

## ENGAGING CHINA IN NUCLEAR ARMS CONTROL

ALEXEI ARBATOV | OCTOBER 2014

While U.S.-China relations will shape the broader security environment in the Asia-Pacific for the foreseeable future, cooperation and competition between China, the United States, and Russia will be key to the region's nuclear outlook. Currently, these three states are engaged in a dynamic struggle for power and influence.

### STRATEGIC CONTEXT

The Ukrainian crisis has led to a deterioration of Russia's relations with the West to a level unseen for the past few decades. Cooperation and common security in Europe have given way to political confrontation and mutual economic sanctions. Once again, after the wars in Yugoslavia in the 1990s and Georgia in 2008, borders are being changed by force with bloodshed and destruction—this time in southeastern Ukraine—as a consequence.

In line with the classic rules of a polycentric world, the confrontation between Russia and the West has strengthened other global and regional powers—China most of all. Beijing's cautious and multivector policies have allowed it to assume the role to which Russia has traditionally aspired—that of a balancer between East and West. In fact, it is Russia, with its new policy of “Eurasianism,” that has become “the East.”

This new global configuration prompts the West to take steps to attract China to its side or at least to prevent Beijing from getting much closer to its opponent; to an even greater extent, that is the case with Russia as well. These dynamics will inevitably affect military-strategic relations. Change will not happen immediately; it will set in over time, with the inertia of military hardware and mentality setting the pace.

In addition to agreeing to large-scale commercial contracts (mostly on Beijing's terms), Russia has started to massively expand its defense cooperation with China. This includes collaboration on technology—discussions are ongoing over the sale of Russia's brand new S-400 surface-to-air missile system, for example—as well as military-operational cooperation, such as large, joint naval exercises.

The United States has not yet proposed significant economic or political concessions to China because they might distress

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U.S. allies in the Western Pacific. Nonetheless, such initiatives may be expected in the foreseeable future in the context of more substantive U.S.-China dialogue about strategic stability. These interactions could potentially evolve into full-scale talks on the limitation of strategic offensive and defensive arms. While this prospect causes concern among U.S. allies—Japan, in particular—their concerns could be addressed through enhancing military cooperation with the United States.

Serious strategic talks with China would also fit into the new U.S. policy of containing and isolating Russia, while promoting the noble cause of nuclear disarmament. In particular, they might allow Washington to deprive Russia of its unique global status—as the United States' exclusive and equal partner in negotiations over an issue central to global military-political relations, which significantly affects many aspects of international security, including nonproliferation. Such a change would also be consistent with the U.S. vision of the global configuration of power in the twenty-first century: a world dominated by two superpowers—the United States and China—in which the locus of economic and political life shifts to the Asia-Pacific, where Russia is doomed to play a marginal role.

Russia does not want U.S.-China relations to evolve this way. Even in the early 1970s, Moscow was confused by Washington's unexpected opening to Beijing. Still, the prospect of limiting the buildup of China's nuclear forces would, objectively, be beneficial to Russia's strategic security, given it is politically unable to pressure China on this issue at present and will lack the ability for the foreseeable future.

In the long run, if the U.S.-Russia political crisis is resolved by diplomacy and an arms control dialogue resumes, engaging China in strategic arms control would be in line with Moscow's official policy of changing the bilateral nuclear disarmament process into a multilateral one. The opening of substantive U.S.-China strategic dialogue may therefore

facilitate the reactivation of the overall nuclear arms control process.

Beijing's course is less predictable. From the perspective of competing with the United States and its allies, Beijing would want to maintain close ties with Moscow to make use of Russia's natural resources (Russia is referred to as a "resource rear" in China), geopolitical space, and remaining role as a supplier (for the time being) of some advanced military and nuclear energy technologies. That said, China will not take on formal obligations to defend Russia's interests or get involved in its current confrontation with the West. Moreover, China must be quite tempted to take the former place of Russia (and before it, the Soviet Union) as the United States' main recognized partner on managing global security, including negotiations on nuclear weapons. This would be perfectly in line with China's national concept of becoming a leading global power by 2049 (the hundredth anniversary of the establishment of the People's Republic of China).

Indeed, in recent years, China's rapid development has forced Beijing to play a more active role in the global economy and politics. High rates of economic growth are crucial for maintaining social stability and sustaining China's present political system. The country's expanding economy demands that it import increasing amounts of natural resources, which it is tempted to secure with military force. At the same time, China's economic growth and its technical development serve as the basis for a military buildup. Hence it should come as no surprise that China has recently adopted a threatening military posture—particularly in the South and East China Seas—and is engaged in an across-the-board modernization of its nuclear and conventional forces.

Simultaneously, China is extremely dependent on economic cooperation with the United States and other advanced Western countries that serve as both consumers of Chinese exports and sources of investment and high technology. To alleviate

these countries' concerns about China's growing military strength, Chinese policymakers formulated their "peaceful development" strategy in 2003, which was later transformed into the concept of building a "harmonious world." In keeping with this concept, China pursues an independent and multivector foreign policy and proclaims its intention to play a constructive global role and secure its interests by peaceful means.

Renewed tensions between Russia and the West have now given China the most advantageous position in today's polycentric world. Many in China believe that their country is set to become the most powerful state in the world during the twenty-first century. In this context, China anticipates intense competition for regional and global leadership with the United States.

### CHINA'S STRATEGIC POSTURE

The missile and nuclear modernization program and buildup that China is conducting rather cautiously, at least to the extent known to the outside world, appears to be primarily a matter of enhancing the country's global stature. However, the program is also aimed at deterring the United States, India, and (tacitly) Russia.

In keeping with the traditions and distinct characteristics of its strategic culture, China may use a number of methods that seem quite unusual to Russia and the West to accomplish its goals. In particular, in parallel to gradually building up and improving the characteristics of its strategic, intermediate-range, and tactical ballistic missiles (the last two types can carry both nuclear and conventional warheads), a portion of its missile and nuclear arsenal may be stockpiled in underground tunnels. This would be a unique development in a global nuclear arms race that has now lasted for almost seventy years.

Due to the lack of official Chinese data on the country's nuclear forces, foreign estimates differ widely. The majority

of Western sources estimate the overall number at around 250 warheads,<sup>1</sup> but some quite authoritative Russian assessments put the amount at more than 1,100 warheads. Apparently the difference is mostly due to higher numbers of medium-range and tactical aircraft nuclear weapons, which the Russian estimate counted (altogether 570 gravity bombs and air-launched cruise missiles on 400 airplanes), as well as warheads on 204 land-based tactical ballistic missiles and 54 long-range, land-based cruise missiles.<sup>2</sup>

If judged by official statements, China's policies on nuclear arms and disarmament seem quite consistent and clear. But a closer look reveals them to be murky and confused.

China is the only one of the nine nuclear-armed states to officially and unconditionally pledge not to use nuclear weapons first. In a white paper entitled *China's National Defense in 2010*, Beijing urged all nuclear-weapon states to "abandon any nuclear deterrence policy based on 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>3</sup>

China's unconditional no-first-use pledge raises many questions. It is generally believed that if a nuclear-armed state refrains from planning for first use, it must instead rely on second-strike (retaliatory) plans and capabilities. However, based on publicly available information, typical descriptions of China's strategic nuclear forces, its ballistic missile early-warning system, and its command-and-control infrastructure suggest its forces are still too vulnerable and insufficiently effective to launch a retaliatory strike following a hypothetical disarming nuclear strike by the United States or Russia. China's strategic nuclear forces are even less capable of launch-on-warning retaliatory operations (in which China would launch after incoming missiles had

been detected by satellites and radar before they hit their targets).

For this reason, some foreign experts consider China's official doctrine to be largely a propaganda tool (akin to the Soviet no-first-use declaration of 1982), which does not reflect actual operational planning. Perhaps Beijing does, in fact, have operational plans for a preemptive strike in a situation when its leadership deems a nuclear or major war to be inevitable.

However, it is also possible that a retaliatory strike is a practical part of China's operational planning—if it actually stockpiles a large reserve of nuclear-armed missiles in underground tunnels. This stockpile would not be available for immediate use. However, it is conceivable that Beijing plans to partially reveal this reserve to the world in a crisis to reinforce its deterrent effect and disrupt an opponent's planning to conduct a disarming first strike. In this case, China's nuclear force would be much larger than can be estimated by collecting intelligence about what is visible on the surface of the earth.

More generally, China's approach to strategic stability differs from that of Russia and the United States. It is expressed as a series of very general, benevolent political pronouncements and does not incorporate the concepts of approximate strategic nuclear parity and mutually assured destruction. In various formulations, China often declares that "it will limit its nuclear capabilities to the minimum level required for national security."<sup>4</sup>

Yet, among the five great powers—the permanent members of the UN Security Council that are also recognized as nuclear-weapon states by the Nuclear Non-Proliferation Treaty—China is alone in not providing official data on its nuclear forces and development programs. Other powers had tolerated this state of affairs in the past, when China's GDP, military budget, and nuclear forces were all relatively modest.

Now, however, given China's impressive economic growth and its large-scale nuclear- and conventional-weapon modernization programs, these peaceful declarations are having the opposite effect. They will increasingly be interpreted as attempts to conceal the real facts on the ground and lull other states into a false sense of security.

## **CHINA AND MISSILE DEFENSE SYSTEMS**

The likely expansion of China's nuclear forces may provide an incentive for the United States and its allies in the Asia-Pacific region to develop ballistic missile defense (BMD) systems, although intercepting China's missiles is not openly acknowledged as a use of such defenses. While the threat of a North Korean missile attack serves as an immediate justification for BMD in northeast Asia, Washington would apparently like to complicate and delay China's acquisition of a robust nuclear deterrence capability as much as possible by securing an assured retaliatory capacity for itself, not to mention building up to strategic parity.

U.S. BMD plans are understandably a major concern for China—even more than the NATO missile defense system in Europe alarms Russia. China is responding by developing BMD penetration aids, antisatellite weapons (that could attack satellites critical to the U.S. BMD architecture), and a BMD system of its own.

## **NON-NUCLEAR STRATEGIC WEAPONS**

The United States is seeking to make its security guarantees to allies less dependent on nuclear weapons. It is trying to accomplish this goal through developing both defensive and offensive conventional weapons. China is greatly concerned by these efforts, especially the development of non-nuclear precision-guided munitions, such as sea- and air-launched long-range cruise missiles, coupled with space-based intelligence, navigation, and communication assets.

China is even more concerned about hypersonic weapons, including orbital weapons—notably the X-37B orbital "space

plane,” which has flown three missions—and boost-glide systems, such as those developed within the framework of the U.S. Conventional Prompt Global Strike program.<sup>5</sup> These boost-glide systems include the Hypersonic Technology Vehicle-2 and the Advanced Hypersonic Weapon, which have been tested on four occasions since 2011.<sup>6</sup> Beijing is alarmed by a possible conventional counterforce strike against its nuclear forces.

This hypothetical threat coming from the United States further undermines China’s official nuclear no-first-use doctrine because, formally, this policy should not permit nuclear retaliation in response to conventional attacks against Beijing’s nuclear forces. If Beijing responded by making reservations about its nuclear no-first-use pledge (that is, providing for the possibility of a nuclear response to a conventional strike against its nuclear forces), then China’s nuclear doctrine would not be so different from that of other nuclear-weapon states.

### **CHINA AND NUCLEAR ARMS LIMITATIONS**

China is the only country in the world that has the economic and technical capability to launch a crash program and build up its strategic nuclear forces to match the United States’ and Russia’s in the next ten to fifteen years. It is, therefore, necessary to consider China’s nuclear forces and development programs when discussing any U.S.-Russia strategic arms limitation agreement that might follow the New Strategic Arms Reduction Treaty (New START). France and the United Kingdom are different; their nuclear forces are being reduced, they are quite transparent and predictable, and they lack the capabilities or intentions to rapidly increase their nuclear forces in the future. Israel, Pakistan, and India do not aim their nuclear arms against the United States or Russia, and their economic and technical resources would be too limited to enable them to challenge the two nuclear superpowers if they wanted to. North Korea has such intentions, which worries its immediate neighbors, but it lacks the capabilities to become a significant factor in the global strategic balance.

Increased transparency would clarify the actual size and characteristics of China’s nuclear forces, as well as China’s potential to build them up. If the country holds 190–200 weapons, as believed by a majority of the international strategic community,<sup>7</sup> then there is no urgent need for legally binding limitations before proceeding with U.S.-Russia arms reductions. A mere political commitment from Beijing not to increase this number substantially would probably suffice for the United States and Russia to continue reducing their strategic nuclear forces.

But if China has 1,000 or more nuclear warheads, taking into account the weapons stored within tunnels, its arsenal certainly should be limited. Otherwise, it would be impossible for the other two powers to reduce their nuclear weapons even if they sort out their disagreements on BMD, substrategic nuclear weapons, and non-nuclear strategic systems. Beijing’s official position, however, is that the countries with the largest 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>8</sup>

Beijing also has an unhelpful attitude about greater information disclosure. It has officially demanded that the United States (and, by default, Russia) commit to no-first-use of nuclear weapons before China agrees to increase transparency about its nuclear forces. While this demand seems reasonable at first glance, it is in reality groundless. Official information from Beijing on the size of its nuclear forces would be of no value to the United States or Russia in planning for a disarming strike; Washington and Moscow would rely on their own intelligence information for that purpose. Information provided by Beijing would not have to include any precise data about the locations of its strategic arms deployments. However, if China were to become more

transparent about its nuclear forces and programs, it would greatly help Moscow and Washington plan future strategic arms reduction treaties.

China apparently considers transparency to be an important bargaining chip. It is unlikely, therefore, that it will be persuaded to be more transparent as a goodwill gesture, or as a minimum contribution to a multilateral nuclear disarmament process. In the best case, Beijing can be expected to bargain hard over this issue to get the most from the other parties in return for each element of greater transparency.

Because of the Ukrainian crisis, U.S.-Russia relations are worse than at any time since the end of the Cold War, and the prospects for further strategic arms reductions beyond the New START are bleak. However, if the United States and Russia reach a political resolution to the current crisis, the issue of a follow-on treaty will sooner or later return to the agenda and the “China factor” is bound to reemerge. China’s nuclear forces may also factor into negotiations if the United States and China decide to start substantive talks for the strategic and political reasons discussed above.

### **PRECONDITIONS FOR CHINA’S PARTICIPATION IN ARMS CONTROL**

In spite of all the difficulties, it appears possible to engage China gradually in the nuclear arms limitation process—although this will not happen in response to rhetorical appeals by other nations. China’s participation will be strictly pragmatic: it will get involved once it has concluded that greater transparency and limitations on specific weapons will be offset by concessions made by the United States (and, indirectly, Russia). In fact, it appears that the following conditions will need to be met before China “opens up” step by step and eventually agrees to limit its strategic weapons:

- The United States should commit to stopping the further buildup of its sea- and land-based BMD assets in the Asia-Pacific and to ensuring transparency.

- The United States should agree to limitations and transparency measures in regard to its strategic and intermediate-range, non-nuclear offensive weapons, including Conventional Prompt Global Strike systems.

Formal arms control involving China will create new challenges. China will not agree to a treaty that enshrines the United States’ numerical superiority in strategic nuclear weapons. The United States, however, is unlikely to reduce its strategic nuclear forces to China’s levels.

Provided that both sides have the political will to reach an agreement, one solution to this dilemma may be to impose equal aggregate ceilings—perhaps of 400 to 500 units—on intercontinental ballistic missiles (ICBMs), intermediate-range ballistic missiles (IRBMs), and shorter-range ballistic missiles (SRBMs), as defined in New START and the 1987 Intermediate-Range Nuclear Forces Treaty. Under this approach, the United States, which eliminated its IRBMs and SRBMs pursuant to the Intermediate-Range Nuclear Forces Treaty with the Soviet Union, would get to keep most or all of its 420–450 Minuteman III missiles. China, meanwhile, would retain most or all of its estimated 480 missiles in the relevant category.

Subsequently, China would have an opportunity to remove IRBMs and SRBMs and replace them with ICBMs. The United States would hardly welcome this prospect. However, it is important to recognize that China may do so anyway. Without an agreement, China may increase both its ICBM force and its IRBM and SRBM forces. Thus, the United States still stands to gain from transparency and limitations on China’s nuclear and conventional land-based missiles—a significant concern to the United States in both a global and a regional context. At the same time, the United States would retain huge superiority in the sea and air legs of the strategic triad, where it would be most difficult for China to catch up.

China, for its part, would also benefit from such an agreement. It would be recognized as an equal strategic partner to the United States and as the world's second superpower. The above agreement would not legally prohibit China from matching the United States in strategic bombers and missile submarines, if it chose to take such steps. So China's prestige would be preserved, and its inferiority would not be legalized.

Finally, it is worth remembering that classical U.S.–Soviet Union strategic arms control also started with partial limitations. The 1972 Strategic Arms Limitation Talks (SALT) I Interim Agreement did not cover heavy bombers or strategic nuclear weapons—it placed limits only on ICBM and sea-launched ballistic missile launchers, as well as submarine numbers (although the agreement was incomplete on the submarine issue: the parties “agreed to disagree”).

## CONCLUSION

For propaganda purposes, China insists that its nuclear arsenal is small and in no way comparable to the U.S. and Russian arsenals. However, even without accounting for the mysterious, hardened underground tunnels that are being built by the Second Artillery Corps (China's counterpart to Russia's Strategic Missile Troops), China may currently be the third-largest nuclear power after Russia and the United States. Contrary to official explanations, the complete veil of secrecy that surrounds China's nuclear forces may be designed to conceal their excessive numbers rather than their small size and vulnerability. Consequently, the United States and Russia must take the “China factor” into account when planning their strategic force modernization and considering follow-on nuclear arms limitation and reduction initiatives.

Until now, China has maintained that it would only join the nuclear disarmament process when the United States and Russia had substantially reduced their numbers of nuclear weapons, committed to a no-first-use pledge, and removed a host of “destabilizing” factors (such as the deployment of U.S. nuclear-powered ballistic missile submarines

in the Pacific, missile defense expansion in the Far East, the development of space weapons, and U.S. support of Taiwan). Beijing's position thus appears to be propaganda-driven and is not intended to produce practical results. It simply helps China buy time while strengthening its strategic position in anticipation of larger concessions by the great powers.

At the same time, current U.S. and Russian policies quite naively call upon China to “open up” its forces and programs as a goodwill gesture and a contribution to the noble cause of nuclear disarmament. This will never happen. Similarly, ideas of involving China in the nuclear arms control process, joining the U.S.-Russia negotiations, or borrowing the U.S.-Russia experience are unrealistic.

China's involvement in arms control is likely only on a strictly pragmatic basis; it must be convinced of a valuable quid pro quo in return for greater transparency and limitations on weapons systems. In other words, China may change its current position if it believes that it stands to lose more politically and militarily by staying away from the arms reduction process than by joining it.

In a sense, however, it is not only China but also the United States and Russia that must revise their military policies to facilitate Beijing's involvement in the nuclear arms control process. Moscow and Washington should recognize, either directly or indirectly, the reality of mutual deterrence with China, as well as Beijing's right to an assured, albeit limited, retaliatory capability. This step might affect U.S. guarantees to its allies. It would also imply reduced Russian reliance on nuclear weapons to compensate for its growing inferiority, relative to China, in conventional forces in Siberia and the Far East.

Even if all this could be accomplished, significant challenges would remain. For example, it will not be easy to reconcile U.S. reluctance to contemplate strategic parity with China while China objects to legalizing its strategic inferiority

to the United States. However, with the political will, creative solutions can be found, such as a combined limit on all land-based ballistic missiles with ranges longer than 500 kilometers (approximately 310 miles). In fact, this is similar to the way that U.S.–Soviet Union strategic arms control started more than forty years ago with the SALT I agreement, and Russia could easily join such an arrangement if it were considered acceptable from a political point of view.

## NOTES

<sup>1</sup> “Nuclear Forces,” Stockholm International Peace Research Institute, January 2014, [www.sipri.org/research/armaments/nuclear-forces](http://www.sipri.org/research/armaments/nuclear-forces).

<sup>2</sup> Alexei Arbatov and Victor Yesin, “The Prospects of Engaging China in Nuclear Arms Limitation” (Russian), Carnegie Moscow Center, August 2014, 5–8, [http://carnegieendowment.org/files/Article\\_Arbatov\\_China\\_Rus2014.pdf](http://carnegieendowment.org/files/Article_Arbatov_China_Rus2014.pdf).

<sup>3</sup> Information Office of the State Council of the People’s Republic of China, “Arms Control and Disarmament,” *National Defense Policy*, March 31, 2011, [www.china.org.cn/government/whitepaper/2011-03/31/content\\_22263420.htm](http://www.china.org.cn/government/whitepaper/2011-03/31/content_22263420.htm).

<sup>4</sup> Ibid.

<sup>5</sup> Lora Saalman, “China and the U.S. Nuclear Posture Review,” Carnegie Paper, Carnegie Endowment for International Peace, February 2011, 33, [http://carnegieendowment.org/files/china\\_posture\\_review.pdf](http://carnegieendowment.org/files/china_posture_review.pdf).

<sup>6</sup> James M. Acton, *Silver Bullet? Asking the Right Questions About Conventional Prompt Global Strike*, (Washington, DC: Carnegie Endowment for International Peace, 2013), 35–56, <http://carnegieendowment.org/files/cpgs.pdf>.

<sup>7</sup> Gareth Evans and Yoriko Kawaguchi, coauthors, *Eliminating Nuclear Threats: A Practical Agenda for Global Policymakers* (Canberra: International Commission on Nuclear Non-Proliferation and Disarmament, 2009), 22, [http://a-pln.org/sites/default/files/apln-analysis-docs/ICNND\\_Report-EliminatingNuclearThreats.pdf](http://a-pln.org/sites/default/files/apln-analysis-docs/ICNND_Report-EliminatingNuclearThreats.pdf).

<sup>8</sup> Information Office of the State Council of the People’s Republic of China, “Arms Control and Disarmament.”

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