

# CHINA'S NUCLEAR ARMS BUILD-UP: BACKGROUND AND CONSEQUENCES

China is gradually, but continuously building up its nuclear capabilities with the goal of continuing to maintain a credible nuclear second-strike capability vis-à-vis the US. At the same time, China regards its nuclear weapons as political currency. It is India, China's neighbour and also a nuclear power, that feels particularly threatened by Beijing's nuclear build-up. The outcome could be a nuclear destabilisation of the Asia-Pacific region.



*China is modernising its delivery systems: Ballistic missile at a military parade in Beijing, 1 October 2009.*

The People's Republic of China is a long-standing member of the nuclear club, having joined in the mid-1960s. But Beijing's nuclear arsenal has only rarely been in the headlines. For many years, China handled its nuclear build-up reticently. Moreover, Beijing declared not use its nuclear weapons first.

Due to its economic rise, China has now become a political heavyweight in the international arena. In military terms, too, the Middle Kingdom has been flexing its muscles with huge growth rates in its defence budget – with an official increase of over 11 per cent in 2012 alone. China's nuclear capability has largely taken a back seat here. However, important changes seem to be on the horizon. Chinese ex-

perts call into question the policy of nuclear no-first use. At the same time, Beijing is slowly, but steadily increasing its nuclear arsenal. Furthermore, delivery systems such as the ballistic missiles are being expanded and modernised.

In many respects, this slow nuclear build-up is owed to Chinese threat perceptions. Beijing fears that with the missile defence system the US is currently deploying and with new conventional prompt global strike options under debate in Washington, the core of China's nuclear doctrine, namely, its nuclear second-strike capability, could be undermined. However, there are also signs that Beijing, more than before, now regards nuclear weapons as important political leverage.

Already today, China's gradual ascent in the nuclear arms sphere has consequences for the Asia-Pacific region. In India, it is viewed with great suspicion. The relationship between the two neighbours may be described as a mix of conflict and cooperation. Both Beijing and Delhi wish to avoid costly nuclear arms races that would impede their respective economic upswings. Nevertheless, there is a danger that this is precisely what will happen: China is expanding its nuclear inventories in order to ensure its deterrent against the US; India, for its part, is ramping up its own nuclear modernisation efforts in order to avoid falling behind its neighbour to the north. At the same time, Pakistan – supported by China – is also building up its nuclear arms in order to defend against its eternal rival, India. This nuclear dynamic could result in considerable instability.

## Nuclear weapons in China's strategic debate

China's nuclear weapons programme was initiated in the mid-1950s. The country carried out its first nuclear test in 1964, followed by 45 more. China has tested the entire range of nuclear weapons, from uranium and plutonium bombs and thermonuclear warheads to neutron weapons. The last testing phase, which was finished in 1996, mainly involved smaller and lighter nuclear devices.

Mao Zedong, chairman of the Communist Party of China from 1943 to 1976, long downplayed the significance of nuclear weapons, referring to them as a

“paper tiger”. Only the nuclear threats of other countries, China’s Communist party claimed, had forced China to build nuclear weapons of its own. Due to this disregard for the importance of atomic weapons, China long pursued a policy of nuclear reticence. Already in 1964, immediately after its first nuclear test, Beijing announced it would never be the first to use nuclear weapons, nor would it even threaten their use. For a long time, no explicit nuclear strategy or deployment plans were developed that went beyond this fundamental principle. China built up a comparatively small nuclear force largely aimed at deterrence based on the ability to retaliate, and explicitly declined to become involved in arms races with other nuclear powers. Over a long period, the number of strategic nuclear arms it possessed, i.e., those that could reach the US, remained stable at about 20 warheads.

It was not until the publication of its Defence White Paper of 2006 that China stated its “nuclear self-defence strategy”. This is guided by five principles: Deterrence of nuclear weapons use or nuclear blackmail directed against China; ensuring the survivability of its own nuclear weapons in order to be able to carry out a second strike in the event of a nuclear attack; relinquishment of nuclear first use; a centralised command for nuclear weapons; nuclear weapons only to be used against key targets. In the future as before, according to the authors of the white paper, China will not engage in nuclear arms races.

Following the publication of this nuclear doctrine, Chinese experts debated the policy of non-first use of nuclear arms. The controversy centred on the question of whether China should threaten nuclear strikes in the event of US military support for a Taiwanese declaration of independence. Furthermore, Chinese strategists noted the huge advances in increasing the destructive force of modern conventional weapons. Their use might justify a Chinese nuclear counter-strike, they argued.

The publication of the Defence White Paper of spring 2013 put an end to this discussion. Beijing stands by its commitment not to be the first to use nuclear weapons. Considering the size of its nuclear force, which is still tiny compared to the US and Russia, a first use of nuclear arms by China

might provoke nuclear retaliation. Moreover, China fears the negative international reaction that is expected to ensue should it announce an official change in its policy. In particular, China has no interest in encouraging a debate in Japan on whether Tokyo should acquire nuclear weapons of its own. However, the new White Paper does not explicitly reiterate the traditional formula ruling out the first use of nuclear arms.

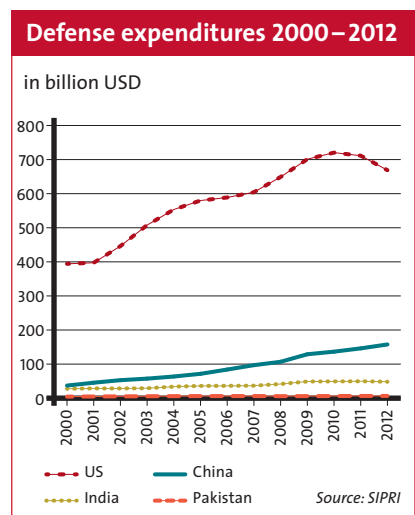
### China’s growing nuclear arsenal

Nobody knows how many nuclear weapons China currently exactly possesses. It is precisely because its nuclear arsenal is so small that Beijing has no interest in announcing details of its deployment bases and nuclear depots as part of transparency measures. Otherwise, Beijing fears, its nuclear arsenal may become vulnerable to a first strike. According to estimates, China likely has between 240 and 400 nuclear weapons at this time. It is interesting to note that – according to US sources – the number of nuclear warheads for strategic missiles has increased from 20 to 30–35 between 2002 and 2010 alone. This amounts to a nearly 100 per cent increase, though the numbers are still low.

As far as delivery systems are concerned, land-based ballistic missiles form the backbone of China’s nuclear force. They have been undergoing continuous modernisation for some years. New missile systems are being introduced that are road-mobile and use modern solid fuel. They are gradually replacing older silo-based missiles that still use liquid fuel. So far, all land-based Chinese missiles carry only one warhead. However, according to experts, China is certainly capable of using multiple-warhead (MIRV) technology. Should it choose to do so, which is currently apparently not the case due to political considerations, China could massively increase its nuclear arsenal within a very short time.

Additionally, the number of missiles that are capable of carrying nuclear arms is being increased. Thus, there are estimates that China has over 1,300 short- and intermediate-range missiles, based mainly along the coast opposite Taiwan, that could carry both conventional and nuclear payloads.

In addition to these ballistic missiles, China’s H-6 aircraft are capable to drop nu-



clear bombs. A modernised version of this aircraft type that was recently placed in service with the Chinese air force can even be equipped with nuclear-tipped cruise missiles. Although this significantly expands the operational radius of this weapons system, the aircraft are most likely intended mainly for regional use.

China has long been trying to meet the challenge of basing ballistic missiles on nuclear-powered submarines. Beijing is now operating three Jin-class boats, each of which carries 12 missile tubes. The missiles they carry could be equipped with multiple warheads. However, so far, China has not yet managed to maintain constant patrols by at least one submarine at any given time. Neither has China succeeded yet in launching a ballistic missile from a submerged submarine. In order to be able to reach targets in the US, the Jin-class submarines would have to venture quite far out into the Pacific, where they would be exposed to US anti-submarine defences. Therefore, some experts believe that China’s submarine-based nuclear missiles should primarily cover targets in India or Russia.

### Motives for incremental build-up of a nuclear force

China has several motives for wanting to expand its nuclear weapons capability. In the context of the country’s political and economic rise, the leading elites appear to attribute a significant political role to nuclear weapons. For instance, the new Chinese President Xi Jinping in December 2012 stated his belief that nuclear arms offer significant strategic support to China’s great-power status.

However, the main strategic driver of the build-up of China’s nuclear arsenals is

most likely the relationship with the US. Beijing is observing Washington's policy with increasing suspicion, especially since the "pivot" of US foreign and security policy towards the Asia-Pacific space, as announced by US President Barack Obama. In Beijing, this "pivot" is interpreted as an expansion of the US military presence in the region. There are fears regarding the credibility of China's own nuclear deterrence due to US improvements in the areas of espionage, surveillance, reconnaissance, missile defence, and long-range conventional precision munitions. Accordingly, the expansion of its nuclear arsenal is mainly aimed at ensuring the survivability of China's strategic nuclear capability.

One significant worry for China is the future of Taiwan. For the island to attain formal independence – which is not expected to happen in the near future – would significantly compromise the basis of legitimacy of the ruling Communist Party of China. This would be true in particular if such independence were secured with the help of US military support. Conversely, Washington would have to extend effective protection to Taiwan against any Chinese military encroachments, as the reliability of US security guarantees in the Asia-Pacific region would be at stake.

Thus, at least from the Chinese point of view, in a scenario of a Chinese-US confrontation over Taiwan, the possibility of inadvertent escalation to the nuclear level cannot entirely be ruled out. Currently, China is trying to develop conventional options that would preclude US military assistance to Taiwan. Specifically, in the future, US carrier groups are to be kept out of the Straits of Taiwan as far as possible. An important element is the build-up of conventional rockets and cruise missiles along the coast opposite Taiwan. In a crisis, an inadvertent nuclear escalation might result if US reconnaissance should misinterpret a launch of conventional missiles by China as a nuclear strike.

Another increasing worry in China is the creation of a missile defence shield by the US. According to official US statements, the systems, deployed in California and Alaska, are mainly designed to protect the US against North Korean missiles. But Beijing suspects that the missile defence is in reality also directed at China. Once Wash-

ington has attained the capability to intercept the still comparatively few Chinese nuclear missiles, there is a danger that the US might try to subject China to nuclear blackmail, for instance as part of a conflict over Taiwan.

The US debate about conventional prompt global strike options is also raising concerns in China. Just like the missile defence shield – according to the dominant view in China –, these systems are able to undermine China's nuclear second-strike capability. The combination of missile defences with long-range conventional precision munitions is regarded as especially dangerous. The fear is that Washington might execute a conventional first strike to take out as many of China's strategic nuclear missiles as possible and use its missile defences to intercept the remaining ones with which China would attempt to carry out a second strike. This would deprive China of the core of its nuclear doctrine, namely, the capability to ensure the survivability of its own nuclear forces in order to strike back after an attack.

### China's non-proliferation policy

China was initially hostile to the Nuclear Non-Proliferation Treaty (NPT), which went into effect in 1970. Beijing did not regard nuclear proliferation as a fundamental problem. China even actively encouraged it where it suited its own national interest. Its longstanding partner Pakistan was the greatest beneficiary of this policy. For instance, in 1983, Islamabad was given the blueprints for a nuclear warhead. Beijing has also delivered highly enriched uranium to its neighbour and assisted with the construction of a uranium enrichment plant.

Subsequently, China changed its position and joined the NPT in 1992. One important motive for this move was the opportunity to bring its political weight to bear at the Review and Extension Conference of the NPT in 1995. China joined the NPT as a nuclear-armed state under the rule designating as such those countries that carried out a nuclear detonation before 1 January 1967. Besides China, this definition includes the US, Russia, France, and the UK.

China often views the problem of nuclear proliferation in a different light than Western countries do. In particular, Beijing sus-

pects that Washington's stance towards proliferation issues is a pretext for safeguarding regional interests. Despite some sympathy for the nuclear politics of problem states such as Iran and North Korea – a sympathy that has, however, been rapidly diminishing recently – Beijing intends to avoid US over-reactions, in particular military interventions. Furthermore, China has repeatedly protested the double standards applied to nuclear problem states like Iran on the one hand and Israel on the other.

The US and many Western countries continue to disagree with China's nuclear policy towards Pakistan. They accuse Beijing of having continued to support Islamabad's nuclear programme even after joining the NPT, which is illegal under the terms of the treaty. During the 1990s, it is claimed, China shipped thousands of ring magnets to Pakistan, where they formed essential elements of the uranium enrichment programme. At the same time, China allegedly helped Pakistan with reprocessing of fissile material and with the development of a new warhead.

In China, on the other hand, the US attempt to advance nuclear disarmament under the *Global Zero* initiative championed by President Obama is viewed with distrust. It is believed that the US aims to secure its dominance by depriving other states of the ability to balance out the US superiority in nearly all non-nuclear military domains by possessing nuclear weapons of their own.

Accordingly, China has hitherto avoided nuclear arms control. It will only put its own nuclear arsenal on the negotiation table once the US and Russia have disarmed to China's level. While Beijing has signed the Comprehensive Test Ban Treaty (CTBT), it will only bring it into force once the US has done so.

### Consequences for the Asia-Pacific region

In the Asia-Pacific region, China's gradual nuclear ascent is causing concern in numerous places, especially in neighbouring India, which is also building up its nuclear capabilities. In April 2012, Delhi successfully tested an Agni-5 missile with a reported range of about 5,000 km. However, the rocket is not yet ready for deployment. Nevertheless, Indian politicians are already pointing out today that the Agni-5 could reach targets anywhere in China. Analysts even believe the Agni-5 could be equipped

with multiple warheads. Furthermore, India's first missile-equipped, nuclear-powered submarine is fast approaching operational deployment.

Moreover, India is expanding its arsenal of short-and medium-range weapons and expanding its capabilities for the production of weapons-grade plutonium. One important consideration here is certainly the ability to ensure a credible deterrent vis-à-vis China in the future as well – not least because Delhi feels encircled due to nuclear relations between China and Pakistan, which continue to be intense. The result is the risk of nuclear instability in a region that has multiple rivalries and border disputes and lacks a clear security architecture.

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