Modernization of the Chinese People’s Liberation Army and Its Impact on the Security of the Indo-Pacific Region

Strategic Paper No. 14

Tomasz Smura
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There is no doubt that the rise of China's power and assertiveness on the international stage may be one of the most important influences on the international order in the coming years. Since the beginning of the process of economic reforms launched by paramount Chinese leader Deng Xiaoping in the early 80s, the People Republic of China has been continuing a period of unprecedented economic development. The Chinese economic boom modernized country and brought prosperity to hundreds of millions of Chinese people, but it also enabled the PRC leadership to launch the major process of modernizing the armed forces. China's rising military power, in turn, enables Beijing to behave more assertively on the international stage, especially towards its neighbours. This paper asks: What are strategic goals and the current state of the Chinese armed forces' development and how do the US and other countries of the Indo-Pacific region, especially those perceiving the PRC as potential threat, or at least a challenge, perceive and respond to the rise of China's military power? It argues that the modernization of the Chinese People's Liberation Army has had a serious impact on the Indo-Pacific region's security architecture as it propels the arms race in the and forces the PRC's neighbours to create new alliances to counterbalance China.

Theoretical Framework and the State of Research on Military Power

To answer the question of why China is building its military power and what consequences it may have on international security, it is important to draw upon the theory of international relations. Power is one of the most important terms in the IR theory, understood as the ability to take actions, or control the actions of others. As American political scientist RA Dahl claimed: "A has power over B to the extent that he can get B to do something that B would not otherwise do." The concept of power was defined similarly by Raymond Aron, who described it as "capacity of a political unit to impose its will upon other units." The problem however is how to measure the influence of one state on the other state and analyse what would be the preferences of the given state without this influence.

The ability to control others is, however, strictly connected with access to given resources. Such a measurable approach is also more attractive for political practitioners, but does not resolve all the issues connected to power as it has multiple dimensions. Hans J Morgenthau claimed that power is consisted of both measurable factors – like geography, economic and military strength – and unmeasurable ones – such as morale of a nation or effectiveness of its leadership. Kenneth N Waltz indicated in turn that great power status is determined by such factors as population size, natural resources, economic power, military strength, political stability and quality of leadership. In turn, Raymond Aron listed three elements defining strength of a nation: occupied space, sufficient resources and collective capability of action (or organization).

There is, however, no agreement on which factor is most important. The proponents of geopolitics as a key in the quest for global dominance consider a control over given territories. American strategist Alfred Thayer Mahan indicated in this context significance of naval power and control over sea roads.⁴ Paul Kennedy, in turn, claimed that it is economic power which plays most important role as it allows to build strong armed forces and deliver on political commitments to other states.⁵ For John J Mearsheimer, the size of armed forces, especially land force, is best indicator showing the overall power of any great power.

Mearsheimer’s offensive realism may be also the best theoretical framework to explain Chinese military build-up. According to the American researcher, international anarchy is a main factor determining great powers' behaviour. Since states can never be sure of the intentions of other states and – as the result of the anarchy – there is no institution that can come to their aid, the only way to ensure security is to have a decisive advantage over other great powers or hegemony in the system. According to Mearsheimer, a superpower can gain hegemony on two levels – regional and global. Obtaining global hegemony is very difficult – no country in modern history has succeeded in doing so. In turn, regional hegemony in the western hemisphere was achieved only by the United States in the 20th century and, for its own security, it consistently prevents other powers from gaining dominance in other regions – specifically, Europe and East Asia.⁶ Through this prism China's strategic aim is to achieve regional hegemony in Asia, pushing the US out of the region. The modernization and development of Chinese armed forces in this context may thus be considered a tool to implement China's strategic ambitions.

**People's Liberation Army**

The Chinese Communist Party's military branch – Red Army of Workers and Peasants (since 1947 under the current name – the People's Liberation Army (PLA)) was founded on 1 August 1927 during the Nanchang uprising, which started the Chinese Civil War. Through the next two decades it fought against its main political competitor – nationalist Guomindang (GMD, Kuomintang) – with the famous Long March as a symbol – and together with GMD against the Imperial Japanese Armed Forces. After the Japanese surrender in 1945, the communist army continued its struggle against Jiang Jieshi's (Chiang Kai-shek) nationalist forces and – in spite of extensive US military support for GMD – finally beat them in 1949. Throughout its history the People's Liberation Army took part in several armed conflicts. It fought against allied forces (United Nations coalition under US leadership) in the Korean War, the Indian Armed Forces in the Sino-Indian War, and the Soviet Armed Forces in the Sino-Soviet border conflict. It also struggled with the Guomindang forces supported by the US during two Taiwan Strait Crises as well as its former ally, Vietnam, during the

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Sino-Vietnamese War, what was the last serious test for the Chinese military structures. Initially composed mostly of the peasants, ill-equipped and pursuing guerrilla warfare, the communist armed forces took advantage of military hardware— including large-calibre artillery and tanks— left behind by the Japanese army. The PLA after the World War Two also changed tactics to regular military operations, successfully used against GMD forces. From the beginning, the PLA was supported by the Soviet Union and developed largely along with Soviet models. However, the split between the PRC and the USRR in the mid-60s encouraged China to pursue its own armed forces modernization programme and, in following decades, acquire weapons from different sources in countries such as Israel, the US, Russia, Ukraine, and France. Against the backdrop of the end of Cold War, the PLA also launched a transformation process. In 1985, China demobilized almost one million troops, while in the first decade of 21st century the PLA changed from a massive conscript army based on Soviet standards into an increasingly professional armed forces comparable in some dimensions to Western militaries.\footnote{Benjamin Lai, The Chinese People’s Liberation Army since 1949: Ground Forces (Oxford: Osprey Publishing 2012).}

Today, with over 2.2 million soldiers, the People’s Liberation Army remains the world’s largest armed forces in terms of number. It consists of five branches, namely ground, navy, air, missile, and strategic support forces. According to the structure adopted in 2015, China’s armed forces are grouped into five so-called “operational theatres” (previously there were seven military regions). The People’s Liberation Army is overseen by the seven-member Central Military Commission, which is formally a department of the CCP Central Committee and is composed—in addition to the chairman—of top military commanders and is headed by PRC Chairman/CCP Secretary General Xi Jinping. Subordinate to it are the substantive departments, bureaus, and commissions, followed by the aforementioned operational theatres, armed forces’ branches, military schools and paramilitary organisations such as the People’s Armed Police and the Coast Guard.\footnote{Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2022 (Washington: Ministry of Defence of the United States, 2022), pp. 41 - 45.} China’s defence strategy, in turn, is based on so-called active defence, which means strategic defence with the use of offensive capabilities at the operational and tactical levels.\footnote{Ibid., pp. 34 - 35.}

According to China’s 2019 White Paper, the goals of national defence (and thus the armed forces) are to:

- deter and repel aggression;
- ensure political security and the safety of citizens and social stability;
- oppose and prevent the “independence of Taiwan”;
- combat supporters of separatist movements such as “Independence for Tibet” and the establishment of “East Turkestan”;
- protect national sovereignty, security, and territorial unity and integrity;

9 Ibid., pp. 34 - 35.
• protect China's maritime rights and interests;
• safeguard China's security interests in space, the electromagnetic domain, and cyberspace;
• safeguard China's interests overseas;
• promote the sustainable development of the country.  

In addition to the general objectives that characterize such documents everywhere, there are more specific issues (containment of Taiwan's independence, protection of maritime interests), the importance of which China wanted to particularly emphasize. The Chinese strategic documents and legislation also emphasise the strict connection of the PLA and the Party, as the Chinese armed forces are expected to provide support in implementation of the CCP strategic goals. As Law of the People's Republic of China on National Defense stated: "The armed forces of the People's Republic of China shall be led by the Communist Party of China." 11

**China Strategic Objectives**

In terms of Armed Forces modernization, China's 2019 White Paper indicates its goal of making the Chinese People's Liberation Army a "world-class" military force by 2049. By then, the Chinese armed forces are expected to have achieved two intermediate goals:

1. by 2020, to achieve mechanization with significantly increased informatization and significantly improved strategic capabilities;
2. to comprehensively develop military theory, organizational structure, military personnel, armaments and equipment and to essentially complete the modernization of national defence and the army by 2035. 12

Among the most important developments of 2022 was the 20th National Congress of the Chinese Communist Party, during which – together with appointing Xi Jinping for the third time as the Communist Party's Secretary General – China's basic development goals were outlined. In implementing the strategic vision of building a "modern socialist country in all respects" by 2049, one of the main tasks for next five years refer to centenary of the People's Liberation Army in 2027. It appeared for the first time in official documents in October 2020 at the Fifth Plenum of the 19th Central Committee of the Chinese Communist Party, which required the acceleration of the process of reforming and modernizing the PLA before the centennial of its establishment in 2027. 13 In Xi

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12 "China's National Defense in the New Era."
Jinping’s report to 20th National Congress, he indicated: "Achieving the goals for the centenary of the People’s Liberation Army in 2027 and more quickly elevating our people’s armed forces to world-class standards are strategic tasks for building a modern socialist country in all respects." This shows that China’s leadership will continue prioritising armed forces development in the years to come. The question remains however if the goals set the PLA are achievable and how China’s neighbours will respond to further enhancement of Chinese military capabilities.

Ambitious modernization plans are fuelled by equally ambitious defence budgets. According to the Stockholm International Peace Research Institute (SIPRI), Chinese defence spending – measured in current US dollars – reached USD 293.3 billion in 2021, being the second highest in the world after the US (USD 800.6 billion). Moreover, Chinese defence spending has more than tripled since 2006, while US spending has remained broadly unchanged over that time.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>PRC</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>24,9</td>
<td>537,9</td>
</tr>
<tr>
<td>1996</td>
<td>27,4</td>
<td>475,1</td>
</tr>
<tr>
<td>1998</td>
<td>31,9</td>
<td>462</td>
</tr>
<tr>
<td>2000</td>
<td>42,2</td>
<td>481</td>
</tr>
<tr>
<td>2002</td>
<td>57,4</td>
<td>544,5</td>
</tr>
<tr>
<td>2004</td>
<td>68,5</td>
<td>675,5</td>
</tr>
<tr>
<td>2006</td>
<td>86,5</td>
<td>716,8</td>
</tr>
<tr>
<td>2008</td>
<td>104,1</td>
<td>789,4</td>
</tr>
<tr>
<td>2010</td>
<td>132,6</td>
<td>875,9</td>
</tr>
</tbody>
</table>

### Armed Forces Modernization

#### 1. Ground Forces

The People's Liberation Army is the largest branch of Chinese armed forces. The 975,000 soldiers in combat units are grouped into 13 units consisting of approximately 80 separate light, medium and heavy brigades (similar to the US Army) of approximately 5,000 soldiers each. Each unit also includes 6 combat support brigades (artillery, air defence, aviation, special forces, engineering and chemical defence). The combined arms brigades consist of combined arms battalions, which are characterized by a high degree of independence.\(^{15}\) Chinese ground troops have approximately 5,600 main battle tanks, 6,700 infantry fighting vehicles, 4,000 armoured personnel carriers, over 9000 artillery pieces and 270 attack helicopters at their disposal.\(^{16}\)

The PLA modernization process is expected to be focussed on "improving precision, multi-functional, and sustained operations capabilities, command and control, and integrated systems to promote ambitions of building a global combat capable army."\(^{17}\)

Nevertheless, the modernization challenges faced by the Chinese land forces remain significant. Mechanized units feature outdated platforms from the 1960s and the most modern weapons systems in the region. A similar situation occurs in armoured units, which consist of a number of

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\(^{16}\) Ibid.

\(^{17}\) *Annual Report to Congress*, p. 47.
obsolete tanks (for example, about 1500 tanks of the Type 59 family, which are the Chinese version of the Soviet T-54, are still in service) and modernized main battle tanks of the III generation (e.g., about 1100 Type 99 tanks of the capabilities comparable to modern Western tanks). Overall, of the approximately 5,600 MBT, about 1,500 vehicles qualify for III generation, while obsolete designs of I generation remain significant part of the rest. Meanwhile, of among the nearly 7,000 Chinese infantry fighting vehicles, more than half are modern designs, but there are still over 1,000 Type 86 vehicles in service, i.e. a Chinese copy of the Soviet BMP-1.\textsuperscript{18}

Thus, despite the great ambitions and technological capabilities of China’s arms industry, China still seems to have some difficulties in acquiring and introducing new platforms into the line, which of course is also due to the size and enormous needs of the land forces. On the other hand, in terms of new capabilities, China is introducing Type-15 light tanks with 105 mm guns, new unmanned aerial vehicles or Z-20 transport helicopters into the line, increasing the mobility of airborne troops.\textsuperscript{19}

\textbf{2. Navy}

Currently, the Chinese navy has the world’s largest surface and submarine fleet of 340 vessels, including 125 large surface combatants belonging to the aircraft carrier, destroyer and frigate classes. It is mostly composed of modern multirole combatants armed with anti-ship, anti-air and anti-submarine systems. Moreover, according to estimates by the Ministry of Defence, the number of Chinese warships is expected to grow to about 400 by 2025 and 440 by 2030.\textsuperscript{20}

The Chinese navy also has naval aviation and the Marine Corps of the People’s Liberation Army under its command. It is divided into three fleets – North Sea, East Sea and South Sea, which are subordinate to the operational theatre commands (North, East and South, respectively). The fleets oversee surface ship and submarine flotillas, naval aviation brigades, and naval bases.\textsuperscript{21}

In the area of naval modernization, China is intensively replacing older units with more modern ones that have ever-increasing anti-surface and anti-submarine and air defence capabilities. The Chinese are also intensively developing cruise missile precision strike capabilities against land targets. China’s power projection capabilities are also steadily increasing. In 2012, China commissioned its first aircraft carrier (\textit{Liaoning}), which is a refurbished Soviet Kuznetsov-class vessel, and in 2019 a Chinese-built copy of this ship (\textit{Shandong}) entered service. However, this is not the end of Chinese ambitions, because according to the assumptions, the second (and the first according to its own design) independently built by the Chinese unit of this class (\textit{Fujian}) is to enter into service in 2024.\textsuperscript{22}

\textsuperscript{19} Annual Report to Congress, p. 52.
\textsuperscript{20} Ibid., pp. 50 - 52.
\textsuperscript{21} Ibid., p. 52.
\textsuperscript{22} Ibid., p. 51.
In 2021, China also launched a third landing helicopter assault ship of the Yushen-class (Type 075), with a displacement of about 35 thousand tons (which is smaller only than the US ships Wasp and America-classes). Each of the ships can take 28 helicopters on board (transport helicopters – Z-20 and anti-submarine helicopters – Ka27/28), and they are equipped, among other things, with HHQ-10 short-range anti-aircraft systems. China’s power projection capabilities are also complemented by 8 amphibious transport docks of the Yuzhao-class (Type 071) with a displacement of 25,000 tons. All of them have already entered service.

Other new vessels entering service are dominated by advanced multi-role platforms with comprehensive capabilities. The 8th Renhai missile cruiser (Type 055) was launched in August 2020 and entered service in March 2023.23 The ship has approximately 13,000 tons of displacement and, with 112 vertical launch systems (VLS) on board, has a wide range of armament – anti-ship cruise missiles (YJ-18A with a range of up to about 500 km), air defence systems (with long-range missiles - HHQ-9B, medium-range missiles – HHQ-16B and short-range missiles – HHQ-10) and anti-submarine warfare systems,24 and in the future also cruise missiles designed to attack land targets.25 At the same time, the 25th Luyang III destroyer (Type 052D) with a displacement of 7,500 tons with 64 VLS was also launched. It, like the Type 055, is capable of carrying a wide range of cruise missiles, anti-aircraft missiles and anti-submarine missiles. By the end of 2021, 19 of these ships had entered service,26 while several more are thought to be under construction.27 In 2021, the Chinese Navy received its 32nd Jiangkai II (Type 054A) frigate, which has about 4,000 tons of displacement and 32 VLS.28 China’s entire surface fleet is completed by 72 Type 056A corvettes, all of which have already entered service.29 Thus, in terms of modernizing China’s surface forces, the navy’s progress is impressive. It is worth noting that in pre-pandemic 2019 alone, Chinese shipyards launched 10 cruisers and destroyers.

In terms of submarines, 4 nuclear-powered intercontinental ballistic missile carriers (SSBN) of the Jin type (Type 094, armed with 12 JL-2 missiles with a range of 7400 km) and 6 nuclear-powered attack submarines (SSN) Shang I and Shang II (Type 093/093A) were recently joined by 2 more SSBNs30 (Type 094A). Probably same number of SSNs (Type 093B) will enhance the PRC navy as well.31 According to

23 Franz-Stefan Gady, "China Launches 2 Type 055 Destroyers Simultaneously," The Diplomat, 4/7/2018, accessed on 22/11/2023, at: https://tinyurl.com/2cwbd5xs
24 Annual Report to Congress, p. 53.
26 Ibid., 52.
28 Andrew Tate, "China launches 32nd Type 054A frigate for PLAN," Janes, 12/10/2021, accessed on 22/11/2023, at: https://tinyurl.com/2244wwx4w
the Ministry of Defence, China is also launching work on a new type of ballistic missile submarine (Type 096), which would additionally increase the number of such ships in the Chinese navy.\(^\text{32}\) The PRC is also thought of working on new generation SSNs (Type 095), capable of firing advanced anti-ship missiles. However, the Chinese ships still in service also have extensive anti-surface warfare capabilities, as 8 of China’s 10 Kilo-class submarines are armed with Russian SS-N-27 cruise missiles (with a range of over 200km), while China’s Song, Yuan and Shang submarines will be equipped with China’s latest YJ-18 anti-ship cruise missiles (which are most likely a copy of the SS-N-27). In the future, Chinese submarines, like surface ships, are also likely to acquire a broader capability to strike land targets with cruise missiles.\(^\text{33}\)

### Table 2
Selected classes and types of ships being introduced into the Chinese People’s Liberation Army Navy

<table>
<thead>
<tr>
<th>Ship classes/types</th>
<th>In service</th>
<th>Pending acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Carriers</td>
<td>2</td>
<td>1 (entry into service 2024)</td>
</tr>
<tr>
<td>Landing helicopter assault ship Yushen (Type O75)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Amphibious transport dock Yuzhao (Type 071)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>SSBN Jin</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>SSN Shang</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Cruiser Type 055</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Destroyers Type 054D</td>
<td>approx. 25</td>
<td>approx.. 5</td>
</tr>
<tr>
<td>Frigates Type 054A</td>
<td>approx.. 30</td>
<td>approx.. 3</td>
</tr>
<tr>
<td>Corvettes Type 056</td>
<td>72</td>
<td></td>
</tr>
</tbody>
</table>

Source: own work.

\(^{32}\) Annual Report to Congress, p. 96.  
\(^{33}\) Ibid., pp. 33 - 54.
3. Air Force

With approximately 2,500 aircraft, the PLA Air Force has been behind and dependent on foreign suppliers for many years, but on a technological front it is rapidly catching up with both Russia and Western countries. The Chinese air force is expected to have both defensive and offensive capabilities, including long-range power projection capabilities.\(^{34}\)

Today, the Chinese air force is equipped with more than 500 fighters, more than 800 multirole fighters and about 120 bombers. Of these, however, around 400 are still J-7 fishbeds and J-8 finbacks, Chinese copies of the MiG-21, a Soviet machine introduced into service in the 1950s that stands no chance of winning an air battle with any current Western design. A further 130 fighters are relatively modern, although still inferior to Western fighters, the Su-27 Flanker and their Chinese J-11 copies.

In 2015, China decided to purchase 24 modern Russian Su-35 fighters to strengthen its fleet of multirole fighters based Russian Su-30MKKs and indigenous Chengdu J-10s, Shenyang J-11Bs and more advanced Shenyang J-16s, but only the wider introduction of the 5th generation J-20 aircraft can more clearly change the picture of Chinese fighter aviation. The same is true of bomber units based on Chinese developmental versions of Soviet Tu-16 bombers (produced by the Chinese aerospace industry under the designation H-6).\(^{35}\)

Nevertheless, it is important to note the systematic increase in the technical sophistication of the Chinese aircraft fleet. Currently, about 800 of China’s 1,800 fighters (both air superiority and multirole) can be classified as 4th generation aircraft. In terms of 5th generation aircraft, J-20 machines are being introduced to air force units and work is underway on the smaller J-31 for export purposes or as a naval fighter for future Chinese aircraft carriers.\(^{36}\)

On the other hand, regardless of the age of Chinese bombers, the PLAAF seeks to maintain and enhance the high operational readiness of the machines. China has deployed significant numbers of upgraded H-6K bombers capable of carrying 6 cruise missiles. The H-6J version, which is the maritime equivalent of the K version, carrying 6 YJ-12 long-range anti-ship cruise missiles, has also been deployed. In 2019, another version of the bomber, the H-6N, better prepared for long-range attacks, was unveiled. Its modified fuselage will allow it to externally carry drones or air-launched ballistic missiles (ALBMs), including those with nuclear warheads. The N version also has air refuelling capability which significantly increases its range compared to other development versions of the bomber. China has also announced work on building a completely new generation stealth bomber, H-20, but its development will probably take several years.\(^{37}\)

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\(^{34}\) Ibid., 59.
\(^{35}\) The Military Balance 2021, p. 255.
\(^{36}\) Annual Report to Congress, pp. 59 - 60.
\(^{37}\) Ibid., p. 60.
Beijing is also developing a whole range of new capabilities. In 2019, the communication jamming aircraft Y-9 (GX-11) was presented. In turn, in terms of air refuelling capabilities, the existing H-6U and Ukrainian Il-78 aircraft are to be supported by the new version of the Y-20 heavy transport aircraft intended for this purpose. Work on the implementation of the most advanced Chinese early warning aircraft KJ-500, which joined the earlier KJ-2000 and KJ-200 machines, is progressing rapidly. Finally, new Y-20 aircraft are delivered to aviation, strengthening strategic transport capabilities previously based on the Russian Il-76 aircraft.\(^{38}\)

In the area of unmanned aerial vehicle (UAV) technology, China is developing and bringing into service a range of advanced, often US-modelled, and weapon-carrying MALE (medium-altitude long-endurance) and HALE (high-altitude long-endurance) drones such as, but not limited to: CASC Caihong CH-4 and CH-5, CAIG Yilong (WingLoong) family, Tengoen TW328, CAIG Xianglong, SYAC Shendiao or AVIC Yunying, while Harbin BZK-005 is being upgraded. Futuristic UAVs with limited radar visibility are also being developed, such as CASC CH-7, CASIC Tianying, GAIC Yaoying-III, AVIC Anjian and Lijian, among others.\(^{39}\)

China, according to the Ministry of Defence, has one of the world's most sophisticated air defence systems based on Russian S-300 long-range anti-aircraft sets and their Chinese copies, the HQ-9s. China has also purchased new sets of the more advanced S-400 complex from Russia and is developing HQ-9 systems into the HQ-9B version, as well as the ballistic missile-capable HQ-19.\(^{40}\) In February 2021, China announced a successful mid-course ballistic missile intercept test. This was to be the fifth such test since 2010.\(^{41}\) The Dong Neng-3 system, which also has anti-satellite capabilities, was probably tested during the trial.

### 4. Missile Force

The Chinese Missile Forces, as an independent branch of the armed forces, were established only in 2015, as a result of the transformation of the 2nd Artillery Corps. Nevertheless, they occupy a very important place in the defence strategy, which is also evidenced by the great emphasis on their modernization and expansion of capabilities in terms of both ballistic and cruise missiles equipped with conventional and nuclear warheads.

China has introduced DF-31/DF-31A (CSS-10 Mod 1/2) solid-propellant missiles in addition to the existing DF-5A/DF-5B (Chinese: Dong Feng-5, NATO: CSS-4 Mod 2/3) and DF-4 (CSS-3) Intercontinental Ballistic Missile (ICBM) systems. Further versions of existing missiles (DF-5C, DF-31B) are also likely to be developed, as well as a new road-mobile multi-warhead DF-41 missile (CSS-20). According

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\(^{38}\) Ibid., p. 61.

\(^{39}\) "Is China at the Forefront of Drone Technology?", CSIS, accessed on 22/11/2023, at: https://tinyurl.com/yrusvju2

\(^{40}\) Annual Report to Congress, p. 61.

\(^{41}\) Liu Xuanzun, "China conducts mid-course antiballistic missile test, system 'becomes more mature, reliable'," Global Times, 4/2/2021, accessed on 1/2/2023, at: https://tinyurl.com/jurf3v8
to estimates by the US Ministry of Defence China has about 300 intercontinental ballistic missiles capable of hitting US territory and systemically increase this number.\(^\text{42}\)

From the perspective of China’s neighbours, however, more important are Short Range Ballistic Missiles (SRBM), including the DF-11 (CSS-7, range of some 600 km), DF-15 (CSS-6, range of some 725 - 850 km) and the more modern DF-16 (CSS-11), with a range of over 700 km. China is also developing a family of medium range ballistic missiles (MRBM), which includes the DF-21 (CSS-5, range of some 1,500 km) and hypersonic glide vehicle capable DF-17 (1700 km range) as well as intermediate range ballistic missiles (IRBM) like the DF-26 (range of some 4,000 km). This is complemented by ground-launched cruise missiles (GLCM), the DH-10 (CJ-10) and DF-100 (CJ-100) with a range of 1,500 km and 2000 km respectively.\(^\text{43}\) China is also intensively testing hypersonic weapons (e.g., Xingkong-2 missiles).

### 5. Strategic Support Force

The newest branch of China’s armed forces, the Strategic Support Force is responsible for the space, cyberspace, and electronic and psychological warfare domains. Its creation in 2016 is part of the PLA’s stated goal of “informatization”, reflecting the growing importance of information and electromagnetic domain dominance on the modern battlefield. The Strategic Support Force oversees two departments – the Space Systems Department responsible for space operations (including, among other things, surveillance of Chinese satellites and satellite information processing) and the Network Systems Department overseeing operations in the information sphere, including electromagnetic warfare, cyber warfare, and psychological operations (also known as psych ops).

### 6. Prospects

As mentioned, the modernization of the PLA is part of the PRC’s broader political goals expressed in the slogans of “the great rejuvenation of the Chinese nation” and making China a “flourishing socialist superpower”, which seem to reflect Chinese aspirations of becoming the world’s greatest power by the mid-21st century. The high pace of modernization efforts can therefore be expected to be, at the least, sustained. Furthermore, China is now moving beyond the vision of a military force focused on defending its own territory – and at most on effective engagement in local conflicts, primarily in the Taiwan Strait – towards building a capabilities to project power on a global scale. The intensive expansion and modernization of China’s blue-water navy, including the construction of aircraft carriers, landing-dock ships, long-range bombers, and naval infantry units, is intended to serve this purpose.

\(^{42}\) Annual Report to Congress, pp. 64 - 65.

\(^{43}\) Ibid.
However, the modernization needs of the Chinese armed forces are still enormous, and much of the equipment used in the Chinese army represents the Soviet technology of the 1960s and 1970s and in no way meets the requirements of the modern battlefield, which is particularly evident in the case of armoured and mechanized units and fighter and attack aviation. China's modernization plans also seem to be experiencing delays, which can be seen, for example, in the successive announcements of the completion of the mechanization process of the ground forces. It is also difficult to make a realistic assessment of the actual capabilities of the "state-of-the-art" solutions introduced by China, such as the J-20 fighters, but taking into account the experience of the Russian Federation (which still has a much more advanced aerospace industry than China), it is difficult to expect that these systems will soon be able to match US solutions. The road to "world-class armed forces" for China seems to be a long one.

External Perception and Regional Implications

There is no doubt that China's neighbours and the US, which remains a guarantor of East Asia security, consider the PRC's armed forces modernization process as at least a challenge. It is noticeable that the 2049 military modernization goal overlaps with the wider political goal of a "great rejuvenation of the Chinese nation", which according to the US Ministry of Defence's report to Congress, or Military and Security Developments Involving the People's Republic of China in 2021, is aimed at pursuing "political, social and military modernity to expand the PRC's national power, perfects its governance and revise the international order in support of Beijing's system of governance and national interests." The Chinese strategy is also expected to embrace deliberate and consistent efforts to accumulate and strengthen national power, which will give the PRC a "leading position" in the international system. The "great rejuvenation" is also interpreted to include, among other things, the reunification of all Chinese lands, which is primarily the incorporation of Taiwan into the PRC. As the Chinese leadership considers the US trying to contain China's rise as one of the most serious external obstacles in implementing this strategy, the PLA seems to be the important tool to achieve abovementioned goals.

The new edition of the Ministry of Defence's report to Congress also reported that "The PLA's evolving capabilities and concept continue to strengthen the PRC's ability to "fight and win wars" against a "strong enemy" (a euphemism likely for US), counter an intervention by a third country in conflict along the PRC's periphery, and project power globally."

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44 The "great rejuvenation of the Chinese nation" is officially defined as a state in which the PRC is "prosperous, strong, democratic, culturally advanced, harmonious and beautiful." Annual Report to Congress, p. 2.
46 Ibid., p. 2.
49 Ibid., p. VI.
It also seems that the rapid Chinese military capabilities development is especially concerning for the countries involved in territorial disputes with China like Japan, India or Vietnam, in addition to Taiwan, to which the PRC has traditionally made claim.

China-Japan relations have been haunted for decades by historical issues connected mainly to Japanese imperialism and the World War II. Conducted responsibly during the Cold War and two following decades the relations deteriorated at the turn of 2010s against the background of territorial claims of Beijing towards Senkaku/Diaoyu being under the Tokyo's effective control. This may be considered as a turning point after which Japan has started to put more focus on China's power development and rising military capabilities, as Tokyo seems to be afraid that the PRC's leadership may use them to settle the territorial disputes and support further territorial claims to which Senkaku/Diaoyu may be only an introduction.  

This interpretation seems to be confirmed by official documents and statements by Japanese politicians. While Japanese strategic documents and defence white papers from the 1990s and the first decade of the 21st century referred to China to a lesser extent, or referred to "key relations" with Beijing, after the Diaoyu/Senkaku dispute flared up, problems in relations with China became the focal point of official documents. As an example, the first Japanese defence white paper published in 2013 after the intensification of Diaoyu/Senkaku dispute claimed that "China has been engaging in extensive, rapid modernization of its military forces, backed by continual substantial increases in its defence budget. China has not clarified the current status and future vision of its military modernization initiatives, while its decision-making process in military and security affairs is not sufficiently transparent: Hence, this could potentially lead to a sense of distrust and misunderstanding by other countries." China's actions in the waters and airspace surrounding Japan, including violations of Japanese territorial waters and airspace, combined with – as the document states – "the lack of transparency in its military affairs and security issues, are a matter of concern for the region and the international community, including Japan." Similar assessment of the PRC policy was maintained in subsequent Japanese white papers and strategic documents, including its first-ever National Security Strategy published in December 2013.

The 2014 Japanese defence white paper added however that "China is enhancing its asymmetric military capabilities to deter military forces of other countries from approaching and advancing in China's surrounding region, and to inhibit their military activities in the region (so-called "anti-access/area denial" ["A2/AD"] capabilities)."

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50 Additional tension was brought by an article written by two Chinese scientists, Zhang Haipeng Li Guoqiang, in May 2013 in the Chinese Communist Party newspaper, People's Daily, challenging Japan's rights over the entire archipelago Ryukyu and Okinawa. The same position was expressed by Chinese general Luo Yuan in an interview with the Chinese state news agency CNS. It is significant that the Chinese authorities have not taken a clear position on whether there are Chinese claims to these territories. "China lays claim to Okinawa as territory dispute with Japan escalates," The Guardian, 15/5/2013, accessed on 22/11/2023, at: https://tinyurl.com/km7fuz9y


52 Ibid., 32.

The second most important Japanese document in the field of security, next to the National Security Strategy, or The National Defense Program Guidelines for FY 2019 and beyond from December 2018, noted that "China has engaged in broad, rapid improvement of its military power in qualitative and quantitative terms with focus on nuclear, missile, naval and air forces. In so doing, China attaches importance to ensuring superiority in new domains: it is rapidly advancing capabilities in cyber and electromagnetic domains with which to disrupt opponent's command and control; and continues to enhance space domain capabilities through developing and experimenting anti-satellite weapons. China is also improving missile defense penetration capabilities and amphibious landing capabilities. Such capability enhancement serves to improve the so-called Anti-Access/Area Denial ("A2/AD") capabilities."

Moreover, the newest National Security Strategy adopted in December 2022 by Fumio Kishida's government touches upon the PRC military modernization and indicates that "Under these national goals ['the great rejuvenation of the Chinese nation' and 'building China into a great modern socialist country,'] China has been increasing its defense expenditures at a continuously high level and extensively and rapidly enhancing its military power, including its nuclear and missile capabilities, without sufficient transparency."

The words in Japan's strategic documents are followed by deeds. In late January 2013, the Japanese government approved the first increase in the defence budget in eleven years. The reasons for the increase were mentioned in the budget description itself, which indicated, next to the threat from North Korea, increased Chinese activity in the airspace and waters around Japan, including violations of Japanese territorial waters and airspace.

Since this time Japanese defence spending has been steadily increasing. In the 2014 fiscal year, the military budget was increased by 3 percent compared to the previous year, the highest such increase in 22 years. Subsequent Japanese defence budgets continued this upward trend. The Kishida government clearly increased the defence budget, which in the fiscal year 2021 – for the first time since 1960 – exceeded the equivalent of 1 percent of previous year's GDP. The budget for the fiscal year 2022 and the draft budget for the following year exceeded this symbolic limit, as the government's goal is to reach GDP 2 percent for defence in 2027.

The Japanese government has been also qualitatively strengthening its Self-Defence Forces. In early July 2013, the Japanese press reported for the first time the planned purchase of two more Aegis-equipped destroyers that entered to the service in 2020 / 21 and together with the four previous ships and two ships converted to the system, brought their fleet to eight. In 2013 also the new helicopter carrier Izumo was launched, that was the largest Japanese warship built since the end of World War II. Although it is classified as a helicopter destroyer in the Japanese classification, in 2018, a decision was made to adapt it to accept F35B short take-off multi-role aircraft, making it, in reality, an aircraft carrier. Several months earlier, in March 2017, the second Izumo-class ship, JS Kaga, entered service.

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Japan also significantly strengthened its combat aviation, deciding to purchase a total of 147 multi-role F35 multi-role aircraft with a low radar cross-section (stealth) in the standard version – A (105 machines) and the short take-off/vertical landing version – B (42 machines).

Among China's biggest neighbours the PLA modernization seems to be a challenge also for India, given its longstanding border dispute with the PRC, while Beijing is additionally the closest ally of New Delhi's archenemy – Pakistan. The 2014 report of India's Ministry of Defence emphasized that the unresolved border conflict between India and China is the main factor in India's strategic calculations, while the 2016 report assessed in terms of the PRC military modernization: "China initiated significant restructuring of the People's Liberation Army, aimed at stronger control by the Party and to usher in jointness to enable mobile operations, multidimensional offense and defence, offshore waters defence and open seas protection, as well as build its airspace as well as nuclear and conventional missiles capabilities."

In recent years, India has launched massive programs to acquire modern weapons to replace obsolete Soviet systems. India continues to develop nuclear forces, especially means of delivery, including intermediate range (IRBM - Agni III, Agni IV) and intercontinental range (ICBM - Agni V) missiles. Currently, the army's priority is anti-aircraft systems, artillery systems and armoured vehicles, including nearly 500 new Main Battle Tanks in the process of delivery. The air force is concentrating on the acquisition of the Multi Role Tanker Transport aircraft A-330. India also purchased 36 modern French Rafale fighters, while additional fighters in maritime version are expected to be procured. Finally, New Delhi started the process of building a new aircraft carrier, which entered service in 2022, while conceptual work to build another one is underway. Moreover, India's navy was strengthened in the last decade by several surface combatants, including 3 destroyers and 6 frigates. Indian defence spending also constantly grows, from approximately USD 40 billion in 2007, it increased to USD 55 billion in 2012, reaching approximately USD 73 billion (constant 2021 USD) in 2021.

In the case of India, of course, it is difficult to say unequivocally to what extent the development of the armed forces is a response to the growing China's military potential, as Pakistan remains priority for the India's Armed Forces. However, building capabilities such as new conventional submarines and aircraft carriers is probably not the answer to the potential of Pakistan's small fleet. Vietnam is another neighbour of China particularly concerned by the PRC military build-up and rising assertiveness, also having had uneasy historic experiences with China and unresolved territorial disputes in the South China Sea.

With rapid economic growth, Vietnam's defence spending is also increasing, and significant efforts are being made to equip the navy and air force so that they are able to deter China from further

57 "SIPRI Military Expenditure Database," SIPRI, accessed 11/2/2023, at: https://tinyurl.com/bdreyrrp
activity in the Spratly Islands. While Vietnam alone cannot counter China's military might, some of the capabilities Vietnam is acquiring may make operational planning much more difficult for Chinese commanders. This applies, for example, to the 6 Kilo submarines and Su-30MK2 aircraft ordered in 2009. Vietnam is also increasingly turning towards Western countries – Hanoi seriously considered ordering Frigate Sigma from the Netherlands. There was also information about Vietnam's willingness to purchase modern Western fighter aircraft. This purchase may be facilitated by the Obama administration's complete lifting of the embargo on deliveries of "lethal weapons" to Vietnam. Acquiring new capabilities is supported by rapidly growing expenses for defence. While in 2008 they amounted to USD 2.9 billion, in 2018 they increased almost to USD 5.7 billion (constant 2021 USD).

China's rising military might not only prompts its neighbours to develop military capabilities, but also cooperate defensively each other and in different configurations with the US and other countries like Australia or United Kingdom.

Japan for example has revived and strengthened its military alliance with the US and developed trilateral military cooperation with the US and South Korea, the US, India and Australia (the so-called Quad), as well as bilateral security cooperation with India, Australia, Vietnam and the Philippines. In addition to the rapidly developing strategic partnership with Washington, enriched with further components in the defence sphere, India also cooperates in Quad format with Australia, Japan, and the US, as well as Japan itself. Vietnam is developing relations with the United States, until recently its adversary, to balance the power of China. Hanoi's relationship with Tokyo is also developing rapidly as well. Notably, the newest security cooperation framework in Indo Pacific or AUKUS between the US, Australia, and the UK, is aimed at providing Australia with new nuclear-powered attack submarines (SSN), but it is likely that this format will expand into new areas in the future.

**Conclusion**

In October 2020, the Fifth Plenum of the 19th Central Committee of the Chinese Party Committee announced the acceleration of the reform and modernization process of the PLA to become a modern armed force for the centennial of its establishment in 2027. This is another modernization goal already set for the Chinese armed forces in recent years. The modernization of the PLA is part of the PRC's broader political goals expressed in the slogans of "the great rejuvenation of the Chinese nation" and making China a "flourishing socialist superpower," which seem to reflect China's aspirations to become the world's largest power by the mid-21st century. In addition to its current modernization priorities (participation in a potential conflict in the Taiwan Strait), China is developing its global power projection capabilities. This is to be achieved through the intensive expansion and modernization of China's blue-water navy, including the construction of aircraft carriers and landing-dock ships, long-range bombers and infantry units.
Despite the great ambitions and technological capabilities of China’s arms industry, China seems to have difficulty acquiring and bringing new platforms into the line, which of course is also due to its size and enormous needs. The modernization deficiencies in the PLA are still enormous and much of the equipment used in the Chinese military represents Soviet technology of the 1960s and 1970s, in no way meeting the requirements of the modern battlefield, which is particularly evident in the areas of armoured and mechanized units and fighter and strike aviation.

The growth of China’s power and assertiveness is one of the most important factors influencing the security environment in the Asia-Pacific region, and it determines the behaviour of the US, protecting its position in the Indo Pacific, and other countries in the region. Some of the countries due to historical experience or open territorial conflicts with China are afraid of an increase of in PRC military might. This is particularly true of Japan, India, and Vietnam, which are building their own military potential and developing military cooperation with partners that share similar perceptions of China. Consequently, in the years to come, the Indo Pacific region may see a high speed arms race between the PRC and other regional powers, as the US, Japan, Vietnam, and the emergence of formal or informal regional alliances aimed at counterbalancing China. The situation in the region will thus only create greater challenges for global stability.
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References


