD.

Nevertheless, taking into consideration special geostrategic situation of the United States and their superiority over other powers in terms of the whole range of armed forces and arms (both conventional and nuclear), it appears that the new U.S. nuclear doctrine might go much further. For instance, it could announce the obligation of no-first-use of nuclear weapons against all NPT nuclear-weapon states, as well as the U.S. readiness to withdraw on certain conditions its nuclear assets from Europe. Furthermore, it might be stated that Washington was ready to go for the reduction of their strategic nuclear forces' alert rates (including the patrol rate of the U.S. SSBNs), that it was striving to alleviate other great powers' concerns over the development of the U.S. missile defense, long-range high-precision conventional weapons, space weapons systems (including “Prompt Global Strike” systems), which were not designed against any NPT nuclear state. Such initiatives would be in line with the ambitious goals of moving towards nuclear weapons free world, proclaimed by President Barack Obama.

5. China is the only great power that remains bound by an official commitment on no-first-use of nuclear weapons, without any reservations. However, presently Chinese strategic nuclear forces, as well as missile early warning systems and combat command-control and communications infrastructure, are too vulnerable and could not guarantee a retaliatory strike after a potential disarming nuclear attack by the United States or Russia. For this reason the official doctrine of China looks primarily like an instrument of politics and propaganda. It does not reflect the actual
operational planning of strategic nuclear forces that are in reality intended for a preemptive strike in the event of an imminent attack by superior forces of other states. Nevertheless, in the foreseeable future, Chinese nuclear forces modernization programs will increase its survivable retaliation capability if China reduces the vulnerability of its missile launches early warning systems, combat command and control systems and develops reliable technologies to prevent unauthorized use.

6. The transformation of NATO position with regard to the possibility of the use of nuclear weapons and the tasks assigned to nuclear weapons is lagging far behind the changes in the geopolitical, geostrategic situation and the relations between Russia and the West on the European continent. Most of fundamental provisions of the 2010 NATO Strategic Concept were borrowed from the previous Strategic Concept adopted in 1999. The ambiguous and vague languages apparently demonstrate the Alliance's lack of resolve to make a number of radical steps consistent with the new political and security realities. Such steps could include announcing that the only task of nuclear weapons in Europe is to deter any use of nuclear weapons on the continent and that NATO will never be the first to use them. However, the implementation of practical tasks adopted at 2010 Lisbon NATO-Russia summit and related to cooperation (in particular, the development of a comprehensive joint analysis of future framework conditions for cooperation in ballistic missile defense and specifying steps of cooperation on common security challenges of the 21st century) may contribute to further evolution of NATO nuclear strategy and finally discarding the Cold War concepts.

7. There are five major military and political objectives that different states may alternatively assign to nuclear weapons: maintaining prestige and status in terms of international policy (all nuclear-weapons states, excluding Israel); prevention of a nuclear attack (currently, all nuclear-weapons states, possibly excluding Israel); deterring and countering an attack with the use of other types of weapons and armed forces (relevant for six nuclear-weapons states and not relevant for the People’s Republic of China and – with reservations – for the U.S. and India); security
guarantees and influence on the allies (for Russia, the U.S., the UK and France); a bargaining chip for negotiations on other issues with other countries (for Russia, DPRK and potentially, Israel).

8. Different nuclear-weapon states assign nuclear forces different sets of roles. Presently, Russia is the only country with a nuclear strategy that includes all these objectives. Russia's views, reflected by its doctrine, need to be taken into account while planning long-term and realistic policy of building a world without nuclear weapons. There will be no serious progress towards this end unless the circumstances defining Moscow’s belief in crucial utility of nuclear weapons are changed or removed through agreements or other measures.

9. The political and expert communities in Russia must awake to the fact that without advancing towards a world free of nuclear weapons it would be impossible to curb the proliferation of nuclear weapons and the scientific and technological progress in other military spheres (ballistic missile defense, high-precision conventional strategic weapons, space arms, etc.). These two processes will eventually render nuclear weapons incapable of performing the tasks that Russia is assigning to them.

10. For Russia (as well as for China), progressing to a higher level of transparency of nuclear doctrines and planning, and of the strategic and non-strategic nuclear forces, their condition and development programs, is in line with their long-term interests. This is especially important in the context of the US-Russia relations in the sphere of strategic offensive arms reductions, potential consultations on the limitation of non-strategic nuclear weapons and cooperation on missile defense systems.

11. Without continuous transformation and, eventually, abolition of nuclear deterrence, it will never be possible to proceed to full-scale cooperation and partnership between Russia, the United States and other nuclear powers and to reinforce their efforts to counter the new threats of the 21st century.
ANNEX 1
## ANNEX 2

### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BMD</td>
<td>Ballistic Missile Defense</td>
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<tr>
<td>CFE Treaty</td>
<td>Treaty on Conventional Armed Forces in Europe</td>
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<tr>
<td>CSTO</td>
<td>Collective Security Treaty Organization</td>
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<tr>
<td>CTBT</td>
<td>Comprehensive Nuclear-Test-Ban Treaty</td>
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<tr>
<td>FMCT</td>
<td>Fissile Material Cut-Off Treaty</td>
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<tr>
<td>HB</td>
<td>Heavy bomber</td>
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<tr>
<td>IAEA</td>
<td>International Atomic Energy Agency</td>
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<tr>
<td>ICBM</td>
<td>Intercontinental ballistic missile</td>
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<tr>
<td>IMEMO RAN</td>
<td>Institute of World Economy and International Relations of the Russian Academy of Sciences</td>
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<tr>
<td>LEP</td>
<td>Life Extension Program</td>
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<tr>
<td>MIRV</td>
<td>Multiple independently targetable reentry vehicle</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
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<tr>
<td>NPT</td>
<td>Treaty on the Non-Proliferation of Nuclear Weapons</td>
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<tr>
<td>NSP</td>
<td>Nuclear Security Project</td>
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<td>NTI</td>
<td>Nuclear Threat Initiative</td>
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<tr>
<td>SDI</td>
<td>Strategic Defense Initiative</td>
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<tr>
<td>SLBM</td>
<td>Submarine-launched ballistic missile</td>
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<tr>
<td>SNF</td>
<td>Strategic nuclear forces</td>
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<tr>
<td>SSBN</td>
<td>Nuclear-powered ballistic missile submarine</td>
</tr>
<tr>
<td>START I</td>
<td>Treaty between the USA and the USSR on the Reduction and Limitation of Strategic Offensive Arms (1991)</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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</tbody>
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ANNEX 3

List of participants in the meeting held on October 21, 2010, at IMEMO RAN

Alexander A. Dynkin, Director of IMEMO RAN, Academician of the Russian Academy of Sciences
Alexei G. Arbatov, Head of the Center for International Security of IMEMO RAN, Corresponding member of the Russian Academy of Sciences
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Vladimir G. Baranovski, Deputy Director of IMEMO RAN, Corresponding Member of the Russian Academy of Sciences
Albert L. Gozal, Project and Promotion Manager, International Science and Technology Center
Pyotr V. Goncharov, Political Commentator, RIA Novosti news agency
Waclaw Gudowski, Deputy Executive Director, International Science and Technology Center
Marianna G. Yevdotyeva, Senior Researcher, Center for International Security, IMEMO RAN
Valery N. Ignatiev, Captain First Rank (rtd.), Principal Adviser, Defense Committee, State Duma
Natalia I. Kalinina, Chief Researcher, Center for International Security, IMEMO RAN
Alexander N. Kalyadin, Chief Researcher, Center for International Security, IMEMO RAN
Vasily I. Krivokhija, Deputy Head of Directorate of International Relations, Council of the Federation, Federal Assembly of the Russian Federation
Yevgeni V. Miasnikov, Principal Research Associate, Center for Arms Control, Energy and Environmental Studies, Moscow Institute of Physics and Technology (University)
Vladimir E. Novikov, Principle Research Associate, Russian Institute for Strategic Studies
Sergey K. Oznobishechev, Head of Sector, Center for International Security, IMEMO RAN
Tatyana G. Parkhalina, Deputy Director, Institute of Scientific Information for Social Sciences, Russian Academy of Sciences, Head of Center for European Security
Alexander V. Radchuk, Adviser to the Head of the General Staff of the Armed Forces of the Russian Federation, Colonel (reserve duty)
Natalia P. Romashkina, Associate Professor, Department of World Politics, State University - Higher School of Economics
Vladimir I. Sazhin, Senior Researcher, Institute of Oriental Studies, Russian Academy of Sciences
Evgeny K. Silin, President of Association for Euro-Atlantic Cooperation
Mikhail V. Streltsov, Counsellor, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs of Russia
Pyotr V. Topychkanov, Senior Researcher, Center for International Security, IMEMO RAN
Sergey V. Utkin, Head of Sector, IMEMO RAN
Madeleine Foley, Program Assistant, Carnegie Moscow Center
Sergey V. Tselitsky, Researcher, Center for International Security, IMEMO RAN.