# INSTITUTE OF WORLD ECONOMY AND INTERNATIONAL RELATIONS RUSSIAN ACADEMY OF SCIENCES

## PROSPECTS OF CHINA'S PARTICIPATION IN NUCLEAR ARMS LIMITATIONS

Edited by Alexei Arbatov, Vladimir Dvorkin and Sergey Oznobishchev

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Prospects of China's participation in nuclear arms limitations

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#### **SUMMARY**

This publication is based on the materials of the conference held at IMEMO RAN. The authors address the issue of utmost importance – the prospects and options for engaging China in the nuclear arms reductions negotiations, which up to now have been carried out by Russia and the US in a bilateral format.

The experts review the interaction of China's domestic and foreign policy, noting that the sweeping changes within the country make it difficult for the rest of the world to form an adequate perception of Chinese evolution. From the Western perspective, a competitor as it is, China obeys the laws of the markets. By contrast, in the political sense, China is an "outsider" due to its authoritarian political system and the monopoly of power of the Communist Party of China (CPC).

The experts agree that China will supplement its rapid economic growth by increasing defense spending in an effort to take a place among the established world leaders and enhance its ability to exert influence on international developments. A number of experts believe that the world should not make much of China's new "assertiveness" in foreign policy; they see it as an aspiration of a large and successful state to actively promote its new status and expanding legitimate interests abroad.

Other participants point out that China's economic growth as well as the enhancement of its international position has resulted in an upsurge of nationalist sentiments within the ruling elite and in the society at large. It is also conceivable that within Chinese leadership serious discussions and struggle is going on over the nation's foreign and military policy course. If there is a substantive rift between the positions of the political and military establishments in Beijing, Russia's security interests may be directly affected, depending on which views takes an upper hand.

At present, China is obviously implementing a large-scale across-the-board military buildup and modernization programs.

Given the fact that the Chinese military program is quite opaque, it is extremely difficult to assess the actual scope of these military activities.

Of particular concern is the development of nuclear weapons which is the most secret area. There are serious reasons to suspect that China's nuclear force is significantly larger than is commonly assumed abroad. Possibly China is currently a third largest nuclear nation ranking only behind the US and Russia, and is possessing comparable technological and economic assets for a crash build-up of its nuclear potential whenever the political decision is taken by the leadership.

Despite the fact that the necessity for China to join nuclear arms limitation in the foreseeable future is being unanimously waived at every discussion level in China, the participants in IMEMO conference believe that there are certain possibilities for the country's engagement in the process. However, just appealing to the noble ideal of nuclear disarmament or obligations under the Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) would be futile. China will not be convinced to implement weapons limitations, reductions or at least to provide greater military transparency as a goodwill gesture or a minimal contribution to nuclear disarmament.

This might only be possible if China considers that the trade-offs in limitations and reductions of its assets and those of other nuclear-weapon states (foremost the US and Russia) are militarily worthwhile and enhance its strategic positions and security as they are perceived by the leadership in Beijing. In other words, the US and Russia should move from declaratory appeals and wishful thinking to a sensible analysis of the price they are ready to pay in the political and strategic sense for the matching arms control concessions by China.

This publication offers a variety of practical measures for engaging Beijing in nuclear weapons transparency, limitation and reduction.

#### **INTRODUCTION**

The authors of this booklet sought to look beyond the horizon of the ongoing arms limitation and reduction talks. The prospects and potential elements of the next stages of this process are still unclear; no explicit consent to join in has been voiced by either the UK or France. Is it appropriate to discuss China's participation in this process?

The answer to this question is that it can and definitely should be a subject of serious research and analysis. Today, China's policy and posture is the major problem for nuclear arms control. Among the P-5 states, which are simultaneously legitimate nuclear weapons states (NWS) by the terms of the NPT of 1968, it is the only nuclear-weapon state that provides no official information on its nuclear forces and programs. Besides, China is the only state aside the US and Russia with the largest economic and technical capacity for the crash build-up of its strategic nuclear forces and other nuclear weapons. Finally, China is not allied to either of the nuclear superpowers, so there is no political, strategic or technical external control or influence over its nuclear forces, their development programmes, doctrine and operational strategy.

In this context – though engaging the UK and even France in the disarmament may be a relatively easier task – to ensure China's participation is much more urgent need in terms of global and regional strategic stability, as well as in terms of the prospects of further nuclear disarmament.

China's actual nuclear strategy and nuclear capability are totally opaque. In this light the declarations of the country's commitment to nuclear no-first-use principle are perceived by many foreign policy-makers and experts as little more than propaganda slogans.

Thus, there goes an active discussion in the global community of strategic experts over the actual military and political goals and capabilities of China's leadership. It is hardly surprising that the experts who contributed to this publication did not see eye to eye on every issue.

Indeed, facilitating the openness of Chinese nuclear weapons program would be appropriate for Beijing in the first place, if it seeks a "harmonious world of common prosperity" in fact, not in word. However, so far China's representatives have avoided even to be present in serious discussions of Chinese nuclear strategy and forces, as well as the prospects for its joining the nuclear arms limitation, or have otherwise got off with rephrasing the sacramental official formulas of most general nature.

Meanwhile, the reduction and limitation of nuclear weapons is reaching some virtual threshold, below which neither the US nor Russia is ready to move unless third countries possessing nuclear weapons join in. Due to a number of factors, China's participation is the one most desirable and indispensable. It is also evident that the final goal of achieving a world free from nuclear weapons will be unachievable without China's engagement in the next stages of practical progress in this direction however far may be the final goal.

#### 1. CHINA: SECURITY THREATS

By Vasily Mikheev

To ensure utmost objectiveness when reviewing this issue, we believe it necessary to analyze two of its aspects: how China *perceives* the threats to its security and what threats to the global and regional security China itself may *constitute*.

By way of an introduction it should be mentioned that in the recent 5 to 7 years China has significantly increased the speed of its internal transformations which results in equally tangible changes in its behavior and positioning in the international arena.

Major trends in China's development. China has turned into a "normal" market system and a significant part of the global economy, though its internal policy and international behavior have retained some conspicuous peculiarities. Internally, the situation is determined by the CPC's (Communist Party of China) existing monopoly of power. As to the country's foreign policy, China would on the one hand prefer to position itself as a player equal to the global leaders. On the other hand, it is not ready yet to assume the responsibility for the international affairs, though it seeks popularity among the Third World states claiming to be one of the "developing states".

As regards the country's domestic policy, China's new leadership may be expected to carry out some political reform, though without introducing a real multi-party system. As to the foreign policy, China may be expected to demonstrate increasing activity as one of the global leading powers, although without ambitions to be the world leader.

China's essential transformations within a very short time create difficulties for its assessment abroad. First, the world has difficulty even in just taking account of the rapid changes in China and consequently in forming an adequate perception of such changes.

Second, despite rapid positive changes, the external world hangs on to its traditional negative perception. Though such an attitude has decreased, it has not been done away with so far.

Third, the US and the West at large still have a two-fold perception of China. In the economic sense, China is an "insider", a competitor which nevertheless plays by the market rules. By contrast, in the political sense, China is an "outsider", given the CPC's prevailing monopoly of power and uncertainty in the country's future domestic and foreign policy.

**External threats faced by China.** At the current stage, China does not regard military intervention by the US or Russia as a credible threat. If this was not the case, China would have to radically redirect its domestic policy towards preparing for war. This would result in gravest consequences in terms of the country's economy, living standards of the people and, consequently, of the social and political stability.

In fact China views national security threats in terms of their potential effect on domestic stability and impact on the issues related to the country's economic growth. The rationale is quite simple: if the external risks may thwart economic progress, this may worsen the economic conditions, and, subsequently, destabilize the social and political situation, eventually creating a threat to the CPC's power. Therefore, China's new leadership will consider further political reform inasmuch as it contributes to maintaining domestic stability and retaining power by the CPC elite.

This implies that strategic external threats to China are primarily related to the global economic development, i.e. are associated with a probability of a new deep recession. On the basis of this perception of external threats, China puts high stakes on cooperation with the US and the West in order to consolidate the positive trends in the global economy.

Similarly, China views the *threats related to military and political crises* through the prism of risks of the economic crises and destabilization of its domestic political. China views a global war as an unlikely scenario, though it fears that regional conflicts and controversy between major powers may create threats to the

global stability. Hence China's "strategic" approach to conflicts in areas that it does not regard as vital (Libya, Syria, Iraq, Afghanistan, Iran, etc.): to avoid exacerbating the situation, to use diplomacy as a primary tool, to make major effort to keep economic presence and access to the sources of raw materials, communication lines and markets under any scenario.

Such an approach is indicative of the fact that China is (at this point) not ready to actively participate in regional conflicts outside its immediate geopolitical areas of vital interests (Taiwan, the Korean Peninsula, the South China Sea, the Himalayan border with India; indirectly — Kashmir).

It appears that despite its rhetoric, China *does not regard* the leading nuclear powers – the US and Russia – as the nations *posing nuclear threat*. China's nuclear weapons program is primarily a publicity exercise: a world economic leader that claims the role of a global political centre of power has to possess appropriate nuclear arms potential. Further, this program is regionally-oriented: its principal goal is to ensure nuclear deterrence to enhance political leverage on Taiwan and India.

If in the future China indicates its readiness for a dialogue with the US and Russia on nuclear weapons limitation and strategic stability, the rationale behind it would be primarily a political PR campaign.

**Regional threats.** China will never give up its ambition to achieve reunification with *Taiwan*. However, China will not take military steps to accomplish this. The prevailing rationale is that any act that may impair PRC's economic growth and consequently put the CPC's power at risk is unacceptable for the country's leadership.

In addition, it should not be overlooked that Taiwan does not raise the issue of independence. Under the current constitution, Taipei makes a claim on representing the entire China. However, there are political groups in Taiwan that stand for amending the Constitution and changing the name of the island to the Republic of Taiwan. Still, their actual influence on Taiwan's posture has not been critical enough to change the status quo.

At the same time, China has used its large-scale military modernization programme to bring full political and military

pressure on Taiwan in an effort to weaken the separatists with a constant threat of a military intervention.

Meanwhile, Beijing places the primary emphasis on engaging Taiwan in economic cooperation and a broader cultural dialogue. If China eventually introduces a viable multiparty system, it may, among other things, encourage Taiwan to reunite with China, providing that the island retains sufficient autonomy. In any case, one of the options for the political reform in China that has been discussed among the country's analysts (but not yet policymakers) implies a return to the pre-war bipartisan system of the CPC and Kuomintang after the reunification with Taiwan.

As before, China will tend to dramatize and overreact if the US continues to supply Taiwan with modern arms. First, this reduces China's ability to exercise military and psychological pressure on the island. Second, precisely this reaction is established in the doctrines; it has permeated the mentality of China's military and political leadership who perceives the Taiwan issue as the major handicap for its status as a great global power.

Though a nuclear attack by *the US* is not regarded as a direct threat, Beijing at the same time perceives Washington's policy in the Asia-Pacific as an attempt to significantly limit China's role in the region. It is assumed that the US seeks to build a "deterrence arc" against China:

- US political-military alliances with Japan and South Korea in the north-east;
- revitalizing military cooperation with Australia and the Philippines as well as (over the long term) with Vietnam in the south;
- building a political partnership between the US and India in the west.

China intends to offset such activity of the US by building up the country's military forces, increasing its strategic mobility, reaching beyond and to the rear area of the US "deterrence arc" and establishing military strongpoints in the far abroad.

As the social and economic situation in *North Korea* deteriorates, the creeping demographic expansion of North Korean refugees to North-Western China is perceived by Beijing as a direct threat to its interests.

China believes that market economy and openness will enable North Korea to improve the economic situation causing Pyongyang to relinquish its military nuclear programme – currently the main bargaining chip that the North Korean leadership has regularly traded for foreign economic aid. China stakes on engaging North Korea in cooperation based on the market principles. China believes that this may facilitate positive transformation of the North Korean regime.

Beijing views the military threat from North Korea within a specific scenario: the North Korean regime collapses, the control over nuclear capabilities is lost, nuclear weapons are seized by North Korean terrorists and sold to other countries, etc. It appears that under this scenario, China envisions a possibility of a military intervention to take control over the country's nuclear facilities. However, such a measure will most probably be resorted to within a peacekeeping mission under a UN mandate.

In the *South China Sea* region China regards the unsettled territorial disputes as a threat to its economic interests. In this region Beijing stakes on dialogue; however, such dialogue is to be backed by China's superior naval power and should exclude the countries that are not situated within the area (in particular the US and Russia).

The Central Asia and Afghanistan are viewed by Beijing as a source of terrorist and separatist threat for China's integrity, in the first place. Further, these areas are seen as a platform for pursuing its economic interests related to the development of the backward Northwestern China. In this context, the US and Russia are perceived both as partners (in the fight against the evil) and as competitors (in a rivalry for the economic control).

China takes a multifold approach to the relations with *India*. The country is rated by Beijing as a major economic partner and at the same time as a potential threat in terms of the territorial disputes in Tibet and in Kashmir (between India and Pakistan). In addition, India is perceived as the key potential politico-military competitor in a struggle for oil resources and routes of their transportation in the Indian Ocean basin.

**Should China be perceived as a threat?** It appears that China does not pose a strategic nuclear threat for either the US or

Russia. Perception of China as a threat by the two countries may be related to two major factors. First, obsolete as it is, there is the common perception of China as the communist (or nationalist) aggressor, since the world is slow to notice the rapid positive changes within the country. Second, China's growing military expenditures are viewed as a threat to the regional and global security.

Meanwhile, the challenges related to the growth of China's military potential (see Annex 1, Tables 3 and 4), have a different nature. It is fair to say that China's ambition to become a global political leader among leading nations will be supported by its increasing military expenditures. However, China's increasing significance in promoting the sustainable development of the global economy (see Annex 1, Tables 1 and 2) will be the cornerstone of its political positioning.

Such perception of the challenge is primarily defined by the fact that on the face of it, China as a new member of the world's political "heavyweights" club has so far been more assertive in protecting its interests, just as any newcomer would, in an attempt to find its place among the "oldtimers". However, there are limits to this external assertiveness, beyond which China will not go due to the nature of the foundations of its global rise. The latter is the deepening economic and financial interdependence between China and the US as well as with other world's economic and energy centers. To break such interdependence would imply unacceptable damage for China's economy and domestic stability.

It will be possible to offset this distinctive "non-critical assertiveness" of China by engaging the state in a broad security dialogue with Russia and the US. In this respect, most promising will be such topics as strategic stability, North Korea, Central Asia and Afghanistan. Meanwhile, it should be realized that due to objective reasons the disputes over the South China Sea continental shelf and the Taiwan issue will for a long time continue to be the most sensitive areas in the relations between China and the external world.

### 2. CHINA'S FOREIGN POLICY: MODESTY OR GROWING ACTIVITY?

By Alexander Lukin

Right from the start of its reforms, Deng Xiaoping's leadership defined that among other aspects, the country's foreign policy should undergo fundamental changes. Since then, China's foreign policy has gone through several stages. In the 1950s it was primarily defined by the strategic and ideological alliance with the USSR and was focused on supporting Moscow in its struggle against global imperialism. China was entitled to certain autonomy in Asia and Africa and was also encouraged to take the role of the leader for the Third World States sympathizing with socialism.

During the Sino-Soviet split and, most particular, the Cultural Revolution, Beijing, biased as it was by revolutionary dogmatism, made attempts to destabilize Asia by supporting the radical anti-Western movements on the continent. In the 1970s, following China's rapprochement with the US on the anti-Soviet basis, Mao Zedong suggested the Three Worlds Theory which declared China the leader of the developing countries of the Third World. The Second World led by the social-imperialist USSR was pronounced the major threat to counter which, it was declared, cooperation with the less dangerous US-led First World was justifiable. The idea of building a united front against the USSR prevailed up to late 1970s. Later on, it was gradually dismissed as the need for a profound domestic reform came to the top of the agenda and the relations with Moscow began to thaw.

**Principle postulates of the foreign policy course.** In September 1982 the XII Congress enunciated the concept of an "independent foreign policy" that amounted to this: China would stay non-aligned with either of the superpowers, i.e. the USSR and the US would be treated equally as partners or adversaries, and, more importantly, the country's foreign policy would be subordinated to the economic development goals. This concept has

up to the present day largely determined China's foreign policy. It includes the following points:

- China has all along adhered to the principle of independence. With regard to all the international affairs, China will, proceeding from the fundamental interests of the Chinese people and the people of the world, determine its stand and policy in the light of the merits and demerits of the matter, without yielding to any outside pressure. China does not form strategic alliance with any big power or coalition of big powers. Nor does China establish military alliences with other countries, or engage in arms race and military expansion.
- China opposes hegemonism and preserves world peace. China believes that all countries, big or small, strong or weak, rich or poor, are equal members of the international community. Countries should resolve their disputes and conflicts peacefully through consultations and not resort to the use or threat of force. Nor should they interfere in others' internal affairs under any pretext. China never imposes its social system and ideology on others, nor allows other countries to impose theirs on China.
- China actively facilitates the establishment of a new international political and economic order that is fair and rational. China holds that the new order should respond to the demands of the development and progress of the relevant times and reflect the universal aspirations and common interests of the peoples of all the countries in the world. The Five Principles of Peaceful Coexistence and other universally recognized norms governing international relations should serve as the basis for setting up the new international political and economic order.
- Chinas is ready to establish and develop friendly relations of cooperation with all the countries on the basis of the Five Principles, namely mutual respect for sovereignty and territorial integrity, mutual non-aggression, mutual non-interference in each other's internal affairs, equality and mutual benefit, and peaceful coexistence. 

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<sup>&</sup>lt;sup>1</sup> China's Independent Foreign Policy of Peace // Ministry of Foreign Affairs of the People's Republic of China. 18 August, 2003. (http://www.fmprc.gov.cn/eng/wjdt/wjzc/t24881.htm)

In reality since early 1980s China has tried to create the conditions for economic growth by establishing good working relationships with all countries of the world, especially the countries that may be most helpful to China in terms of achieving this goal, providing investments and supplying it with new technologies. Special attention is given to the neighbouring states: China spares no effort (including compromise) to resolve territorial and other disputes for the sake of developing trade and economic cooperation, particularly, but not exclusively, in the border areas. Beijing has outlined its core interests which it cannot give up on: regarding Taiwan and Tibet, and, previously, Hong Kong and Macau as China's territory, as well as other issues related to territorial integrity. On most issues of a different nature Beijing has been modest, steering clear of international conflicts that do not directly affect it in order to spare resources, and has most commonly restricted itself to merely expressing its opinion on the subject.

Modern foreign policy. However, in the recent years the situation has started to change. The development logic itself has prompted Beijing to play a more active role in the world politics. Firstly, as the result of the successful economic development in the recent decades, China's national power has increased to such an extent that it is now hardly possible to think that the world's numerous economic as well as political issues may be resolved without Beijing's participation. Secondly, the model of China's economic development that is based on rapid growth and export leads to the shortage of resources, primarily raw material, and generates a need to find new markets. To obtain them, China should reach abroad. Finally, China's environmental issues, surplus labour, as well as a number of other internal problems have started to directly affect other states, primarily neighbor countries.

In 2003, in an effort to provide a theoretical basis to the country's increasing role in the world arena as well as to dissipate the international community's fears of a potential threat from a more powerful China, its leading ideologists came out with the theory of the "peaceful rise", which was taken up by the country's leadership. The theory implies that China's rise is not a threat to the world, that the country focuses on growth that, it was noted, is beneficial for the neighbors as it will facilitate their development. In

particular culture was declared a means of the peaceful rise, though not the main one.

Despite the good intentions of the theory's authors, the idea of a rise, even a peaceful one, was controversially received by the global community at large, while some of its members were scared. As the result, the Chinese leadership soon disclaimed this concept as no longer an official one, first returning to the idea of "peace and development" suggested by Deng Xiaoping and then replacing it with the concept of a "harmonious world" which is what Beijing now officially proclaims.

The need "to jointly build a harmonious world" was first referred to by China's leader Hu Jintao at the Asia-Africa Summit in Jakarta in 2005. In September 2005, at the UN 60<sup>th</sup> Anniversary Celebration, China's leader called for building "a harmonious world of common prosperity". In his speech at the Yale University in April 2006, Hu Jintao said that China has always set store by social harmony, noting that the country has proceeded to building a harmonious society within its borders, and at the same time is "eager to draw on the strength of other civilizations to pursue peace and development through cooperation and play its part in building a harmonious world of enduring peace and common prosperity"<sup>2</sup>.

The idea of a "harmonious world" was reiterated by Hu Jintao at the XVII CPC Congress and was later enshrined in the Party's Charter. The Chinese leader said: "We maintain that the people of all countries should join hands and strive to build a harmonious world of lasting peace and common prosperity. To this end, all countries should uphold the purposes and principles of the United Nations Charter, observe international law and universally recognized norms of international relations, and promote democracy, harmony, collaboration and win-win solutions in international relations. Politically, all countries should respect each other and conduct consultations on an equal footing in a common endeavor to promote democracy in international relations.

Economically, they should cooperate with each other; draw on each other's strengths and work together to advance economic globalization in the direction of balanced development, shared

<sup>&</sup>lt;sup>2</sup> http://www.fmprc.gov.cn/eng/zxxx/t259224.htm

benefits and win-win progress. Culturally, they should learn from each other in the spirit of seeking common ground while shelving differences, respect the diversity of the world, and make joint efforts to advance human civilization. In the area of security, they should trust each other, strengthen cooperation, settle international disputes by peaceful means rather than by war, and work together to safeguard peace and stability in the world. On environmental issues, they should assist and cooperate with each other in conservation efforts to take good care of the Earth, the only home of human beings."

This is basically the same old program of an independent and non-aligned foreign policy in a new environment. Its message is to hush the fears of the international community over the goals of China's development, to demonstrate that the country plays a constructive role in the world and that others would not loose, but even benefit from China's rise.

The peace offensive by Beijing as well as its expert use of "soft power" has yielded certain results. As a more constructive Barack Obama administration came to replace the confrontation-prone hardliners of George W. Bush, and China successfully overcame the financial crisis, China's role was positively reassessed by the global community.

Early in 2009 two of US most prominent domestic policy experts Zbigniew Brzezinski and Henry Kissinger came out with their proposals on resolving global issues in a new environment. In fact, these proposals presented the options for the newly-elected President Barack Obama on changing the US foreign policy. Though Brzezinski and Kissinger did not see to eye on every issue, they shared the opinion that the stable future of the world depends on whether the US and China succeed in building a constructive cooperation, despite the existing differences.

There were certain compelling reasons behind the proposals of the two famous political experts. Firstly, the generally accepted understanding that the previous administration's foreign policy had failed and the desire to change it. Secondly, the admission that the

Full text of Hu Jintao's report at 17th Party Congress http://news.xinhuanet.com/english/2007-10/24/content\_6938749\_10.htm)

crisis made the US policy actions, as well as economic models lose their popularity in the world, giving ground to alternative concepts. One of such concepts was the Chinese vision, that the western economists themselves dubbed "the Beijing consensus" (similar to the "Washington consensus" that it was opposed to). Thirdly, the acceptance of Beijing's increased role in the world policy resulting from its tangible economic achievements and the expectations that China will emerge from the crisis with less damage than many other major economies.

However, the sentiments in the West changed by 2010. The world started to sort out the new trends in Beijing's foreign policy. According to a number of observers, due to its economic achievements of the recent decades, China has taken a more assertive approach to the outside world. It has tended to show greater rigidity in its relations with partners and greater reluctance to make concessions; to answer blows with blows, to exert pressure in response to pressure. There is an opinion that this trend has strengthened as China successfully – as the country's leadership believes – emerged from the world financial crisis that caused it less damage compared to other leading world economies. Indeed, even when the crisis raged, the Chinese economy showed an 8-10% growth. As the examples of China's increased assertiveness, the experts refer to Beijing's rigid position on Tibet, its reluctance to reach an agreement with Dalai Lama, unreasonably tough sentences to several renegades, an anti-western position on the global warming, the refusal to put the pressure on North Korea to make it implement the United Nations Security Council resolutions that Beijing itself had supported.

It appears that the world should not make much of China's new 'assertiveness' in terms of foreign policy, and view it as an aspiration of a large and successful state to actively protect its interests abroad. At the same time, it cannot be overlooked that China's economic growth in the recent decades, as well as the strengthening of its international position, have resulted in an upsurge of nationalist sentiments within the elites.

The prospects for revision of the foreign policy course. In the first decade of the new century several articles and books were published in China maintaining that Beijing should actively protect (including by use of its army and navy) its economic interests across the globe and even control the world resources and their distribution. The book "Unhappy China" published in early 2009 quickly became a bestseller. It maintains (without substantive proof) that the Chinese use their scarce natural resources more effectively than any other nation. The conclusion is that in the future China should take over the control of world resources to administer them for the benefit of the humanity. According to the authors, China's army should actively support the country's struggle for resources beyond its borders<sup>4</sup>. In an earlier book Wang Xiaodong, one of the co-authors, had also written that China's main problem was the lack of "living space".

China's officials and experts have claimed that the ideas promulgated by the journalist co-authors of "Unhappy China" merely reflect the sentiments of an individual group of citizens. However, several Chinese representatives have confessed that such nationalist theories are supported by certain groups within the defense and law-enforcement agencies.

The Pulcinella's secret was fully disclosed when several books and articles written by official military analysts sharing similar ideas were published in 2010. For example, the author of the book "The China Dream"<sup>6</sup>, Senior Colonel Liu Mingfu, Professor at the National Defense University (an institution within the Ministry of Defense) believes that in the 21<sup>st</sup> century China should seek to become the strongest world power. Otherwise, he argues, China

<sup>&</sup>lt;sup>4</sup> 宋晓军,黄纪苏,宋强,刘仰 (Song Xiaojun, Wang Xiaodong, Huang Jisu, Song Qiang and Liu Yang): 《中国不高兴:大时代、大目标及我们的内忧外患》(Unhappy China. The Great Time, Grand Vision and Our Challenges). 南京,江苏人民出版社,2009年,第80-81, 98-99, 106-108页。

<sup>&</sup>lt;sup>5</sup> 王小东 (Wang Xiaodong):《当代中国民族主义论》(Theory of Contemporary Chinese Nationalism). 《战略与管理》2000年第5期。

<sup>&</sup>lt;sup>6</sup> 刘明福 (Liu Mingfu):《后美国时代的大国思维:中国梦》 (China Dream: Great Power Thinking & Strategic Positioning of China in the Post-American Age). 北京,中国友谊出版, 2010年。

will be cast aside to the periphery of the global development by the US, a country with which China will inevitably enter the struggle or even war for world leadership"<sup>7</sup>.

Another book under a distinctive title "C-Shaped Encirclement: China's Breakthrough under conditions of Domestic Problems and Foreign Aggression" by a military journalist, People's Liberation Army Air Force (PLAAF) Colonel Dai Xu, promulgates the same arguments. Dai Xu maintains that China is encircled by a tight US-coordinated military c-shape arch of neighbors (Japan, Vietnam, India and US itself in Afghanistan). According to the author, China has always been engaged in a struggle for existence with the great powers: with the UK-led Europeans in the 19<sup>th</sup> century, with Japan in the first half of the 20<sup>th</sup> century, with the USSR in the second half of the 20<sup>th</sup> century, and, presently, with the US. Since the war is practically inevitable, China has to – in order to secure the position of advantage – strengthen its armed forces, foremost its air forces and navy<sup>8</sup>.

One of the possible ways to counter the "encirclement" is to follow the US lead and establish military bases abroad. The calls to create foreign infrastructure for the People's Liberation Army and engage in vigorous activity beyond China's borders have prevailed in the recommendations of military analysts. For example, in November 2009 Rear Admiral Yang Yi, Director of the China Institute for Strategic Studies of the National Defense University, said: "We should confidently and overtly tell the United States and other countries that China needs to expand its overseas military power because of... national interests abroad". Early in 2010 the international community was stirred by the interview of the retired Admiral Yin Zhou published at the official web page of the Ministry of Defense, in which he proposed to establish a naval base in the Gulf of Aden to aid China's navy in its anti-piracy efforts.

<sup>&</sup>lt;sup>7</sup> China PLA officer urges challenging U.S. dominance (http://www.reuters.com/article/idUSTRE6200P620100301).

<sup>&</sup>lt;sup>8</sup> 戴旭 (Dai Xu):《C型包围——内忧外患下的中国突围》("C-Shaped Encirclement: China's Breakthrough under Domestic Problems and Foreign Aggression". 山海, 文汇出版社, 2010, 第3-4页。

<sup>&</sup>lt;sup>9</sup> South China Morning Post. November 28, 2009.

Such statements received public scrutiny since they ran counter to the official doctrine and China's traditional military practice. Since the time of China's "bloody lesson" failure in Vietnam in 1979, the People's Liberation Army has not been active abroad, with the exception of its participation in the UN peacekeeping operations and the exercises of the Shanghai Cooperation Organization. Taiwan has always been regarded as the main target of the country's army and navy. The experts have believed that the modernization of China's armed forces and its major acquisitions of arms and equipment have been aimed against Taiwan.

China's diplomatic efforts have also been aimed at demonstrating that China pursues solely peaceful goals, and that its foreign policy focuses on facilitating the country's economic development. Beijing has invariably refused to discuss its interests abroad or interfere in international conflicts, confining its policies to articulating its position, usually amounting to appeals to settle disputes by peaceful means and negotiation.

Officially, this policy remains unchanged; however, it is obvious that it has numerous critics, including those in the People's Liberation Army. Without expressly renouncing the policy of the leadership, they are in fact shaping a new ideology of foreign and defense policy that runs counter to the policy developed by Deng Xiaoping late in the 1970s, with 'modesty' as its slogan: "...we should not boast. The more developed we are, the more modest we should be", exhorted the Chinese leader in 1989. 10

Today it is clear that within Chinese society and government serious battles are being waged as to how China should proceed with its foreign policy in the future. Some experts deny that the Chinese foreign policy has become more aggressive, and claim that China should merely become more unequivocal in presenting its positions on key issues and defending them. As regards the aforementioned books, it is claimed that these publications failed to strike a chord among average Chinese and were barely even noticed

<sup>10《</sup>邓小平文选》第三卷 (Selected works by Den Xiaoping, Vol.3) 北京,人民出版社,1993第320页。.

by the broad readership in China. They argue that the vision of increased China's influence in the world aimed at obtaining the ability to control the world's raw material resources is merely a dream, without serious intention of making it real. It has been underlined that the Chinese at large do not share the ideas expressed in "Unhappy China" and do not fancy their country turning into a superpower.

Furthermore they assure that China's rapid development does not make wars inevitable and that China will adhere to the principle of peaceful development. According to them, unlike the world of the past when a rapid growth of one nation lead to wars, in the modern world global development means cooperation – which is illustrated by the cooperation between China and Russia. China needs a strong Russia while Russia needs a strong China.

According to middle-of-the-road analysts, China currently faces two groups of problems: the old (security, territorial integrity and sovereignty, borders, the Taiwan issue, China's secondary role in the world politics) and the new ones (growing investments abroad, greater number of Chinese citizens going to foreign countries, China's engagement in globalization and resource-related issues). All these problems should be addressed through cooperation and by increasing China's economic integration in world economy, including integration with Russia, the US and other countries.

However, in reality the picture is not as smooth as in the nice-sounding Chinese doctrines represent, such as "the harmonious world". The serious deterioration in the relations between Beijing and Washington is one of the most vivid examples in this respect. The US is displeased with China's increased international activities, as well as with the country's economic expansion in areas close to and well beyond its borders, such as Africa, Latin America and the Middle East. The US is also unhappy about China's position on global warming, where China positions itself as the leader of the developing world that tends to shift the responsibility for the climate changes to the developed countries.

But the biggest disappointment for Washington and the European capitals has been Beijing's reluctance to agree to revalue its national currency, RMB. The US and Western Europe view the

undervalued RMB as an implicit export subsidy that results in an even greater trade deficit between China and most of the Western countries. Further, the US is unhappy about China's position on a variety of regional issues, namely the North Korean nuclear program: in Washington's opinion, Beijing has not exerted enough pressure on Pyongyang. The same applies to the Iranian nuclear issue: Beijing and Moscow pursue the policy aimed at softening the sanctions proposed by the West. As a result of the "reset" of the US-Russia relations, Moscow's position on the Iranian nuclear issue in 2010 got closer to the position of Washington. By contrast, Beijing has tried to either waive sanctions, or soften them to such an extent that they would be impotent. Eventually, in 2011-2012 Moscow changed its stance and together with Beijing opposed any new sanctions on Iran at the UNSC.

Beijing has also expressed discontent over Washington's policy on a variety of issues. Apart from the arms sales to Taiwan, the US applied pressure on Beijing in relation to economic issues, conducted "interference with [China's] internal affairs" as regards human rights. Moreover President Barack Obama met the leader of Buddhists Dalai Lama, blamed as separatist by Beijing.

The lack of stability in US-China relations reflects upon the relations between Beijing and Moscow. The Russia-China relations are much more consistent. There are no particular political differences between Moscow and Beijing, the extensive cooperation mechanism rests upon a solid foundation of common interests; Russia shares many of China's concerns over the US foreign policy ambitions and actions.

At the same time, even at this point it would be unwise to assume that any downward trend in the relations between two of the countries forming the triangle will automatically benefit the third country. China's increased assertiveness, if it is backed by nationalism, may not only affect the interests of the US, but still more inflict damage on China's neighbors, including Russia.

#### 3. CHINA'S NUCLEAR CAPABILITY

By Victor Yesin

Today, China is the only one of the five nuclear-weapon states recognized by the 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT), that provides no official factual information on its nuclear arms. For political and propaganda purposes, China claims that its nuclear forces are small and cannot be compared to those of the US and Russia. Expert estimations of China's nuclear arsenal vary within a wide range of 240-300 to 10,000 nuclear warheads.

With due respect to the assessments of various experts, here are our own estimates of China's nuclear potential, forces and programs.<sup>11</sup>

Nuclear weapons production. China has an advanced and self-sufficient military industry capable of serial production of all the range of nuclear weapons required by the country's nuclear force, from gravity bombs to reentry vehicles for various missiles. China's military industry is divided into two virtually independent groups of enterprises, the southern one and the northern one, each of them comprising facilities for the production of special fissile materials and nuclear warheads components, as well as for the assembly of nuclear warheads. The northern group consists of four industrial centers in Baotou (the Inner Mongolia Autonomous Region), Koko Nor (Qinghai province), Lanzhou and Yumen (in the Gansu province). The southern group includes three production centers in Guangyuan, Ebian and Zitong (all of them in the province of Sichuan).

Judging by the performance of China's special fissile materials production installations and the dates of their actual entry into service, it may be estimated that by 2011 they could have

<sup>&</sup>lt;sup>11</sup> Hereinafter, only the author's assessments are given.

produced up to 40 tones of weapon-grade uranium and about 10 tones of weapon-grade plutonium. This would be sufficient to manufacture 3,600 nuclear warheads (1,600 with uranium and 2,000 with plutonium core).

It is possible to assume, that China has followed the example of other P-5 states, using only some of its weapon-grade materials for the actual production of warheads. The stockpile holdings of such materials may stand at more than a half of the total amount of the material produced. Hence, on the basis of this assumption China's nuclear arsenal may consist of 1,600-1,800 nuclear warheads. Of those, about 800-900 might be available for operational deployment, while the rest may be kept in storage as reserve or await dismantling and recycling after expiration of their service lifetime. No doubt, the above rough assessments cannot be absolutely accurate, but they appear much more realistic than those mentioned earlier in this chapter.

China's nuclear-weapons industry produces nuclear explosive devices for the following range of weapons:

- B-4 gravity bombs (several modifications with a yield of 5 to 20 kt each) for Qian-5 tactical attack aircraft;
- B-5 gravity bombs (with a yield of up to 2Mt) for H-6 long-range bombers (a license version of Soviet Tu-16 medium-range bomber);
- single reentry vehicles (two modifications, each having a yield of 2Mt) for DF-4 medium-range ballistic missiles (MRBMs) and DF-5A intercontinental ballistic missiles (ICBMs);
  - single reentry vehicles (with a yield of 500 kt) for DF-31 ICBMs;
  - cut-off reentry vehicles (with a yield of up to 300 kt) for DF-31A ICBMs;
  - single reentry vehicles (two modifications with a yield of up to 350 kt each) for DF-21/21A MRBMs and JL-1 submarine-launched ballistic missiles (SLBMs);
  - single reentry vehicles (several modifications with a yield of 5 to 20 kt each) for DF-15/15A/15B and DF-11/11A tactical missiles and DH-10 ground-launched cruise missiles (GLCMs);

- single reentry vehicles (with a yield of up to 500 kt) for JL-2 SLBMs.

China is currently working on a multiple independently targeted reentry vehicle (MIRV) as one of the most promising projects. This reentry vehicle is intended for modified DF-5A and DF-31A ICBMs, as well as JL-2 SLBMs that has recently entered PLA service. Presumably, experimental samples of these MIRVs could have been produced and flight-tested in 2011.

**Air-based leg of nuclear force.** China's air-based nuclear force consists of strategic aviation comprising H-6 medium-range bombers, and tactical aviation including Qian-5 fighter-bombers and other attack aircraft using Russian-made Su-30 multi-purpose fighter as their prototype.

Operational inventory of strategic aviation includes about 60 H-6 bombers, with approximately the same number kept in storage. The maximum flight range of the H-6 bomber carrying one thermonuclear B-5 bomb inside the hull is about 5800 km. A total of up to 120 B-5 gravity bombs are attributed to these aircraft.

Operational inventory of tactical aviation includes a total of over 300 Qian-5 fighter-bombers and other attack aircraft certified for nuclear missions. These aircraft have a maximum flight range of 1,400-2,000 km when carrying one B-4 nuclear bomb. A total of 320 B-4 bombs are attributed to tactical aviation.

Thus, a total arsenal of B-4 and B-5 bombs available for operational deployment amounts to 440 weapons. At peacetime they are stored at airbases in special facilities separately from the aircraft.

**Nuclear land-based force.** China's nuclear land-based component consists of Strategic Missile Force and the missiles of the People's Liberation Army Ground Force (PLAGF). Strategic Missile Force is operated by the so-called PLA Second Artillery that has six missile bases:

The 51st missile base deployed in the Shenyang military region. It comprises three missile brigades armed with road-mobile two-stage solid-propellant DF-21 MRBMs (with a range of up to 2,000 km). They operate a total of 28 launchers and have an allotment of 35 missiles and 35 nuclear reentry vehicles.

The 52nd missile base deployed in the Nanjing MR. It consists of seven missile brigades, two of which are armed with road-mobile two-stage solid-propellant DF-21A MRBMs (with a range of 2,800-3,000 km), two with road-mobile solid-propellant operational-tactical DF-15/15A/15B missiles (with a range of up to 600 km) and three with road-mobile solid-propellant operational-tactical DF-11A missiles (with a range of up to 300 km). That makes a total of 84 launchers (24 DF-21A, 24 DF-15/5A/15B, and 36 DF-11A). Allotment for DF-21A launchers stands at up to 30 missiles and 30 nuclear reentry vehicles. DF-15/15A/15B operational-tactical missiles can carry both high-explosive and nuclear reentry vehicles. The allotment of nuclear reentry vehicles for these missiles is kept in storage facilities and may amount to a total of 30 nuclear warheads.

The 53rd missile base is deployed in the Chengdu MR. It includes two missile brigades armed with road-mobile DF-21/21A MRBMs. They operate a total of 24 launchers with an allotment of 30 missiles and 30 nuclear warheads.

The 54th missile base is deployed in the Jinan MR. It comprises three missile brigades, one of which is armed with silo-launched two-stage liquid-propellant DF-5A ICBM (with a range of up to 12,000 km). The second brigade has silo-launched and launch-pad liquid-propellant DF-4 MRBM (with a range of up to 5,200 km). The third brigade operates road-mobile launchers of three-stage solid-propellant DF-31 ICBM (with a range of up to 8,000 km). They operate a total of 24 launchers (6 of them for DF-5A ICBMs, 6 for DF-4 MRBMs, and 12 for DF-31 ICBMs), with 28 missiles and 28 nuclear reentry vehicles.

The 55th missile base in the Guangzhou MR includes two missile brigades with silo-based DF-5A ICBMs and one missile brigade with silo-launched and pad-launched DF-4 MRBMs. They operate a total of 17 launchers (12 launchers for DF-5A ICBMs and 5 for DF-4 MRBMs) and are equipped with 20 missiles and 20 nuclear warheads).

The Lanzhou military region houses the 56th missile base consisting of two missile brigades. One is armed with road-mobile DF-21A MRBMs, and the other with road-mobile three-stage solid-propellant DF-31A ICBMs (with a range of up to 12,300 km). They

operate a total of 30 launchers (12 launchers for DF-21A MRBMs and 18 launchers for DF-31A ICBMs) with 35 missiles and 35 nuclear reentry vehicles.

All in all Second Artillery strategic missile force has a total of 207 deployed launchers (48 for ICBMs, 99 for MRBMs and 60 for tactical missiles). Their allotment amounts to 238 missiles and 208 nuclear warheads.

As for the PLA Ground Force, it operates two types of road-mobile missile launchers capable of launching missiles carrying both conventional and nuclear warheads. One of the types is solid-propellant DF-11 tactical missiles (with a range of up to 300 km) and the other is DH-10 GLCMs (with a range of 1,500-2,000 km). The total of DF-11 operational missile launchers stands at about 100 pieces and DH-10 GLCM launchers - at about 350 pieces (although there are estimates that there are 500 launchers). The number of reentry vehicles stored for these missiles may include 150 nuclear warheads.

Thus, the land-based component of China's nuclear forces may presently comprise about 360 nuclear reentry vehicles intended for deployment. At peacetime most of them are stored separately from the missiles. But not all of them, in contrast to opinion of some experts, relying on the information leaking to mass media (apparently with the authorization of Chinese authorities).

As the missile brigades armed with road-mobile DF-31/31A ICBMs are on constant combat duty (on alert), it should be assumed that these missiles are kept in the state of readiness for immediate launch upon the authorization of the state leadership. This implies that these missiles are constantly loaded into launchers and nuclear reentry vehicles are mated to them. China would not be a nation universally recognized for its pragmatism if it could do otherwise, since a state of constant alert of missiles not armed with nuclear warheads is a complete operational nonsense.

There is another fact to be taken into account. China's military construction units are building an extensive tunnel system capable of holding heavy military equipment in Central China. The existence of such tunnels (with a total length of several thousand kilometers) cannot but invite a suspicion that a considerable number of reserve mobile launchers with ballistic and cruise missiles, as

well as a stockpile of nuclear warheads for them, can be stored there. It can hardly be imagined that such enormous facilities are intended for any other use. No question, China has a right to do it and to keep it secret, but other states should not overlook it when assessing China's nuclear capability and receiving infinite official statements by Beijing on the "modesty" of its nuclear potential.

**Sea-based leg.** The sea-based component of China's nuclear force comprises two types of nuclear-powered submarines armed with ballistic missiles (SSBNs): one Xia class (Type 092) submarine carrying 12 two-stage solid-propellant JL-1 SLBMs (with a range of up to 2,400 km) and two Type 094 submarines each carrying 12 three-stage solid-propellant JL-2 SLBMs. The JL-2 SLBMs have a range of up to 8,000 km.

China stopped the construction of Xia-class submarines in 1990s. The stockpile of nuclear reentry vehicles for JL-1 SLBMs is estimated at 15 pieces.

The Type 094 submarines have been built since 2001. Apparently China is planning to commission at least four submarines of this class (or five, according to other sources). The two Type 094 submarines as part of the Navy operational force regularly go on patrol in China's littoral seas. Their allotment is estimated at 30 JL-2 SLBMs and 30 nuclear reentry vehicles.

Thus, presently a total of 36 JL-1/2 SLBMs with single reentry vehicles are deployed in the sea-based component of China's nuclear force, and the allotment for them stands at 46 nuclear reentry vehicles.

The prospects of further development of China's nuclear force. Apparently, further development of China's nuclear force will be determined mainly by external factors, in particular, final design of the global missile defense created by the US and their allies, and the military developments in the neighboring countries' — primarily India's — nuclear force. The prospects of resolving the outstanding issue of Taiwan will also have certain impact. At the moment, however, it is possible only to guess on the future of China's nuclear potential relying on scarce unofficial data available from the world expert community.

In accordance with the plans for the development of strategic aviation, China upgrades the existing and starts serial

production of new modifications of H-6 medium-range bombers. They are equipped with new targeting devices and an expanded set of arms, including air-launched cruise missiles (ALCM) carrying nuclear warheads. These ALCMs most probably will use DH-10 GLCMs as their prototype.

In improving the land-based component of its nuclear force, China has placed emphasis on equipping the existing and future ballistic missile types with multiple reentry vehicles and BMD penetration aids. Alongside with that, two new solid-propellant ballistic missile types are developed, namely a DF-25 MRBM and DF-41 ICBM. The DF-25 MRBM uses the first and the second stages of DF-31 ICMB and is equipped with MIRV platform dispensing three independently-targeted reentry vehicles. Its range is expected to reach 4,000 km. It is intended to replace the obsolescent DF-4 MRBMs. The DF-41 ICBM is intended as a versatile missile to be deployed on road-mobile and rail-mobile missile launchers. It will reportedly carry a multiple independently-targeted reentry vehicle system with 6-10 warheads.

In developing sea-based leg of the nuclear force, China's makes an effort to accelerate the construction of Type 094 submarines, improving their quality and training their crews to ensure all regimes for patrolling the ocean. At the same time China has been upgrading its JL-2 SLBMs through equipping them with MIRVs. In addition, the construction of the SSBN base and logistics infrastructure in Hainan Island (South China Sea) is nearing completion. The nearest prospects are the construction of a first new Type 096 SSBN. This submarine may be equipped for 24 MIRVed JL-2 SLBMs and could be commissioned in 2014-2015.

The significance of China's nuclear capability. The above analysis has shown that the international community has grossly underestimated China's nuclear capability. In reality it is much larger than implied by the assessments of most experts. Apparently, China has already become the third largest nuclear-weapon state after the US and Russia. Its nuclear force has massive theater and expanding strategic dimensions and is assigned deterrence missions against a multitude of neighboring and distant regional and global powers. No doubt, it has sufficient technical and economic resources for a rapid buildup of its nuclear force if such a decision

is taken by the political leadership. In this sense China's position is unique among seven third nuclear weapon states besides the US and Russia.

This means that Chinese nuclear potential must be taken into account when considering any follow-on US-Russia nuclear arms reduction and limitation agreement. It is high time for China to be involved in one format or another in negotiations on nuclear arms limitation. Otherwise this process cannot significantly move further, even if Russia and the US overcome their current differences on missile defense, non-strategic nuclear weapons and the militarization of space.

#### 4. CHINA'S MILITARY PREPARATIONS

By Alexander Khramchikhin

Military command structure of China. People's Liberation Army of China (PLA, official name of Chinese armed forces) is headed by the Central Military Commission (CMC). The Chairman of the CMC is in fact considered to be the most important position in China. A person can become a sovereign leader of the country only having taken up this post. This in itself demonstrates an exceptionally important role of the army in China's political system.

CMC leads four main service branches: land-based strategic missile force (the Second Artillery), Ground Force, the Air Force and the Navy. Besides, under the CMC there are seven military regions (with the headquarters in Beijing, Shenyang, Jinan, Nanjing, Lanzhou, Guangzhou, and Chengdu) through which command of their ground force units is exercised. The command of the troops is also exercised through the General Staff Headquarters (except for the Second Artillery which reports directly to the CMC) and three PLA General Departments (General Political Department, General Logistics Department and General Armament Department). The command system is extremely centralized, and the movement of any unit bigger than a battalion, as well as any movement of troops between military regions must be authorized by the CMC.

The Minister of Defense directs routine army management work and holds a seat in the State Council. General Political Department leads in all party political and propaganda activities in the PLA. There is a party structure in every unit, and no order, including operational orders, can be effective unless signed by the political commissioner.

PLA is manned by conscription, although there are also military service contracts for the terms from 3 to 30 years. Those males aged between 18 and 35 who do not go through compulsory

military service, are conscripted into reserve service in militia, the strength of which stands at 36.5 million people. It is considered as a standing PLA reserve and a nucleus of guerilla movement in case of foreign occupation.

China's military expenditures increase rapidly. They grow 1.5-2 times as fast as GDP, with their growth rate currently standing at 14-18 percent a year. While in 2001 these expenditures amounted to approximately \$17 billion, in 2011 they reached \$91 billion. Thus, in ten years they grew by more than five times (see Annex 1). Notably, all foreign analysts agree that the official data are 1.5 to 3 times lower that the actual expenditure, as it does not include the cost of the arms import and the income from arms export, the expenditure related to nuclear weapons, strategic nuclear force, People's Armed Police, and appropriations for military industry, as well as allocations to R&D.

**Ground Force.** Ground Force has always been and will remain the backbone of China's military strength, as the country's enormous population, not to mention the abundance of young men, provides China's armed forces with the unlimited resource beyond what any other country's leadership can think of. Even with a certain technical gap between China and some of the world's armed forces, due to its enormous numerical superiority China would secure a victory over any adversary it faces in any war on land either in its own territory or in its vicinity. Location of army groupings shows whom China considers to be its potential adversaries.

Among the 7 military regions, the Beijing and the Shenyang MR located in the vicinity of the Sino-Russian border are the strongest, with the first one oriented towards Russia's Siberia Military District, and the second, towards the Far East Military District. These military regions account for 4 out of 9 armored divisions, 6 out of 9 mechanized divisions, and 6 out of 12 armored brigades of PLA Ground Force. Two more armored divisions and a brigade are part of the Lanzhou MR (it is located in the western part of the country and is to protect the country from the directions of Central Asia, Mongolia and the part of Siberia to the west from

Lake Baikal)<sup>12</sup>. Besides, there are an armored division, 2 armored brigades and the only PLA's mechanized brigade in the Jinan MR which is situated in the central part of the country and can be used as a strategic reserve for the Beijing, Shenyang, Lanzhou and Nanjing MRs.

In particular, the 38th Army of the Beijing MR serves as a "testing ground" for new organizational solutions and ways to use new types of military equipment. It has completely automated artillery, which is still inferior to American, but is apparently superior to that of Russia. China rapidly upgrades its armored units, which, as exercises have shown, can conduct offensive at higher tempo then the Armed Forces of Russia. In particular, the 38th Army comprises a fully automated 6th armored division equipped with Type-96 tanks. The tempo of offensive of the 38th Army stands at 1000 km a week (i.e. 150 km a day). Finally, this Army also comprises the 4th anti-aircraft artillery brigade having the latest state-of-the-art equipment of China's battlefield air defense (which includes, in particular, a squadron armed with Russian Tor SAM).

The "reserve" Jinan military region is another testing ground for new uses of weapons. It comprises, in particular, the elite 8th Armored Division and the 127th Light Infantry Division armed with state-of-the-art equipment.

The rest of the mobile units of the PLA Ground Force (armored and mechanized divisions) belong to the Nanjing military region assigned a mission of taking Taiwan. Those, in particular, include the two deployed China's amphibious mechanized divisions, the only amphibious armored brigade and the only special task assault brigade. These units have a total strength of 25,000 troops. Taking in consideration the marines of the Navy (2 brigades, 10,000 troops), China has second largest marine corps after the US.

The Chengdu and the Guangzhou MRs located by the borders with India and the countries of Indochina are the weakest

(Chuprin K.V. The Military Might of the Celestial Empire. Armed Forces of the PRC (reference book). M: "Harvest", 2006.)

 $<sup>^{12}</sup>$  See: Чуприн К. В. Военная мощь Поднебесной. Вооруженные силы КНР (справочник). М: «Харвест», 2006.

military regions. In particular, they have no armored and mechanized divisions. Thus, China's leadership does not appear to prepare for any major offensives in the south. The troops of these regions comprise mainly light infantry (former infantry) divisions, the most archaic type of units in the PLA Ground Force. In other MRs the majority of divisions of this type have been transformed into brigades. PLA has engaged in a rather active replacement of divisions for brigades, although this is an absolute trend. It appears that presently deployed armored and mechanized divisions that serve as the backbone of the Ground Force offensive capability are not to be reorganized into brigades.

Today, the following equipment should be mentioned among the state-of-the-art systems used by the PLA Ground Forces: about 4,000 Type-99 and Type-96 tanks, 100 2S23 self-propelled guns, several hundred WAC-021 SAMs and domestically designed A-100, WM-80 and WS-1 MLRSs, and 27 Tor-M1 SAMs. Notably, China continues to produce at least 200 tanks of each type (possibly, 400-500) a year, which is more than the number of tanks produced annually by the rest of the world altogether (neither Western countries, nor Russia are producing tanks in comparable quantities any more). Presently China is developing a brand new tank which will apparently have a crew consisting of two and an unmanned turret. In addition to the main gun it is to have two six-barreled rapid-fire guns to engage air targets and ATGMs. The tank might also have a compact reconnaissance robot.

PLAGF has engaged in active combat training, some aspects of which are but alarming, as they involve staging deep offensive operations (up to 1,500 kilometers) involving major groups of forces. It is obvious that there is no space either physically or geographically, for such operations either in the south, the east or west of the country.

Recently, PLA has commissioned equipment that has no direct equivalents either in Russia or the West. For one, there is a ZBD-05 armored infantry fighting vehicle (AIFV) specially designed for the marines (PLA has procured at least 250 pieces of various modifications) and used as a basis for a whole family of vehicles (command carrier, ZTD-05 self-propelled gun, etc.). Based on these vehicles, a WZ502G AIFV was developed that is not

amphibious, but has enhanced armor. As Chinese sources claim, its turret and front part can withstand a hit of a 30 mm armor-piercing projectile launched from a distance of 1000 meters, and the sides protect from a 14.5 mm projectile launched from a distance of 200 meters. It should be noted, that the 30 mm is the caliber of the gun of Russian BMP-2 (while the US AIFV Bradley has a 25 mm gun), and the 14.5 mm is the caliber of Russian machine gun (mounted on all APCs), while the caliber of the US and Western machine guns does not exceed 12,7 mm.

The PLA Ground Force has traditionally had an advantage in rocket artillery. It is in this particular sphere that China depended the least on the USSR as far back as in 1970-1980-s. It has developed many models of domestic MLRSs based on both Soviet and Chinese designs. Logically, it was China which has developed the world's highest-performance and longest-range MLRS WS-2 (six 400 mm caliber guns), the first modifications of which had a range of only 200 km, and the latest (WS-2D) 350-400 km. Neither the US MRLS and HIMARS, nor Russia's Smerch systems have a performance comparable to those of WS-2.

In general, MLRSs within comparable range are more efficient against large area targets than strike aviation, as in this case there is no risk of loss of extremely expensive aircraft and pilots, and no costly fuel is spent. MLRS spend only ammunition, which is cheaper than air bombs. The lower accuracy of MLRS is made up for by the quantity of rockets launched in one salvo. Moreover, today the rockets are equipped with guidance systems, which is also true of the WS-2 rockets. What is more, each launcher of this type is to have its own targeting UAV to further enhance its accuracy. The performance of MLRSs also greatly exceeds that of tactical missiles, especially taking in consideration the lower cost of rockets as compared to missiles.

It was believed that insufficient range was the main disadvantage of MLRS vs. aviation and tactical missiles. However, China managed to solve the problem. A WS-2D located deep in Manchuria can immediately hit all the units of Russian Armed Forces located around Vladivostok and Ussuriysk, Khabarovsk, Blagoveshchensk and Belogorsk. A WS-2D deployed in Manchuria along Russian border (on Chinese territory) would be capable of

destroying Russian troops and airbases around Chita and strategic facilities in Komsomolsk-on-Amur.

Smaller WS-2D rockets are hypersonic, and their flight time, even when launched to the maximum range, will not exceed five minutes. Russian air defense will not be able to detect them, let alone to intercept. Moreover, it will not be possible to the massive deployment of MLRSs in China's territory, as the launch trucks look very much like usual trucks (the launchers are box-shaped and thus convenient to disguise as truck body).

In comparison American Tomahawk SLCMs certainly have a longer range, but they fly at subsonic speed, due to which their flight time to the maximum range is two hours, rather than five minutes. What is more, their launchers (at least those on cruisers and destroyers) cannot be concealed. Neither Russia, nor NATO countries have no weapon with any comparable battle performance to that of WS-2.

**Fighter aviation.** Since the early 1990s China has engaged in replacing its fighter aviation with the most advanced aircraft. Over 300 Su-27/J-11 heavy fighters (Su-27 procured from Russia, J-11A produced under a license and J-11B manufactured without license) have already entered service of PLA Air Force and Naval Air Force, and their number will probably be brought to at least 500. It should be noted in this context that J-11B are to replace not only all J-8, but also Su-27 aircraft. The J-10 fighters, the number of which presently exceeds 220, will most probably completely replace the J-7, and their number will probably rise to 1000 for the PLAAF only. (Russian and Western sources continuously state that only 300 aircraft of this type will be produced, yet it remains unclear, where this data has been found and to whom has China's General Headquarters reported on its plans.)

On the average, the training flight time of a Chinese pilot of a modern fighter reaches 200 hours a year, which is almost equal to that in the US and four to five times more than that in Russia. Like the US Air Force, PLAAF has an "aggressor" squadron staffed with the best trained pilots flying Su-27 fighters who perform as the Air Force of Russia and Taiwan (possibly viewed by China as the most probable adversaries) during exercises. In these exercises, pilots of

other units fight the "aggressors", improving their skills and studying the tactics used by probable enemy.

Improvement of strike aviation continues to present a major challenge for China. Modifying H-6 to carry ALCMs had little effect due to the obsolescence of this type of aircraft in general. The Q-5 attack aircraft has also become archaic, with its modifications equipped with Western avionics able to satisfy but developing countries. This lack of strike aviation, however, is made up for by the abundance of tactical missiles and new attack UAVs (WJ-600, CH-3, Pterodactyl, etc.). Besides, presently a new JH-7 bomber is entering service of PLAAF and Naval Air Force. (At the moment, there are about 200 aircraft of this type, with the PLAAF and Naval Air Force having almost equal quantities. As the production goes on, it is assumed that the number of the aircraft may reach 300-400). It appears that the 100 imported Russian Su-30 (76 for the Air Force, and 24 for the Naval Air Force) and their unlicensed copies J-16 to be produced in the near future, will be used as attack aircraft.

During the Zhuhai Air Show in autumn 2010 China presented a considerable number of new UAVs, including combat UAVs such as WJ-600, CH-3, Pterodactyl, and Anjian. It should not be excluded that in this sphere China has left behind even the US, let alone Russia which cannot be compared to it due to a huge gap with China in this respect.

PLA has raised its ground-based air defense to a new level as it procured S-300 SAM systems from Russia. Nevertheless, the two battalions armed with S-300PMU (PT) and eight battalions (two regiments) armed with S-300PMU-1 (PS), for which only 150 5V55R SAMs were procured, have rather limited capabilities. China's 15 or 16 battalions (four regiments) armed with S-300PMU-2 (PM) have much greater capabilities, although their allotment of ammunition is relatively small (900 48N6 SAMs). Thus, real capabilities of PLA air defense will be determined by domestic production of HQ-9 (derived from S-300) and HQ-16 (derived from Buk) SAM systems.

**Navy.** In recent twenty years China has accelerated the development of its Navy. The country's leadership assigns this branch of service the following pivotal tasks: to be capable of

ensuring, first, the occupation of Taiwan, second, continuous supplies of raw materials (primarily oil) from Africa and the Persian Gulf, and the protection of oil extracting facilities on the sea shelves adjacent to Chinese coast, and third, the protection of its coast.

It is obvious that even the US Navy will not send its troops to storm China's shore, as they are doomed to complete destruction by enormous PLA Ground Force. Chinese leadership is much more concerned over possible attack of the US Navy and Air Force using high-precision weapons and the consequent destruction of facilities underpinning China's new economy and built in the years of reform. Over 80 percent of the modern industrial enterprises that have been the source of China's economic miracle are situated in the littoral area and are extremely vulnerable to a strike from sea. Hence, China's Navy is assigned the task of moving the line of defense as far to the ocean as possible.

To effectively fulfill these tasks, PLAN must, according to the vision of the political and military leadership of the country, complete three stages of development. At the first stage, China's Navy should create a favorable operational environment within the first island chain (from Japanese Ryukyus to the Philippines); at the second stage — gain sea-control within the second island chain (from the Kuril Islands to the Mariana Islands and New Guinea); and at the third stage it should be able to act freely in any part of the world's oceans and seas.

State-of-the-art assets of the Navy include 12 diesel-electric Type 636 and Type 877 Russian-made submarines and 23 Type 039 and Type 041 domestic submarines (with the construction of the latter two being similar to both French Agosta and the newest Russian Type 677 submarines), 13 destroyers (various modifications of Type 956, Type 052 and Type 051), and 10 Type 054 frigates.

China is the world's leader in terms of the aggregate number of its diesel and general-purpose submarines (about 70) that is maintained at a stable level. New Type 093 submarines come to replace and supplement Type 091 ones, while Type 041 (039A/B) submarines gradually enter service instead of earlier Type 033 and Type 035 submarines. Notably, the Type 041 submarines are equipped with an advanced air-independent propulsion system. It is

probable that they will be produced in large series and continuously improved. Despite this, 25 boats of Type 039G, Type 877 and Type 636 submarines are most likely to remain in service for a long time.

China's Navy is already capable of ensuring naval blockade of Taiwan and seriously impeding the activities of the US and Japanese Navy in the North-West Pacific. In the longer term, should China increase the number of its submarines and establish military bases overseas, PLAN will have to be taken into account as a geostrategic factor both in the Pacific and the Indian oceans.

The four Type 956 destroyers procured from Russia are intended for fighting against surface ships, and the two domestic Type 052C destroyers are to ensure air defense for the naval force. For this purpose they carry Russian-made Rif SAMs (naval version of S-300) and multi-purpose combat system similar to the US Aegis.

The Type 052C destroyers serve as the most vivid example of foreign technologies synthesis policy pursued by China. These ships are equipped with Ukrainian-made Zarya gas turbine engine, and in addition to the Russian Rif SAMs they are armed with domestic C-803 anti-ship missiles (which in themselves are a mixture of French Exocet and Israeli Gabriel), 100 mm artillery gun copied from the French Creusot-Loire M68 gun, seven-barreled 30 mm Gatling gun CIWS copied from the Dutch Goalkeeper, anti-submarine Yu-7 torpedoes derived from the US Mk-46, and carry Z-9 helicopter copied from French SA-365. All the weapons and equipment copied from foreign types, except for the helicopters, are manufactured without license. These particular destroyers will be produced in large series (at least 10 ships), with the new modification armed with domestic HHQ-9 (naval version of HQ-9) instead of Russian-made SAMs.

As for "Mosquito Fleet", China is building 60 to 80 Type 022 missile boats that are to be the world's most powerful ones, based on Australian Austal's high-speed catamarans. Those are to replace the multitude of older missile and torpedo boats.

The first Type 071 amphibious transport dock has recently entered service in China's PLAN. So far this has been the largest China's ship with a deadweight of 20 thousand tones. It can hold up to 800 marines, and 50 armored vehicles which are to land with the

help of the ship's four hovercrafts and four helicopters. The ship has already sailed to the coast of Somali to fight sea pirates. In late 2011 the second ship of this type entered service of PLA Navy, and two more are currently under construction.

Most significant China has been actively designing aircraft carriers using the technologies of the Varyag aircraft carrier purchased at \$28 million from Ukraine (complete technical data package for the ship was bought from Nevskoye design office for a purely symbolical sum of \$840 thousand), which had been intended for the USSR Navy but has never been completed. Also the Melbourne aircraft carrier decommissioned by Australia and sold to China at the price of metal scrap was used as a source of naval technologies. What is more, Varyag that was officially purchased for refurbishment into an "entertainment center", was completed as an aircraft carrier (possibly, a training one) and is to enter service of PLAN in the near future. A cattier fighter J-15 will be developed for it based on the T-10K (a prototype of Su-33), which is also Ukrainian-made.

Nonetheless Varyag cannot become a prototype for new aircraft carriers and will almost certainly remain the only one of its type to serve as a training and experimentation ship. China will have to develop full-deck aircraft carriers on its own, although capitalizing on foreign experience. However, the very fact that China is completing the construction and intends to introduce into service a ship, that cannot serve as a full-value aircraft carrier or be used as a prototype for new ships, is an unequivocal proof to the fact that China attaches exceptional importance to developing its Navy and intends to build a fleet of carriers. Otherwise it would need no training aircraft carrier.

Hence, China will certainly start building "real" aircraft carriers (taking into account the experience of completing and operating Varyag). Probably, there will be 3 or 4 of them (possibly 5 or 6), as building only 1 or 2 would be pointless for a country like China. This would by definition call for at least 20 more Type 052 or newer destroyers. As it has been said, Type 052C destroyer has been chosen as the main type. It has HN-2 SLCMs (viewed as equivalents of Tomahawks, which were recovered after use and bought by China from Sudan, Serbia and Pakistan), and HHQ-9

SAMs (Fort, S-300F). As China has renewed the construction of this type of ships after a break (this time, arming them with domestic rather than Russian SAMs and new radars), this particular type of ships may well become the main type of PLAN surface ships for escort and defense of aircraft carriers. As for frigates, China has opted for Type 054A frigates which have already been built in large series and will most probably be improved in the course of the construction.

Aircraft carriers and major amphibious ships will provide Chinese Navy with qualitatively new capabilities, first, in the struggle for Taiwan and subsequently for operating in the world's distant oceans and seas. Occupation of Taiwan would greatly enhance the naval and air power of China and enable it to establish control over maritime transportation routes in Western Pacific and South-East Asia. Thus China could breach the "island barrier" allowing its ships to breakout into the ocean.

Apparently, China has already been preparing for this breakout, increasing the share of ocean-going ships and simultaneously reducing the share of ships and boats designed to operate in the coastal waters. In fact, even with a single aircraft carrier China's PLAN will be able to ensure favorable operational environment within the second island chain, including Sakhalin, Kuril Islands and Kamchatka.

The efforts of China's political and military leadership in the following few years may aim at establishing a relatively small (from China's perspective) modern technologically advanced army within PLA, capable of effectively countering the armed forces of the US, Russia, Japan and India, not to mention any other country. It could account for approximately 15 percent of total PLA strength (i.e. peacetime strength prior to mobilization).

This army is to master and counter the newest US army building concepts, in particular, the network-centric warfare. As China will have difficulty in implementing this concept in its armed forces in the foreseeable future, it will pay considerable attention to asymmetric warfare, that is, reaching "nerve centers" of adversary's army. This refers to destroying the enemy's command posts, space satellites and communication centers with electronic warfare and by physical destruction, as well as by using deception and concealment

measures. China has already started training "hacker units" for this purpose. In 2000, "network forces" were established within PLA as a separate service branch, while April 2007 saw China's successfully testing an anti-satellite weapon. In 1999 two PLA officers issued a book titled "Unrestricted Warfare" proposing the strategy for asymmetric warfare <sup>13</sup>. This book can be summarized in a phrase "the main rule of unrestricted warfare is the absence of any rules and a complete freedom of action".

What is more, China, like the US, has been actively developing its Special Forces ("fist units") to complete four types of missions. They can be used as "door-openers" striking against targets of value and breaching the enemy's defense, in "surgical" operations against vital targets in order to paralyze the enemy's military capability, a "sledgehammer" force for capturing important positions of the enemy, and a "booster" to increase the tempo of military campaign or start it in a new area.

As part of this plan China would resort to information warfare. In this vein, acts of aggression committed by China against its neighbors can be called "self-defense" aimed at protecting its nationals abroad or correcting historic injustices (for one, China announced its 1979 attack against Vietnam to be a "defensive counterstrike").

Conceptual support of China's military policy. As the probability of a world war has decreased, China has developed a "local war" concept. Notably, China does not exclude that it can initiate a local armed conflict itself. A local war involves fewer troops, due to which the enemy can be caught off guard.

At the same time, China has not dismissed the "people's war" concept put forward by Mao Zedong. It views every citizen as a soldier and the country a single military camp. At the time of Chairman Mao this concept envisaged luring a technologically superior enemy deep into the interior and starting a large-scale guerilla war relying on China's enormous human resources.

(Menges K. China: the Growing Threat (Translated from English by Bulychev A.G.). M: "Nezavisimaya Gazeya", 2006).

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 $<sup>^{13}</sup>$  См: Менгес К. Китай: нарастающая угроза ( Пер. с англ. Булычева А. Г.) / М., «Независимая газета», 2006.

As the analysis of Chinese military experts' works shows, this concept has been updated and now provides for harassing the enemy as much as possible in border fights and rapidly launching strategic counteroffensive or even initiating a limited military attack defined as a self-defensive strike. Thus, it has much in common with the active defense concept involving strategic defense at a preestablished line of defense in order to change the balance of forces in one's favor and subsequently shift to counter-offensive.

Of these, special attention should be paid at the concept of strategic borders and living space, which apparently has no equivalents among military concepts of other countries 14. There is no other state that would so openly declare its right to military aggression due to the lack of resources and territory. The underpinning idea of this concept is that due to the growing population and the limited resources China is facing natural need to expand its living space in order to support further economic activities and broadening its "sphere of survival". It is assumed that territorial and space frontiers only delimit the area where the state can commit military force to "effectively protect its interests". "Strategic frontiers of the living space" should be extended as China's "comprehensive power" increases. This concept envisages moving hostilities from border areas closer to "strategic frontiers" or even beyond them, as the armed conflicts can be brought about by difficulties in "ensuring legitimate rights and interests of China in Asia-Pacific". China believes that the frontiers of the great powers' living space lie far beyond their national borders, while the spheres of influence of smaller nations are less than their national territories.

In general it can be concluded that China's Armed Forces are rapidly transforming into a major important factor impacting global strategic environment. It is indicative that five-fold increase of China's military expenditure in ten years and tremendous increase in combat material strength (i.e. procurement of weapons

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<sup>&</sup>lt;sup>14</sup> Агафонов Г. Д. Азиатско-Тихоокеанский регион и морской потенциал России // Проблемы Дальнего Востока. 2001, № 6. СС. 31-44 (Agafonov G.D. The Asian Pacific Region and Russia's Naval Potential // Problemy Dalnego Vostoka, 2001,# 6., PP. 31-44).

and equipment) take place under deliberate self-limitation on the development of PLA imposed by China's leadership. Beijing has learnt the lessons from the sad experience of the USSR which proved unable to bear the burden of the arms race, and came to the conclusion that first a high level of economic development should be achieved, and then the armed forces should be built on this base. It appears that this approach can be considered extremely efficient.

If China removes self-imposed limitations for the development of its armed forces, PLA will be capable of a "great leap forward" which will bring it to a qualitatively new level. This done, the army may in itself become a factor of economic development ensuring successful external expansion and extending strategic frontiers of the nation's living space far beyond the current borders of the People's Republic of China.

# 5. THE PROSPECTS OF ENGAGING CHINA IN NUCLEAR ARMS LIMITATION

By Alexei Arbatov

**General strategic context.** The US-Chinese relations will determine general economic relations and political security in the APR in the foreseeable future, while cooperation or confrontation of the tree powers, China, the US, and Russia, will play a key role in the strategic context.

Military and strategic relations within this 'big triangle' represent a tangle of common interests and differences among the parties in the field of offensive and defensive strategic (as well as non-strategic) arms. Notably, contrary to popular impression, Chinese-Russian relations are no closer than those between Russia and the US or the US and China on key strategic issues.

In the foreseeable future the US and Russia are likely to have common position contrary to China's stance on the following points:

- refusal to unequivocally undertake nuclear no-first-use commitment;
- refusal to announce that they will neither threaten nor use their nuclear weapons against any non-nuclear-weapon state or a country of a zone free from nuclear weapons;
- intention (at least declared) to cooperate in the development of missile defense (to which China has not been invited);
- desire to ensure greater transparency of nuclear and missile forces and programmes of China;
- striving to engage China as early as possible in the disarmament process;
- reluctance to conclude at an earliest possible date a treaty (convention) on full nuclear disarmament providing for specific timeframe and outlawing nuclear weapons;

- reluctance to withdraw nuclear security assurances (extending deterrence) to their allies.
- the US and China, in their turn, are united versus Russia by their striving to:
- work towards a further START envisaging considerably lower levels of nuclear arms;
- reduce and limit (non-strategic) tactical nuclear weapons (TNWs) of the US and Russia (but not, as yet, China);
- limit the nuclear weapons in storages of the US and Russia. Finally, Russia and China agree, in defiance of the US, on the necessity of:
  - limitation of global and regional missile defense;
  - limitation of long-range high-precision conventional arms;
- limitation of space-based and suborbital boost-gliding strike systems;
- unacceptability of NATO's proposal to relocate Russia's TNWs from its western part to the east.

Neither the US, nor China view Russia as a full-fledged military ally, equal to the US NATO allies or Russia's allies in the CSTO.

At the same time, both the US and China strive to prevent Russia from establishing either a political or military alliance with China and the US, respectively. Both view this as one of the priorities of their foreign policies, although they never officially admit it.

**Strategic position of China.** Although China's position and policy in the nuclear strategic sphere appears straightforward and simple, it is in fact, rather complicated and controversial.

On the one hand, China is the only of the great powers that has officially committed to no-first-use of nuclear weapons and, what is more, has made no reservations for that.

China's White Paper titled "China's National Defense in 2010" officially declares this pledge and calls on all nuclear-weapon states to "abandon any nuclear deterrence policy based on

<sup>&</sup>lt;sup>15</sup> China's National Defense in 2010: II. National Defense Policy // China.Org.Cn (http://www.china.org.cn/government/whitepaper/2011-03/31/content\_22263420.htm).

first use of nuclear weapons, make an unequivocal commitment that under no circumstances will they use or threaten to use nuclear weapons against non-nuclear-weapon states or nuclear-weapon-free zones... nuclear-weapon states should negotiate and conclude a treaty on no-first-use of nuclear weapons against each other"<sup>16</sup>.

The key difference between China's official approach to strategic stability and the US-Russia strategic relations lies in the fact that it is not based on approximate nuclear missile parity and the concept of assured mutual destruction (as a result of retaliatory strike). As for the level of the necessary nuclear forces, the paper says that China will maintain "the minimum level required for national security" Hence, rhetorically China's nuclear doctrine is close to what in the Western strategic theory is called "finite deterrence".

At the same time, China is the only one of the five great powers permanent members of the UN Security Council and nuclear-weapon states recognized by the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), that provides no official factual information on its nuclear forces and programmes of their development.

In the past, when China's GDP, military expenditure and nuclear forces were modest, this was tacitly considered acceptable by other states. In the recent ten years, as China's economy has grown, its military budgets came to be the second after those of the US, the country commenced major programmes to modernize its nuclear and conventional forces, held impressive military parades at the Tiananmen Square and pursued increasingly ambitious foreign and military policy, this attitude has started to change.

No declarations on 'exclusively defensive nuclear doctrine', no-first-use and maintaining "the minimum required level" of nuclear forces will be trusted any longer. What is more, without official information, even of a most general nature, on China's nuclear forces and the programmes of their development such declarations will be perceived as just the opposite: an attempt to conceal the truth and to lull other states' vigilance.

17 Ibid.

<sup>16</sup> Ibid.

Today China seems to revive its millenarian traditions in many dimensions. Those can turn out to be more influential than the orthodox official stance of the current CPC leadership. In this context, it would be appropriate to remind of the ideas of the greatest Chinese military theoretician (and the first strategist in the world history) Sun Tzu, that were put forward in his manuscript, titled "The Art of War". Twenty five hundred years ago, when people living in the territory of what is now Russia and all NATO countries wore animal skins and fought with clubs, he wrote: "All warfare is based on deception. Hence, when we are able to attack, we must seem unable; when using our forces, we must appear inactive; when we are near, we must make the enemy believe we are far away.../Even though you are competent, appear to be incompetent. Though effective, appear to be ineffective".

Without going into unnecessary military and technical detail, according to some most competent Russian experts, China has up to 800-900 nuclear warheads available for operational deployment (440 air bombs to be carried by aircraft of different types, 360 warheads for ICBMs, MRBMs, and operational-tactical missiles, and 45 warheads for SLBMs<sup>19</sup>). All of them can be deployed so as to reach Russia (and more than 80 weapons are within reach of the US). China may have a total of 40 tonnes weapon-grade uranium and 10 tonnes of plutonium. This would be enough to produce 3,600 nuclear warheads<sup>20</sup>, although a large part of the weapon-grade nuclear materials and nuclear warheads may be kept at storage sites in reserve. Thus, China is most probably the third biggest nuclear power after the US and Russia, having. Huge superiority over Britain and France. Moreover, due to its economic and technical potential China is the only state, beside the US and

<sup>&</sup>lt;sup>18</sup> See: Sun Tzu translated and annotated by Lionel Giles (2005). The Art of War by Sun Tzu – Special Edition. El Paso Norte Press /Sawyer, R.D. The Art of War. Westview Press. 1994

 $<sup>^{19}</sup>$  See В.И.Есин. Третий после США и России // Военнопромышленный курьер, № 17. 3-8 мая 2012. С.5

<sup>(</sup>Victor I. Yesin. Third Next to the US and Russia // Voyenno-Promyshlenny Kurier , No. 17, May 3-8, 2012, P. 5).  $^{\rm 20}$  Ibid.

Russia, which can build up its nuclear and missile capability at a crash rate.

China also makes efforts to enhance the survivability and efficiency of its land-based and space-based ballistic missile early warning systems and command-and-control assets and has engaged in R&D and testing in the field of BMD and ASAT warfare.

Besides, there are periodic unofficial news about enormous tunnels constructed in China, the total length of which is estimated at about 5,000 km<sup>21</sup>. It is noteworthy that the tunnels are constructed by the Second Artillery Corps that controls land-based strategic forces (a counterpart of Russian Strategic Missile Forces). Beijing provides no explanation of this project, but it is quite probable that the tunnels are intended for covert storage of reserve mobile launchers, as well as strategic and tactical missiles and nuclear warheads. According to various estimates, those can hold many hundreds of nuclear warheads and hundreds of reserve ground-mobile ICBMs, MRBMs and tactical missiles<sup>22</sup>.

Taking this in consideration it may be reasonably assumed that China's total secrecy with regard to its nuclear forces is meant to obscure the huge surplus of China's nuclear capability rather than its 'small size' and 'weakness'.

China makes its own way in the nuclear politics rather than follows the example of the US and the USSR who deployed each new type and modification of nuclear weapons in large quantities widely advertising it for the purposes of political propaganda. (Suffice it to remind Nikita Khrushchev's bluffing that the USSR produced missiles "like sausages", or the US leadership's declarations that the US had "undoubted nuclear superiority", that continued up to the late 1970s.)

Unlike them, China consistently tests new types and modifications of weapon systems deploying them in moderate quantities or not deploying them at all. It appears that thus China tries to finally come up with an optimum nuclear weapons systems at minimum cost. Probably, Dongfeng-31A and Dongfeng-41

<sup>&</sup>lt;sup>21</sup> Stephens B. Plumbing the Secret Underground Great Wall // The Wall Street Journal. October 24, 2011.

<sup>&</sup>lt;sup>2</sup> Ibid

ICBMs, Dongfeng-25 MRBMs and Julang-2 SLBMs could become such optimum systems for serial deployment. It is also possible that while officially belittling its nuclear capability, China will openly deploy the first three systems in limited quantities, while secretly building up its nuclear missile forces in the tunnels of the Second Artillery on a much larger scale.

There are also some uncertainties as regards China's commitment on the no-first-use of nuclear weapons. Unlike the public and detailed nuclear doctrines of the US, Russia, the UK and France, almost nothing is known of China's actual strategic concepts. It is common to think that a nuclear-weapon state that has committed to no-first-use of nuclear weapons relies on the retaliation (second strike) concept and assets. However, according to generally accepted assessments, so far both China's strategic nuclear forces (SNF) as known to the West, and ballistic missile early warning systems are too vulnerable to enable a retaliation after a hypothetical disarming (counterforce) nuclear strike by the US or Russia. Besides, China's SNF are incapable of a launch on warning of a missile attack from the missile early warning systems.

For these reasons China's official doctrine is rather regarded by many Western experts as an instrument of political propaganda (similar to the USSR's 1982 nuclear no-first-use commitment) that does not reflect real operational planning of SNF. The latter might possibly envisage mounting a preemptive strike in a situation when the country's leadership decides that war is imminent.

However, one cannot exclude that a retaliatory strike also a working concept of China's operational planning, if China's underground tunnels hold a major reserve of nuclear and missile assets not known to the enemy and highly survivable, despite the fact that they cannot be used immediately. To enhance the effect of deterrence in a crisis a part of this reserve may be demonstrated to the world in order to disrupt the enemy's plan.

In fact, this version would be in keeping with the traditions of China's strategic school. As Sun Tzu wrote in his immortal work, "... the highest form of generalship is to balk the enemy's plans; the next best is to prevent the junction of the enemy's forces (with those of allies); the next in order is to attack the enemy's army in the field;

and the worst policy of all is to besiege walled cities"23. Traditionally, the US and Soviet nuclear strategy prioritized technical and mathematical modeling of the exchange of nuclear strikes and focused on the fourth and the third tasks (besieging being an equivalent of counter-city strikes) as their criteria for deterrence capability. Chinese strategic school appears to have a distinct nature of its own, attaching much more importance to international policy functions of the military strategy and sets different priorities for its deterrent posture.

This appears especially significant against the background of the comprehensive modernization of China's general-purpose forces. Building up its nuclear forces China will strategically provide a robust "umbrella" over its superiority in general-purpose forces over all its neighbors. This prospect causes serious concerns on the part of India. It may also undermine the credibility of the US security assurances to Japan, South Korea and Taiwan and induce them to engage in appeasing China. As another option they could join their efforts, and/or strive for military (including nuclear) independence. (Information on the increase of such attitudes in Japan has recently caused a sensation<sup>24</sup>.)

This also causes fears on the part of South-East Asian countries, which are competing with China over the oil-rich shelf of the South China Sea.

For Russia, for all its plans to establish 'strategic partnership' with China, these trends are fraught with alarming consequences. The buildup of China's capability for a massive nuclear strike against its European part may imply shearing off its advantage in medium-range bombers and SLCMs and various tactical nuclear weapons that so far has made up for China's superiority in conventional armed forces in the vicinity of Russia's Siberian and the Far Eastern territories.

China and missile defense. The fact that China may build up its nuclear forces serves as a considerable, although unstated inducement for the US and their allies to develop their missile defense in the Far East. Although the US announces the interception

<sup>23</sup> See: Sun Tzu. Op.cit.<sup>24</sup> ASIA NEWS, October 2011.

of DPRK's missiles as an explicit pretext for this, in reality Washington apparently intends to use missile defense to make as difficult and distant as possible the prospect of China's acquiring nuclear deterrent relying on assured nuclear retaliation capability against the US, not to mention Beijing's attaining strategic parity.

For obvious reasons this causes even more serious concerns on the part of China, than NATO missile defense does on the part of Russia. So China responds by developing missile defense penetration means, antisatellite warfare and its own missile defense system.

During past several years China has been gravely concerned over Russian-US/NATO negotiations on cooperation on European ballistic missile defense, which China perceived as military rapprochement of the two powers against itself. Russia's proposal on the establishment of a common "sectoral" missile defense in which each party would intercept missiles aimed against another party and flying over its territory, must have provoked serious suspicions in Beijing. For example, would such type of joint BMD imply Russia' obligation to intercept Chinese missiles flying over its territory in the direction of the US or Western Europe? Would such a joint system thus undercut China's deterrence both against the US and Russia?

Strategic missile defense is global by definition, especially as regards information and command-control systems. Missile defense cooperation of the powers could hardly be confined to a certain region, e.g. Euro-Atlantic. What is more, while the US could at least in theory envisage US-Russian cooperation in missile defense, its cooperation with China would be completely out of the question. As for Russia, developing either joint or shared missile defense with the US could considerably complicate Russian-Chinese relations and bring about a crash build-up of the Chinese nuclear forces which would have a direct negative impact on Russia's security.

For this particular reason one could feel China's invisible presence at Moscow-Washington talks on missile defense. Although that issue was not given formal consideration neither in Brussels, nor at the summits, apparently it became one of unstated causes for which the talks failed.

The failure of the negotiations relieved China's concerns for the time being, but their possible renewal probably continues to be a major factor influencing China's strategic planning.

**Strategic conventional arms.** The United States strive to reduce the reliance of their security assurances to their allies on nuclear arms. With this view they develop both defensive and offensive conventional weapons.

China is deeply concerned over this fact, especially the development of the US long-range high-precision non-nuclear arms, such as submarine- and air-launched cruise missiles matched with space surveillance, navigation and communications systems.

It has expressed an even more serious preoccupation over possible development of suborbital hypersonic boost-glide systems carrying high-precision conventional weapons under the PGS concept (testing of X-37B spacecraft in April 2010<sup>25</sup> and the launches of Minotaur Lite IV). It is noteworthy that China, like Russia views these systems as aimed exclusively against itself. At the same time, the only scenario generally and seriously discussed in China involves an armed clash with the US over Beijing's attempt to resolve the Taiwan issue by force<sup>26</sup>. China may believe that the mentioned US systems would be able to mount massive multiple disarming strikes against China's high-precision conventional missiles intended for a strike against Taiwan and US fleet.

Beijing is equally concerned over the possibility of counterforce non-nuclear strikes against its nuclear forces. Such possibility undermines China's official nuclear doctrine based on the unequivocal commitment on the no-first-use of nuclear weapons, which does not provide a reservation for a nuclear retaliation in case of a counterforce attack with high-precision conventional weapons. Anyway the US can count on such indecisiveness on the part of China, having a superiority over it both in nuclear and non-nuclear strategic arms.

It is possible that China considers maintaining major underground stocks of missiles in this particular context, if such

<sup>26</sup> Ibid., PP. 22 and 35.

<sup>&</sup>lt;sup>25</sup> Saalman L. China and the US Nuclear Posture Review. "Carnegie –

Tsinghua", 2011, P. 33.

suspicion has grounds. Another possible option for countermeasures involves accelerated development of MRBMs and tactical missiles carrying high-precision conventional warheads to destroy aircraft carrier forces and other valuable targets in response to aggression using non-nuclear strategic weapons.

Besides, in order to improve the survivability of its nuclear forces, China has engaged in the SSBNs and SLBMs development programme (with 3 to 4 submarines under construction). China is gravely concerned over the US ability to repel its SLBM strikes — mounted from the current patrol areas of Chinese SSBNs in the adjacent seas — with the help of missile defense (GBI) in Alaska and California, as well as missile defense on US ships and Japanese land bases and ships (Aegis/SM-3 system).

Building new SSBNs and sending them to the Open Pacific Ocean will enable China to outflank the US missile defense from the south, which may oblige the US to engage in an expensive restructuring of its missile defense to build protection from the south azimuths.

To ensure protection for its new strategic and multi-purpose nuclear submarines China has started an ambitious Naval Forces development programme. Yellow Sea Navy is to become a Blue Water Navy in both the Pacific and the Indian Ocean in order to establish and expand the zone of China's maritime dominance, as well as to control the hydrocarbon transportation routes. This is also a cause of deep concern for both India and Japan.

China and nuclear arms limitation. As mentioned above, beside the US and Russia, China is the only country possessing an economic and technical capability large enough to enable a rapid buildup of its strategic nuclear forces in the next 10 to 15 years. That makes it imperative that China's nuclear forces and the programmes of their development are taken into account when contemplating any subsequent Russian-US START follow-on agreements on strategic arms reductions. In this context the main difference between China and the UK and France is that they are allied to the US in NATO, their forces are being reduced, they are open and predictable, and they have no capability for a rapid buildup of their nuclear assets.

That is why transparency is so important. It would help clarify the actual size, specifications and capability for growth of Chinese nuclear forces. If they comprise 240-300 warheads, it would hardly be possible to strive to a legally binding agreement on their limitation in the near future. China's commitment not to engage in extensive buildup of such forces while Russia and the US further reduce their SNF, would be sufficient.

In case China possesses 800-900 nuclear warheads plus the assets concealed in tunnels, no further reductions of the two other powers' nuclear forces are possible, unless these holdings are limited (even if the two manage to remove other obstacles: agree on missile defense, TNWs and conventional strategic systems).

Beijing's official position states that "countries possessing the largest nuclear arsenals... should further drastically reduce their nuclear arsenals in a verifiable, irreversible and legally-binding manner, so as to create the necessary conditions for the complete elimination of nuclear weapons. When conditions are appropriate, other nuclear-weapon states should also join in multilateral negotiations on nuclear disarmament" <sup>27</sup>.

As for the disclosure of information, Beijing has officially demanded the US (which also tacitly implies Russia) to renounce the first use of nuclear weapons as a condition for greater transparency with regard to Chinese nuclear forces.

This appears to be convincing at first sight, yet turns out to be a complete nonsense, as Beijing's official data on the number of its nuclear weapons cannot facilitate the targeting of US and Russia's disarming strike. While planning such operations they must rely on their own intelligence, the more so that the official data should not necessarily include the exact location of all China's strategic facilities. At the same time, the transparency as to China's forces and programmes would be extremely helpful for Moscow and Washington's planning of treaties on strategic offensive arms reductions.

In practice, China appears to view the transparency as a most important bargaining chip. Therefore, China will hardly be

 $<sup>^{27}</sup>$  China's National Defense in 2010: X. Arms Control and Disarmament  $\ldots$ 

persuaded to enhance the transparency of its nuclear forces as an act of good will, a first step, or a minimum contribution to multilateralizing nuclear disarmament. It is, at best, Beijing's fixed intention to drive a hard bargain and to sell at as high price as possible every single part of its transparency.

Prerequisites for China's engagement in arms limitation. It appears, however, that China might be involved in the nuclear arms limitation process on a step-by-step basis. This has nothing to do with wishful thinking about expanding the range of participants in the process. China will not be 'taught' the US-Russian best practices, rather it will go its own way. China's involvement can only be achieved on pragmatic basis, if China deems that concessions on the part of the US (which implies on the part of Russia, too) in matters of interest for Beijing make up for its own concessions on transparency or certain arms limitation.

First and foremost, Beijing views the new START as an interim hastily agreed instrument to replace the START I that expired in December 2009, and as whittling away, to a certain extent, strategic nuclear forces reduction (minimum real reductions, peculiar counting rules, reductions through relocating warheads to storage sites, etc.). Before seriously considering, at least in theory, any limitation of its nuclear weapons, China is expecting at least a follow-on US-Russian START treaty envisaging real reduction of the two parties' strategic nuclear forces (e.g. down to the level of 1,000 warheads).

It is generally known that today the prospects of such treaty seem doubtful due to the parties' differences as to missile defense and non-strategic nuclear weapons, as well as for political reasons.

Furthermore, China insists on the US's (which implicitly concerns Russia, too) renouncing the first use of nuclear weapons and acknowledging the relations of mutual nuclear deterrence with China based on mutual vulnerability. For the US, such steps are fraught with complications in their relations with their allies depending on Washington's security assurances, including nuclear ones. Russia, in its turn, perceives nuclear no-first-use concept as a threat to its security in the West and in the East, in particular taking in consideration China's geostrategic position and its increasing superiority in general-purpose forces.

Therefore, involving China in nuclear disarmament is to a certain extent a matter of serious and painful changes in the US and Russia's military policy, rather than mere alteration in China's position.

What is more, if Washington and Moscow are earnest in striving to transparency or limitation of China's nuclear forces, mere calls and references to Article VI of the NPT will continue to be in vain. The two leading powers should thoroughly calculate what they can sacrifice in terms of reducing and limiting their own arms in exchange for the relevant concessions by China. Beijing will not move to anything new and will pursue its 'vicious circle' position, calling for the US and Russia to reduce their nuclear forces down to the levels comparable to those of China (without specifying what exactly these levels should be).

Apparently, the following could serve as real prerequisites for its consent to gradual 'opening' of its strategic arms and their limitation (at least through commitment not to increase their numbers):

- US obligation not to build up sea and land-based missile defense assets in the Pacific (which also concerns Japan);
- obligation by the US and Russia should they reach an agreement on cooperative BMD development not to deploy defenses undercutting China's deterrence potential and to give China access to certain projects (e.g. exchange of data from earlywarning systems) in the format it finds acceptable;
- US and Russia's negotiating a follow-on START treaty envisaging elimination of strategic delivery vehicles and limitation of high-precision conventional weapons;
- the progress in limiting tactical nuclear weapons of both the US and Russia (excluding their relocation from Europe to Asia, to which NATO calls).

Implementing the first, second and fourth points the two leading powers would indirectly acknowledge mutual vulnerability and mutual nuclear deterrence with China. Both the US assurances to their allies and the security of Russia's eastern borders will have to be ensured by general-purpose forces and systems, as well as political and economic means.

The relevant negotiations could be held as bilateral dialogue between the US and China in parallel to the US-Russian negotiations on strategic arms reductions and regular Russian-Chinese strategic consultations.

Trilateral or four-party talks would be extremely difficult. Nevertheless, they are possible, e.g. as the parties discuss missile defense cooperation (exchange of data from early warning systems). In a longer term, the parties could conclude trilateral arrangements on strategic offensive arms limitation, for example, through equal limits (for instance, of 200-300 launchers) for the aggregate number of ICMBs, MRBMs and shorter range missiles of Russia, the US and China (in a sense combining elements of START and INF Treaties). This would imply that while the US and Russia have already eliminated their medium-range missiles, China could decommission its MRBMs, replacing them with ICBMs. This would hardly be a welcome prospect for Russia, not to mention the US, but it should be remembered that without such arrangements China could do the same or even build up its ICBMs in addition to MRBMs anyway.

To conclude, China would make an unexpected and impressive step, if it suggested, in response to the calls to engage in nuclear disarmament, that it is ready to join the new US-Russian START Treaty of 2010. Possible reaction of Moscow and Washington to such a gambit would make a subject of a separate analytical exercise, although of a purely abstract nature, as apparently there is presently no new Sun Tzu in China.

#### **CONCLUSIONS**

- 1. China adheres to its own principles based on independence and self-sufficiency in its foreign and defense policy. In the recent years, the development logic itself has prompted Beijing to play a more active role in the world economy and politics. Firstly, as the result of successful economic and financial development China has become an increasingly important actor in international politics. Secondly, the model of China's economic development that is based on rapid growth of consumption and import of energy resources, as well as active expansion of export of industrial and agricultural products, inevitably gets China increasingly involved in political problems and calamities of the regions providing raw materials and transit routes pivotal for Chinese economy. Activism of foreign policy is becoming instrumental for sustaining high economic growth rate as the necessary condition for maintaining social stability and, hence, preserving the existing political system. In other words, it allows CPC elite, military establishment and major business groups to retain their power and high living standards.
- 2. In 2003, in an effort to provide a theoretical basis to the country's increasing role in the world arena as well as to dissipate the international community's fears of a potential threat from a more powerful China, its leading ideologists came out with the theory of the "peaceful rise". Later on, this declared aim was transformed to the concept of building a "harmonious world". This basically meant that China will continue to pursue non-aligned and independent foreign policy while demonstrating an intention to play a constructive role in the world and pursue its interests by exclusively peaceful means.

There are good reasons to believe that China's leadership views the consequences of ups and downs in the world economy as the main threat to the country's economic development and, hence, national security. Besides, China is highly dependent on economic cooperation with the US and other Western countries which consume most of exported Chinese goods, and supply major investments and technologies.

3. At the same time, Chinese public extensively supports the idea that in the 21st century China must become the most powerful world's nation. It is expected that to do this, China will have to enter the struggle for leadership with the US at the regional and global levels and that the US will try by all means to cast China aside to the periphery of global development.

As part of this concept some Chinese policy-makers, military officials and experts have openly stated that China and the US will not be able to avoid a clash of interests and rivalry (or even a direct armed conflict) at some point in the future. Due to this, they claim, China must secure a position of advantage in the world and strengthen its armed forces.

Although officially Beijing continues to declare that its foreign policy is exclusively peaceful, there are signs that a different, confrontation-prone political and military course is coming to the forefront. This duality may be explained either by the fact that China tries to disguise its activism by officially declared peaceful intentions, or by the fact that within Chinese government there are controversies and serious battles are being waged on how China should proceed with its foreign and military policy in the international arena. The duality of rivalry and interdependence in China's relations with the West may in fact manifest itself in the existence of alternative opinions on foreign and military policy within China's leadership.

Besides, one cannot ignore special features of China's political system, ideological and personnel emphasis of CPC's way of controlling military policy, weak civil society, complete secrecy with regard to the defense, rudimentary independent strategic expertise and timid critical analysis. In an environment like this practical military strategy and defense policy are largely restricted to and determined by the ambitions of the military establishment matched by huge increase in military expenditures and active introduction of foreign and domestic technical innovations. This is exactly what happened in the USSR of the 1970-1980s, when the peaceful decretory course of the CPSU went hand in hand with crash build-up of the country's military power.

4. A sufficiently cautious China's nuclear missile capability modernization and build-up program, at least as known to the

outside world, appears to be first and foremost status-oriented. However, this by no means excludes that this program can be aimed at enhancing China's nuclear deterrent against the US, India and Russia. China's traditions and specific strategic mentality may lead the country to use techniques quite unexpected by the Western countries and Russia and much different from their experience.

In the context of China's relations with Taiwan nuclear deterrence may also aim at preventing other countries from interfering in this issue, whatever way the situation develops.

China has gradually but consistently increased the number and improved the characteristics of its strategic, medium-range, and tactical missiles (arming the latter two with both nuclear and precision-guided conventional warheads). China may have a major nuclear missile capability concealed in huge tunnels constructed by the Second Artillery (a counterpart of Russian Strategic Missile Forces) - a solution that had no precedent during the US-Soviet nuclear arms race of the second half of the 20th century. On top of that, China is experimenting with its own missile defense system and anti-satellite weapons.

At the same time China steadily builds up and upgrades its general-purpose forces, enhancing their offensive capabilities and strategic and tactical mobility. It is evident that China strives (although it has never officially said so) to establish military dominance over all the territories and waters adjacent to its borders. The recent years have seen China's army conduct its first cautious expeditions beyond the immediately neighboring areas in search of possible military bases in more distant regions (in particular, the Indian Ocean).

- 5. China is the only one of the P-5 nuclear-weapon states that provides no official factual information on the strength and composition of its nuclear force. For the sake of propaganda, China maintains that its nuclear arsenal is small and cannot be compared to those of the US and Russia. As China's nuclear program is absolutely opaque, the foreign experts' estimates of the number of its nuclear warheads vary from 240-300 to 3,600.
- 6. As the analysis of China's weapon-grade fissile material production capabilities has shown, by the end of 2011 China could have produced up to 40 tons of weapon-grade uranium and about 10

tons of weapon-grade plutonium. If China has followed the practice of other P-5 states, beside stockpiled materials its nuclear arsenal may consist of 1,600-1,800 nuclear warheads. Of those, about 800-900 pieces might be available for operational deployment. Even without taking into account the contents of mysterious tunnels China may well be the third greatest nuclear power after the US and Russia, and possess nuclear force greater than the rest six nuclear weapon states combined.

Contrary to official reasoning and common beliefs, the complete secrecy surrounding China's nuclear force may in fact be intended to conceal great excess of the its nuclear capability, rather than be explained by its small size and vulnerability. Despite the fact that China has publicly renounced achieving nuclear parity with the US and Russia, in reality its nuclear assets may be quite comparable to those of these two countries, and even to exceed them in certain parameters (e.g., in medium- and short-range missiles).

What is more, save for the US and Russia, China is the only country possessing an economic and technical capability large enough to enable a crash buildup of its strategic nuclear force within a short period of time. Of the remaining six nuclear-weapon states, no other can be compared to China in this respect. Moreover, China is not allied with any other nuclear weapon state and its nuclear strategy and forces are out of any foreign control or even understanding. And its nuclear potential is consistently growing in global and regional dimensions.

- 7. All this means that Chinese factor should necessarily be taken into account while conceiving new initiatives on the limitation or reduction of nuclear arms of the US and Russia in the aftermath of the new START of 2010. In this sense China's role is also unique among other nuclear states.
- 8. So far, China has been claiming that it may engage in nuclear disarmament only after the US and Russia considerably reduce their nuclear arms (allegedly to the level comparable with that of China), assume the commitment on the no first use of nuclear weapons, and remove other "destabilizing factors" (e.g. withdraw the US SSBNs deployed in the Pacific, discontinue the

expansion of the missile defense in the Far East, forego the development of space weapons, and stop the support of Taiwan).

Apparently China's present position on the matter has political and propaganda, rather than practical nature. It enables the country to gain time to strengthen its strategic positions while expecting more attractive proposals on the part of the great powers.

At the same time, it appears naive of the US and Russia to call on China to engage in nuclear disarmament, ensure the openness of its nuclear force, or at least to undertake not to build up its nuclear capability merely in keeping with its obligations under Article VI of the NPT, or as an act of good will for the sake of contributing to the noble cause of nuclear disarmament.

9. In contrast to this it appears that China might be involved in the nuclear arms limitation process only on a pragmatic basis, rather than through wishful thinking.

This means that China could engage in the process, if China deemed that concessions on the part of the US (and by implication by Russia, too) in military and political matters of interest for Beijing make up for its own concessions on transparency or certain arms limitations. In other words, China could change its current position if it decided that from political and military perspective it would be in a worse position remaining outside the disarmament process than in case it joints it in an acceptable format.

Similarly, the proposals to "engage China in nuclear arms control", "involve China in the US-Russian talks", or "make use of the US-Russian experience" are unrealistic. China will at best engage in the talks with the US (and possibly with Russia and India on some issues), rather than join the "big two". Beijing will on its own choose the format of the dialogue and rely on its own strategic goals and the conceptual framework matching its interests, rather than emulating foreign experience.

10. In particular, China will hardly take part in the strategic stability dialogue offered by the US to enhance the transparency of China's nuclear forces either as an act of a good will, or a first step to actual arms limitations. Beijing will use the transparency issue as its initial "bargaining chip" to obtain maximum strategic concessions on the part of the US.

11. Hence, involving China in nuclear arms control is largely a matter of the revision of the US and Russia's military policy and their assessment of how much they are willing to pay for that with their own strategic concessions, rather than mere alteration in China's traditional posture on the issue.

This refers to direct or indirect acknowledgement of mutual nuclear deterrence in the strategic relations with China and its right to an assured destruction capability through its retaliatory strike. This may affect the US security assurances to their allies in Asia and imply reduced Russia's reliance on nuclear weapons despite the widening gap in conventional armed force balance with China in Siberia and the Far East.

- 12. Apparently, the following could serve as realistic conditions for China's consent to gradual 'opening' of its nuclear capability and its subsequent limitation (at least through commitment not to increase the number of weapons):
- US obligation not to continue expansion of sea- and landbased missile defense systems in the Pacific (which might also affect similar assets of Japan and Taiwan);
- obligation by the US and Russia should they reach an agreement on cooperative development of certain BMD projects to give China access to these projects (e.g. exchange of data from early-warning systems) in the format it finds acceptable;
- US and Russia's negotiating a follow-on START treaty envisaging elimination of strategic delivery vehicles and limitation of long-range high-precision conventional missiles;
- the progress in limiting non-strategic nuclear weapons of both the US and Russia (excluding their relocation from Europe to Asia, to which NATO calls).

Implementing the first, second and fourth points the two leading powers would indirectly acknowledge mutual vulnerability and mutual nuclear deterrence with China.

13. The relevant negotiations could be held as bilateral dialogue between the US and China in parallel to the US-Russian negotiations on strategic arms reductions and regular Russian-Chinese strategic consultations.

Trilateral or four-party talks would be extremely difficult, with the cooperation in missile defense (exchange of data from early warning systems) being the only conceivable exception.

In a longer term, however, the parties could conclude trilateral arrangements on strategic offensive arms limitation, for example, introducing equal limits for the aggregate number of ICMBs, MRBMs and SRBMs of Russia, the US and China.

In a sense, such approach would help combine START and INF/SRF agreements between the US and Russia and trilateralize them. As neither US, nor Russia have shorter-range and intermediate-range missiles, under such arrangement they would have to limit only the number of their ICBMs, while China would have to limit all types of its missiles (with a range of over 500 km). Otherwise Russia and the US might deploy some shorter range missiles while reducing ICBMs accordingly. Since there is a growing pressure against the INF/SRF Treaty in Russia (which includes demands for its "universalization") this might provide a smooth and non-destructive solution.

China would have a choice of reducing shorter range missiles and deploying more ICBMs under the common ceiling, which would not be welcomed by either the US or Russia. However, without such an agreement China would be free to do it anyway or to build-up both while keeping opaque its forces and programs (including the contents of the tunnels). Besides, Chinese precision-guided conventional missiles would be a subject of limitation as well.

Clearly, this is just an illustration of what may be achievable through a realistic, constructive and innovative approaches to multilateral nuclear arms limitations either by 2020 or after it.

## ANNEX 1

# China's GDP and Military Expenditure

**Table 1.** China's GDP in 2000-2011 (trillion USD)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
1,20	1,32	1,45	1,64	1,93	2,26	2,71	3,49	4,52	4,99	5,93	7,30

Source: International Monetary Fund

(http://www.imf.org/external/pubs/ft/weo/2012/01/weodata/index.as

px).

**Table 2.** China's GDP in 2000-2011 (trillion yuan)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
9,9	11,0	12,0	13,6	16,0	18,5	21,6	26,6	31,4	34,1	40,1	47,2

Source: The National Bureau of Statistics of the People's Republic

of China

(http://www.stats.gov.cn/english/statisticaldata/yearlydata/).

**Table 3.** China's Military Expenditure in 2000-2011

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
billion yuan	184	227	262	288	331	379	452	546	638	764	820	923
billion USD	33,49	41,17	47,82	51,95	57,54	64,72	76,06	87,73	96,66	116,66	121,06	129,27
share of GDP	1,9	2,1	2,2	2,1	2,1	2,0	2,0	2,1	2,0	2,2	2,1	1,96

Source: Stockholm International Peace Research Institute (http://milexdata.sipri.org/).

**Table 4.** China's Military Expenditure (according to the official Chinese sources, 2012 – planned expenditure) in 2000-2012

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
billion yuan	121,3	141,0	166,0	185,3	206,5	247,7	280,0	350,9	417,8	480,7	532,1	601,1	670,0
billion USD	14,6	17,0	20,0	22,4	25,0	29,9	35,3	45,0	57,2	70	78	91,5	106,4

Source: compiled according to the information from Tsinghua

(http://www.xinhuanet.com/)

and from the National Bureau of Statistics of the People's Republic of China

(http://www.stats.gov.cn/english/statisticaldata/yearlydata/).

### **ANNEX 2**

#### **Abbreviations**

AIFV armored infantry fighting vehicle

ALCM air-launched cruise missile

APR Asia-Pacific Region ASM anti-ship missile

ATGM anti-tank guided missile
BMD ballistic missile defense
CMC Central Military Commission
CPC the Communist Party of China

GDP gross domestic product

GLCM ground-launched cruise missile ICBM intercontinental ballistic missile

IMEMO Institute of World Economy and International RAN Relations of the Russian Academy of Sciences

IRBM intermediate-range ballistic missile

kt kiloton

MIRV multiple independently targetable reentry vehicle

MLRS multiple-launch rocket system

MR military region

MRBM medium-range ballistic missile

Mt megaton

NATO North-Atlantic Treaty Organization

NPT Treaty on the Non-Proliferation of Nuclear Weapons

NSP Nuclear Security Project NTI Nuclear Threat Initiative PLA People's Liberation Army

PLAAF People's Liberation Army Air Force
PLAGF People's Liberation Army Ground Force

PLAN People's Liberation Army Navy
PRC People's Republic of China
R&D research and development

SAM surface-to-air missile

SIPRI Stockholm International Peace Research Institute

SLBM submarine-launched ballistic missile

SNF strategic nuclear forces

SSBN nuclear-powered ballistic missile submarine

START I Treaty between the United States of America and the

Union of Soviet Socialist Republics on the Reduction

and Limitation of Strategic Offensive (1991)

UAV unmanned aerial vehicle

### **ANNEX 3**

# List of Participants in the Conference Held by IMEMO RAN on June 28, 2012

- 1. A.P. Anshuman, First Secretary, Embassy of India.
- 2. Alexei G. Arbatov, Head of the Center for International Security of IMEMO RAN, Academician of the Russian Academy of Sciences.
- 3. Ildar A. Akhtamzyan, Associate Professor, Department of International Relations and Foreign Policy of Russia, Moscow State Institute of International Relations (University) of the Ministry of Foreign Affairs of Russia (MGIMO(U)).
- 4. Eldar Bayramov, First Secretary, Embassy of Azerbaijan.
- 5. Dmitry A. Chizhov, Researcher, Strategic Studies Section, Center for International Security, IMEMO RAN.
- 6. Sebastian Gerhardt, First Secretary, Embassy of Germany.
- 7. Pyotr V. Goncharov, Political Commentator, Golos Rossii radio station.
- 8. Vyacheslav M. Ivanov, Political Observer, Interfax-Military News Agency.
- 9. Guang Jianbing, Head of the Moscow news office, China Youth Daily (Zhongguo Qingnian Bao).
- 10. Timur T. Kadyshev, Principal Research Associate, Center for Arms Control, Energy and Environmental Studies.
- 11. Natalia I. Kalinina, Chief Researcher, Center for International Security, IMEMO RAN.
- 12. Karina Katap, Political Department, Embassy of Germany.
- 13. Alexander A. Khramchikhin, Deputy Director, Head of Analytical Department of the Institute for Political and Military Analysis.
- 14. Elina V. Kirichenko, Director, Center for North American Studies, IMEMO RAN.
- 15. Irina Ya. Kobrinskaya, Principal Research Associate, IMEMO RAN.

- 16. Roman Kowalczuk, Councellor, Embassy of Poland.
- 17. Darya V. Kochegarova, Researcher, Russian Plekhanov Economic University.
- 18. Oleg V. Kulakov, Professor, Military University of the Ministry of Defense of the Russian Federation, Colonel (reserve duty).
- 19. Mikhail B. Kustovsky, First Secretary, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs of Russia.
- 20. Victor N. Litovkin, Associate Editor, "Nezavisimoe Voennoe Obozreniye" Newspaper, Colonel (rtd.).
- 21. Alexander V. Lukin, Vice-Rector for Research and International Ties, Diplomatic Academy of the Ministry of Foreign Affairs of Russia.
- 22. Aleksei A. Makhlai, President, Independent Non-Profit Organization "Center for Socio-Political Studies".
- 23. Vasily V. Mikheev, Deputy Director of IMEMO RAN, Corresponding Member of the Russian Academy of Sciences.
- 24. Yevgeni V. Miasnikov, Director, Center for Arms Control, Energy and Environmental.
- 25. Vladimir E. Novikov, Principle Research Associate, Russian Institute for Strategic Studies.
- 26. Sergey K. Oznobishchev, Head of Sector, Center for International Security, IMEMO RAN.
- 27. Alexander N. Perendzhiev, Associate Professor, Department of Political and Social Science, Russian Plekhanov Economic University, Lieutenant Colonel (rtd.).
- 28. Alexander V. Radchuk, Adviser to the Head of the General Staff of the Armed Forces of the Russian Federation, Colonel (reserve duty).
- 29. Olga S. Rozhdestvenskaya, Programme Manager, Russian Council for International Affairs.
- 30. Natalia P. Romashkina, Senior Researcher, Center for International Security, IMEMO RAN.
- 31.
- 32. Leonid F. Ryabikhin, Deputy Chair, Committee of Scientists for Global Security.

- 33. Vladimir I. Rybachenkov, Principal Research Associate, Center for Arms Control, Energy and Environmental Studies, Moscow Institute of Physics and Technology.
- 34. Boris A. Shmelev, Head of the Center for Political Studies, Institute of Economy, Russian Academy of Sciences.
- 35. Evgeny K. Silin, President of Association for Euro-Atlantic Cooperation.
- 36. Vladimir I. Sotnikov, Senior Researcher, Center for International Security, IMEMO RAN.
- 37. Yury V. Tavrovsky, Editor-in-Chief, Diplomat magazine.
- 38. Georgy D. Toloraya, Regional Director for Asia and Africa, Head of Regional Projects Directorate, the Russky Mir Foundation.
- 39. Pyotr V. Topychkanov, Senior Researcher, Center for International Security, IMEMO RAN.
- 40. Sergey V. Tselitsky, Researcher, Strategic Studies Section, Center for International Security, IMEMO RAN.
- 41. Vitaly I. Tsymbal, Head of Military Economy Laboratory, Yegor T. Gaidar Institute of Economic Policy.
- 42. Feodor G. Voitolovsky, Head of Sector, IMEMO RAN.
- 43. Nikolay P. Voloshin, Assistant to the Director, Russian Federal Nuclear Center National Institute of Technical Physics Named after Academician Yevgeni Zababakhin.
- 44. Liao Weijing, Chief Correspondent, Economic Daily (Jingji Ribao).
- 45. Jacek Wesolowski, Deputy Defense Attache, Embassy of Poland, Lieutenant Colonel.
- 46. Marianna G. Yevtodyeva, Senior Researcher, Center for International Security, IMEMO RAN.
- 47. Sergey M. Yermakov, Senior Researcher, Defense Policy Section, Russian Institute for Strategic Studies.
- 48. Victor I. Yesin, Chief Researcher, Institute of the US and Canada Studies, Russian Academy of Sciences, Colonel General (rtd).
- 49. Andrei V. Zagorsky, Head of Section of Disarmament and Conflict Settlement, Center for International Security, IMEMO RAN.

- 50. Pavel S. Zolotarev, Major-General (rtd), Deputy Director of the Institute for US and Canada Studies of the Russian Academy of Sciences.
- 51. Olga V. Yarkova, Researcher, Academy of the Civil Protection, EMERCOM of Russia.
- 52. Chi Ye, Correspondent, China Youth Daily (Zhongguo Qingnian Bao).
- 53. Yang Zhen, Political Observer, Guangming Daily (Guangming Ribao)