

**Testimony Prepared for the US-China Economic and Security Review Commission
Hearing on “China’s Military Diplomacy and Overseas Security Activities”**

Panel III: China’s Foreign Military Sales and Technological Acquisition

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Introduction

Commissioners, thank you for the invitation to discuss the People’s Republic of China’s foreign military sales. The views expressed today are strictly my own and I will only be addressing a subset of the questions posed. My written remarks provide additional details, sources, and graphics for the supplementary questions not formally addressed in my oral remarks.

I begin by summarizing the two main judgements of my testimony. First, the PRC defense industrial base is diverse, complicated, and evolving. Second, China’s foreign military sales are becoming more diversified geographically, but PRC defense relationships differ depending upon the specifics of the host nation and numerous historic factors.

Because of these trends, the organizations and corporations that build and sell military equipment are not easily generalizable. Although I will be discussing broad trends, for any one company or industry, the empirical reality may differ. Thus, in my recommendations, I encourage policymakers and scholars to continually update their assumptions and empirical analysis.

PRC Arms Markets: Recipient Countries and Equipment Types

The first question posed to me by the Commission was, “What are the arms and equipment markets in which China excels?”

To answer this question, it is necessary to provide some historical context. The PRC has shifted from a “supplier of last resort,” as described by researchers in the early 2000s,¹ to an affordable choice for aircraft and ships. In the 1990s and 2000s, the PRC primarily exported missiles and ground-based platforms, such as tanks and artillery, often to countries that could not obtain such defense articles elsewhere. Over time, the PRC defense industry has been able to upgrade the quality of its arms exports to be more competitive against other suppliers.

¹ Evan S. Medeiros and Bates Gill, *Chinese Arms Exports: Policy, Players, and Process*, Strategic Studies Institute, 2000, <https://press.armywarcollege.edu/monographs/132/>.

Separately, the PRC has expanded the range of countries that it sells weapons to globally. In the decade prior to 2020, the PRC sold arms to over 50 different countries worldwide.² Using the Stockholm International Peace Research Institute's *Arms Transfers Database*, we see that in 2020 and 2021, the PRC sold weapons and equipment to at least 20 countries including buyers in Asia, Africa, and the Middle East.³ Consistent with historical patterns, Pakistan remains China's largest client of arms purchases by a wide margin.⁴

Drivers

The second question posed relates to the drivers and authorities behind PRC arms sales. I will address these two issues separately.

For China's arms sales there are supply- and demand-side factors. As the People's Liberation Army (PLA) has modernized, there is now a larger inventory of platforms available for export from defense industry state-owned enterprises (SOEs). (Defense-affiliated SOEs prioritize sales to the PLA and are also responsible for coordinating arms exports.) For example, Aviation Industry Corporation of China (AVIC) is now selling a wide variety of remotely-piloted vehicles for export.⁵ Recent aircraft sales include Wing Loong UAVs, transport aircraft (Y-12), helicopters, and combat aircraft trainers.⁶

Shipbuilding is likely to remain an area of growth. Countries such as Pakistan and Bangladesh have purchased naval ships including corvettes, patrol craft, and submarines. China had traditionally provided the hulls and ships to its recipients, but "Chinese shipbuilders are increasingly providing radar, propulsion, and weapons capabilities for these vessels," according to market analysis from Janes.⁷

In terms of demand-side drivers, arms affordability remains the most important determinant of PRC military sales. Buying older variants of weapons systems is often more realistic for middle-

² Michael Raska and Richard A. Bitzinger, "Strategic Contours of China's Arms Transfers," *Strategic Studies Quarterly* 14, no. 1 (Spring 2020), <https://www.jstor.org/stable/10.2307/26891885>; Stockholm International Peace Research Institute (SIPRI), SIPRI Arms Transfer Database.

³ SIPRI, https://armstrade.sipri.org/armstrade/html/export_values.php, data for 2020-21 generated on January 9, 2023. See Table 1 in the Appendix for the list of top 20 country recipients.

⁴ Ibid. The top four recipients of PRC arms exports, according to SIPRI for 2020-21, are Nigeria, Saudi Arabia, Malaysia, and Angola.

⁵ Janes, *China Market Report: Exports*, July 17, 2020.

⁶ Stockholm International Peace Research Institute (SIPRI), *Arms Transfer Database*, data generated on March 9, 2020, July 7, 2020, and January 18, 2023, <http://www.sipri.org/databases/armstransfers/>. A graphic depicting arms sales by platform is provided in Figure 2 of the Appendix; this graphic is based on the data generated on January 18, 2023.

⁷ Janes, *China Market Report: Exports*.

and lower-income countries where price is the key constraint.⁸ Under Mao, the PRC did not sell arms to developing countries, preferring instead to use arms as part of military aid.⁹ Military aid is less prominent today than during the Mao era, but flexible financing structures for arms packages are now used to help make packages more affordable.¹⁰

Authorities

In terms of the authorities for PRC arms sales and export controls, I think this is one area that needs to be monitored closely as US-China technological competition intensifies.

In October 2020, the PRC government officially released an updated version of its Export Control Law.¹¹ In that law, there are provisions that could facilitate arms control, but the law also includes legal authority to take retaliatory measures against countries that “abuse export control measures to endanger the national security and national interests” of the PRC.¹²

This clause is reflective of US-PRC tension that has grown since 2018. In Xi Jinping’s report to the 20th Party Congress, held in October 2022, the report states that “Mechanisms for countering foreign sanctions, interference, and long-arm jurisdiction will be strengthened.”¹³ Consistent with these comments, the PRC has created regulations such as the PRC Ministry of Commerce Order #1, Rules on Counteracting Unjustified Extra-Territorial Application of Foreign Legislation, and the PRC Ministry of Commerce Order #4, Provisions of the Unreliable Entity List, both of which are meant to enable retaliatory sanctions for any actions imposed on PRC companies.

Recommendations

The overall size of PRC defense exports has remained relatively steady at about 5 percent of global arms sales. This is considerably less than larger suppliers, such as the US, Russia, and France.¹⁴ However, the PRC has been willing to sell particular platforms, such as armed drones, to countries that are unable to purchase those items due to export restrictions from other suppliers.

⁸ China’s ships sales to Bangladesh have included at least eight second-hand items, such as the Jiangwei frigates (Type 053). Stockholm International Peace Research Institute (SIPRI), *SIPRI Arms Transfer Database*.

⁹ Luo Zhifan, “Intrastate Dynamics in the Context of Hegemonic Decline: A Case Study of China's Arms Transfer Regime,” *Journal of World-Systems Research* 23, no. 1 (2017): 36-61.

¹⁰ US Department of Defense, *Military and Security Developments Involving the People's Republic of China: Annual Report to Congress*, 2021.

¹¹ Standing Committee of the National People’s Congress [PRC], 中华人民共和国过出口管制法 [PRC Export Control Law], Oct. 17, 2020, <http://www.npc.gov.cn/npc/c30834/202010/cf4e0455f6424a38b5aacf8001712c43.shtml>.

¹² PRC Export Control Law, Article 48.

¹³ Xi Jinping, *Hold High the Great Banner of Socialism with Chinese Characteristics and Strive in Unity to Build a Modern Socialist Country in All Respects*, Oct. 16, 2022, p. 46.

¹⁴ SIPRI, *SIPRI Arms Transfers Database*, “TIV of arms exports from the top 10 largest exporters, 2010-2021, SIPRI TIV expressed in millions, data generated on Jan. 13, 2023, https://armstrade.sipri.org/armstrade/html/export_toplist.php.

Given the number of firms in the defense industrial base, PRC market share could increase as PRC companies look for opportunities to increase revenue. Continued research on industry conglomerates, SOEs, and their subsidiaries is thus necessary.¹⁵ I would add that my co-panelist has done excellent work in this area.¹⁶

Second, policymakers need to understand the PRC's innovation-driven development strategy and how that relates to military-civil fusion or MCF. MCF encourages PLA technology to move to the commercial sector, which is happening with aircraft and ships, but there is also the question of technology flows from the commercial sector into the military.

As the PLA attempts to incorporate "intelligentized warfare" into its operations, we need to understand which types of artificial intelligence, machine learning, and quantum technologies are being fielded for military use and whether those applications will find their way into PRC arms exports. This requires researchers and policymakers to understand the AI ecosystem in China and how those applications can or will be scaled for military use.

There are several challenges with these types of predictions. PLA and defense industry SOEs have historically applied a top-down model of innovation. In contrast, the tech sector in China, especially in emerging fields like AI, grew from the bottom-up: commercial innovation was driven by business imperatives and cutthroat competition. As such, it remains unclear how applications created for a commercial purposes will be adapted to military use.

Conclusion

To conclude, the overarching goal of the PRC defense industrial base is to supply weapons and systems to the PLA. However, as the PLA has modernized, this has given China's state-owned enterprises an opportunity to upgrade the range of weapons available for export.

In terms of location, the largest recipients of PRC arms transfers remain in South Asia, but there are buyers worldwide. China still only represents a small share of global arms sales, but when US or European military equipment is unaffordable or restricted, then PRC defense industry firms may be able to fill those niches.

Thank you for your time and I look forward to your questions.

¹⁵ A list of the largest PRC defense industry firms is available in Table 2 of the Appendix.

¹⁶ Lucie Béraud-Sudreau and **Meia Nouwens**, "Weighing Giants: Taking Stock of the Expansion of China's Defence Industry," *Defence and Peace Economics*, <https://doi.org/10.1080/10242694.2019.1632536>.

Supplementary Questions

What do we know about the drivers and authorities behind China's arms sales? Are they predominately security-motivated, diplomatically-motivated, or economically-motivated? Which companies sell to the PLA, which sell to the international arms market, and what are these companies selling to each?

PRC defense industry companies are motivated by all of these factors, but the priority remains providing equipment to the PLA. Foreign arms sales are typically handled by a separate SOE subsidiary company or branch focused on the international market. Pakistan is a probably the best example of security, diplomacy, and economic motivations coming together in a way that is mutually reinforcing. Sales to Pakistan are diverse, wide-ranging, and a steady component of the China-Pakistan relationship. Between 2015 and 2021, China was the largest supplier of arms to Pakistan, in terms of volume, by a wide margin.¹⁷ On average, Pakistan has purchased approximately \$548 million USD worth of arms each year from China since 2009.¹⁸

The main top-level defense industry SOEs include the Aviation Industry Corporation of China (AVIC), China Aerospace Corporation (CASC), China Aerospace Science and Industry Corporation (CASIC), China State Shipbuilding Corporation (CSSC), China Shipbuilding Industry Corporation (CSIC), China North Industries Group Corporation (NORINCO), China South Industries Group Corporation (CSGC), China Electronics Technology Group Corporation (CETC), China National Nuclear Corporation (CNNC), and China General Nuclear Power (CGN). However, each of these companies has a separate subsidiary that handles foreign military sales and these large SOEs are often at the top of a complex corporate ecosystem that includes hundreds of subsidiaries, some of which produce defense articles and some which do not.¹⁹

What services does China sell alongside its equipment, such as maintenance, repair, and training packages? How do these packages compare to those offered by other major sellers, and how are they perceived internationally by perspective buyers?

In the past, the PRC had been criticized for selling military equipment and not providing training or maintenance for that equipment. However, as China's defense clients expand this aspect of PRC military sales has changed and the most concrete examples of this change is the relationship with Pakistan. In the 2010 joint statement on China and Pakistan's strategic partnership, the two countries agreed to "step up personnel training, joint exercises, training and co-operation for

¹⁷ Using SIPRI's trend indicator values (TIV), the total for this 5-year time period was approximately 2.8 billion. The next highest supplier to Pakistan was Russia, with 252 million TIV.

¹⁸ Center for Strategic and International Studies, "How dominant is China in the global arms trade?" China Power, April 26, 2018, updated May 27, 2021, <https://chinapower.csis.org/china-global-arms-trade/>.

¹⁹ Béraud-Sudreau and Nouwens, "Weighing Giants."

national defense, science and technology, and collaboration in defense production.²⁰ The Pakistan's JF-17 is the result of co-production managed through AVIC.²¹

One other example of changes to PRC arms packages is the sale of particular systems to Thailand. In 2016, Thailand selected China for its main battle tank procurement, selecting the MBT-3000, which is produced by China North Industries Corporation or NORINCO.²² After the MBT-3000 procurement, China “proposed developing a maintenance, repair, and overhaul facility . . . close to the 3rd Cavalry Division” which would operate the new tanks.²³ NORINCO has also provided armored personnel carriers (APCs) to the Royal Thai Army²⁴ and, in 2021, the Thai government confirmed that a maintenance, repair, and overhaul (MRO) facility will be run by Thailand's Defence Technology Institute (DTI) in coordination with NORINCO.²⁵

In terms of co-development, Thailand and China have worked together on a locally produced multiple rocket launcher (MRL) system. The first set of local MRL production began in 2011, and there is now a follow-on program in place for a guided MRL, named DTi-1G; the new prototypes are being developed by Thailand's state-owned Defense Technology Institute (DTI) and China National Precision Machinery Export Corporation (CPMIEC) but, according to Janes, the program has stalled.²⁶

While PRC maintenance, repair, and training packages may not be as robust as traditional exporters from the US or Europe, this is an area to monitor as PRC defense industry firms deepen their relationships in South Asia, Africa, and Latin America. In the cases examined for this testimony, maintenance and repair has primarily been the responsibility of defense SOE rather than the PLA. Future research should examine the role of the PLA in weapons sales and post-sale services to determine if this division of labor is changing.²⁷ Further analysis comparing these programs in different countries would be necessary to fully understand how PRC-host nation relationships are evolving.

²⁰ Brandon J. Kinne and Jonas B. Bunte, “Guns or Money? Defense Co-operation and Bilateral Lending as Coevolving Networks,” *British Journal of Political Science* 50 (2020): 1074, <https://doi.org/10.1017/S0007123418000030>.

²¹ “China ramps up production of JF-17 fighter jet,” *Global Times*, July 15, 2020, <https://www.globaltimes.cn/content/1194554.shtml>; Janes, “China Market Report,” July 17, 2020.

²² Janes, *Jane's Sentinel Security Assessment - Southeast Asia*, June 9, 2020.

²³ Janes, *Jane's Sentinel Security Assessment - Southeast Asia*, June 9, 2020, p. 53.

²⁴ Ibid.

²⁵ Jon Grevatt, “Thailand, China Progress plan to establish joint MRO facility,” *Jane's Defence Industry*, March 18, 2021.

²⁶ Janes, *Jane's Sentinel Security Assessment - Southeast Asia*, June 9, 2020, p. 56.

²⁷ Thanks to both Ken Allen and Phillip Saunders for discussions of the role of the PLA (or lack thereof) in PRC arms sales. More research on this topic should be done.

What are the international implications of China's approach to foreign military sales? Do China's arms sales threaten to create dependencies or undermine defense relationships with any of the United States' partners?

There are implications of China's increasing defense sales, but I think these vary greatly by region, host nation, and platform. In terms of regions, PRC defense sales remains highest in South Asia and sales in Africa and Latin America may be driven by different imperatives. Research from the Mercator Institute for China Studies indicates that in some countries in Africa, the competition for arms sales is between China and Russia.²⁸ This is a much different dynamic than, for instance, arms transfers in Europe and comprehensive regional comparisons could be explored in future research but would have to rest on significant research on individual countries to identify generalizable trends within a region or across regions.

For host nations, the question is less about dependencies or undermining defense relationships but rather the desire for countries to have options and the ability to negotiate prices. While diversification in arms purchases could make countries less vulnerable to single-source procurement, buying a variety of systems may create interoperability challenges within that force. Having multiple suppliers also gives countries options for technology that is restricted, as has been the case with the sale of armed drones. Since US and European defense manufacturers may be prohibited from selling certain types of UAVs, some countries have sought alternate suppliers as is the case with several Gulf states, including the United Arab Emirates (UAE).

Overall, arms transfers between China and the UAE remain quite low since the UAE continues to rely primarily on the US, France, and other European countries for equipment. However, as the China-UAE relationship has grown,²⁹ defense sales have become part of the relationship. The UAE agreed to purchase the Wing Loong UAV (翼龙 无人机, also known as the "Pterosaur" or "Pterodactyl" depending on the variant) in 2011, and received its first delivery in 2015.³⁰ The Wing Loong is an armed drone produced by Chengdu Aircraft Industry Group, a subsidiary of aviation giant AVIC.³¹ As of 2018, the UAE had ordered 25 Wing Loong-I and 15 Wing Loong-

²⁸ Tom Bayes, *China's growing security role in Africa: Views from West Africa, Implications for Europe*, Konrad Adenauer Stiftung and Mercator Institute for China Studies, 2020.

²⁹ Xinhua, "China, UAE pledge to boost comprehensive strategic partnership," Xinhua Online (English), July 23, 2019, http://www.xinhuanet.com/english/2019-07/23/c_138248606.htm. In 2019, China and the UAE signed a "comprehensive strategic partnership" and this was an upgrade from the "strategic partnership" that was established in 2012.

³⁰ Joseph E. Lin, "China's Weapons of Mass Consumption," *Foreign Policy*, March 20, 2015, <https://foreignpolicy.com/2015/03/20/chinas-weapons-of-mass-consumption/>; Janes, *United Arab Emirates - Market Report*, March 31, 2020.

³¹ Jeffrey Lin and P.W. Singer, "Chinese Drones Soon Flying Over Saudi Arabia," *Popular Science*, April 29, 2014, <https://www.popsoci.com/blog-network/eastern-arsenal/chinese-drones-soon-flying-over-saudi-arabia/>; Peter Wood and Robert Stewart, *China's Aviation Industry: Lumbering Forward*, 2019, <https://www.airuniversity.af.edu/CASI/Display/Article/1925704/chinas-aviation-industry-lumbering-forward/>.

II, for a total of 40 UAVs.³² In the latest arms shows, AVIC has shown newer, longer endurance variants of the Wing Loong and may now have six different variants.³³ According to SIPRI, since 2010, China has sold variants of the Wing Loong to Egypt, Kazakhstan, Pakistan, Saudi Arabia, Uzbekistan, and the UAE.³⁴

Export Control Authorities

China has gradually instituted an export control system,³⁵ and the PRC's criteria for sales is determined by a combination of political goals, foreign policy, international arms agreements, and internal decision-making. The 2020 Export Control Law lists at least eight factors that will be reviewed for the export of controlled items including:

- National security and national interests;
- International obligations and commitments;
- Type of export;
- Item sensitivity;
- Destination country;
- End users and end use;
- Credit record of the exporter;
- Other factors as provided by laws and administrative regulations.³⁶

While China has agreed to some international arms agreements, the government has been increasingly vocal in its response to US-led sanctions regimes. According to the PRC Export Control Law, the State Council and the Central Military Commission remain the key entities for approving export licenses and the law calls upon the State Council to establish an “export control

³² Stockholm International Peace Research Institute (SIPRI), *Transfers of major weapons: Deals with deliveries or orders made for 2010 to 2019*.

³³ Oishee Majumdar and Akshara Parakala, “Update – Airshow China 2022: AVIC Displays Wing Loong-3,” *Jane's Defence Weekly*, Nov. 10, 2022.

³⁴ Stockholm International Peace Research Institute (SIPRI), SIPRI Arms Transfer Database, *Transfers of major weapons: Deals with deliveries or orders made for 2010 to 2019*, September 3, 2020

³⁵ Jing-dong Yuan, Phillip C. Saunders, and Stephanie Lieggi, “Recent Developments in China's Export Controls: New Regulations and New Challenges,” *The Nonproliferation Review* Fall-Winter (2002). NPC Observer, “PRC Export Control Law,” 2020, https://www.cov.com/-/media/files/corporate/publications/file_repository/prc_export_control_law_comparison_dec_2019_to_jun_2020_ch_en.pdf.

³⁶ PRC Export Control Law, 2020. Article 13 lists these items; in the law the export control functions are known collectively as the “national export control management departments” or “state export control administration departments” depending on how you choose to translate.

coordination mechanism” but does not specify additional details about that body.³⁷ Subsequent regulations implementing the law have been published in 2022³⁸ and should be evaluated further.

Export licensing for military items is under the purview of the State Administration for Science, Technology, and Industry for National Defense (SASTIND), which is subordinate to the Ministry of Industry and Information Technology (MIIT). Within the State Council, the Ministries of Public Security, Commerce, Foreign Affairs, and the Customs Administration all play a role in granting, denying, and/or enforcing export regulations. According to the Export Control Law, local governments will also continue have a role in export control compliance³⁹ and this likely means that there could be variability on how the provisions of the law are enforced.

³⁷ PRC Export Control Law, 2020. Historically, both PRC government ministries and PLA departments maintained lists of SOEs and private companies certified to produce defense articles. The current Export Control Law does not specify whether changes have been made to that system. For background on this aspect of the PRC defense industrial base, see: Daniel Alderman, Lisa Crawford, Brian Lafferty, and Aaron Shraberg, “The Rise of Chinese Civil-Military Integration,” in *Forging China’s Military Might: A New Framework for Assessing Innovation*, edited by Tai Ming Cheung, Baltimore: Johns Hopkins University Press, 2014, p. 109-135.

³⁸ PRC SASTIND, 军品出口许可——经营权和经营范围 [Licensing for the export of military products—managerial authority and scope of operations], July 18, 2022, <http://www.sastind.gov.cn/n6195634/n6195706/n6195716/n6427863/n6428033/c6429000/content.html>.

³⁹ PRC Export Control Law, 2020. Article 15 specifies that exporters must submit “user and ultimate [end] user use certificates” (用户和最终用途证明文件) to certifying documents will be issued by national or local government agencies.

Appendix: Data Tables, Figures, and Supplementary Information

Table 1: Top 20 Recipients of PRC Arms Sales, 2020-21

Country	Total TIV of Arms Imports (2020-21)	Region	Top 20 arms recipient prior to 2020?
Pakistan	1294	South Asia	Yes
Nigeria	139	West Africa	Yes
Saudi Arabia	80	Middle East	Yes
Malaysia	52	Southeast Asia	No
Angola	42	Southern Africa	No
Bangladesh	42	South Asia	Yes
Thailand	33	Southeast Asia	Yes
Tanzania	29	East Africa	No
Djibouti	24	East Africa	No
Ethiopia	24	East Africa	No
Indonesia	19	Southeast Asia	Yes
Serbia	11	Europe	No
United Arab Emirates	11	Middle East	Yes

Sources: SIPRI Arms Transfers Database, data generated on January 18, 2023, https://armstrade.sipri.org/armstrade/html/export_values.php. Only countries with a trend indicator value (TIV) of at least 5 combined for 2020-21 are included in this list. Comparison in column four is based on the Top 20 arms recipients prior to 2020 based on SIPRI data generated on July 7, 2020, which are displayed in CNA, “China’s Defense Exports: Small Volume, But Room for Growth,” October 2021, <https://www.cna.org/quick-looks/2021/chinas-defense-exports>.

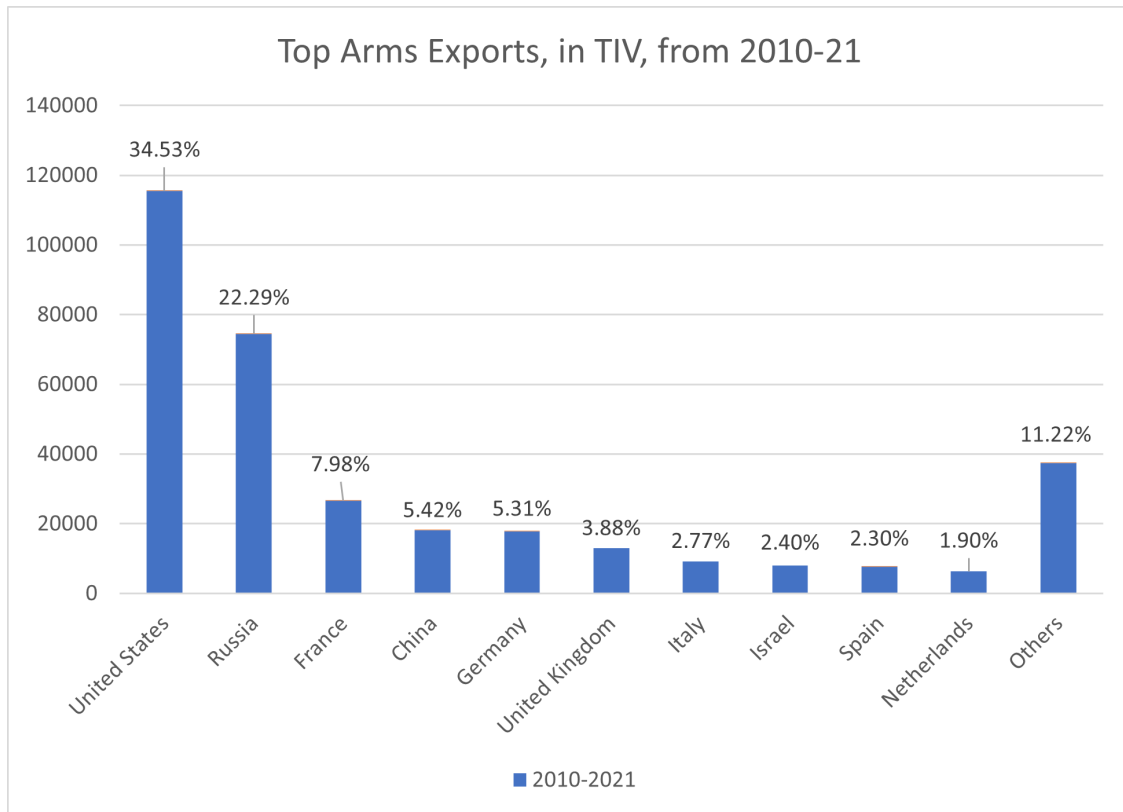
Table 2: PRC Defense Industry State-owned Enterprises (SOEs) by Sector

State-owned enterprise	Acronym (English)	Primary Sector
Aviation Industry Corporation of China	AVIC	Aviation
China Aerospace Corporation	CASC	Space
China Aerospace Science and Industry Corporation	CASIC	Space
China State Shipbuilding Corporation	CSSC	Naval / Maritime
China Shipbuilding Industry Corporation	CSIC	Naval / Maritime
China North Industries Group Corporation	NORINCO	Land / ordnance
China South Industries Group Corporation	CSGC	Land / ordnance
China Electronics Technology Group Corporation	CETC	Electronic warfare / Radars / Remote systems
China National Nuclear Corporation	CNNC	Nuclear
China General Nuclear Power	CGN	Nuclear*

Sources: Béraud-Sudreau and Nouwens, “Weighing Giants: Taking Stock of the Expansion of China's Defence Industry,” 2019; Peter Wood and Robert Stewart. *China's Aviation Industry: Lumbering Forward*, 2019, <https://www.airuniversity.af.edu/CASI/Display/Article/1925704/chinas-aviation-industry-lumbering-forward/>; Greg Levesque and Mark Stokes, *Blurred Lines: Military-Civil Fusion and the "Going Out" of China's Defense Industry*, 2016.

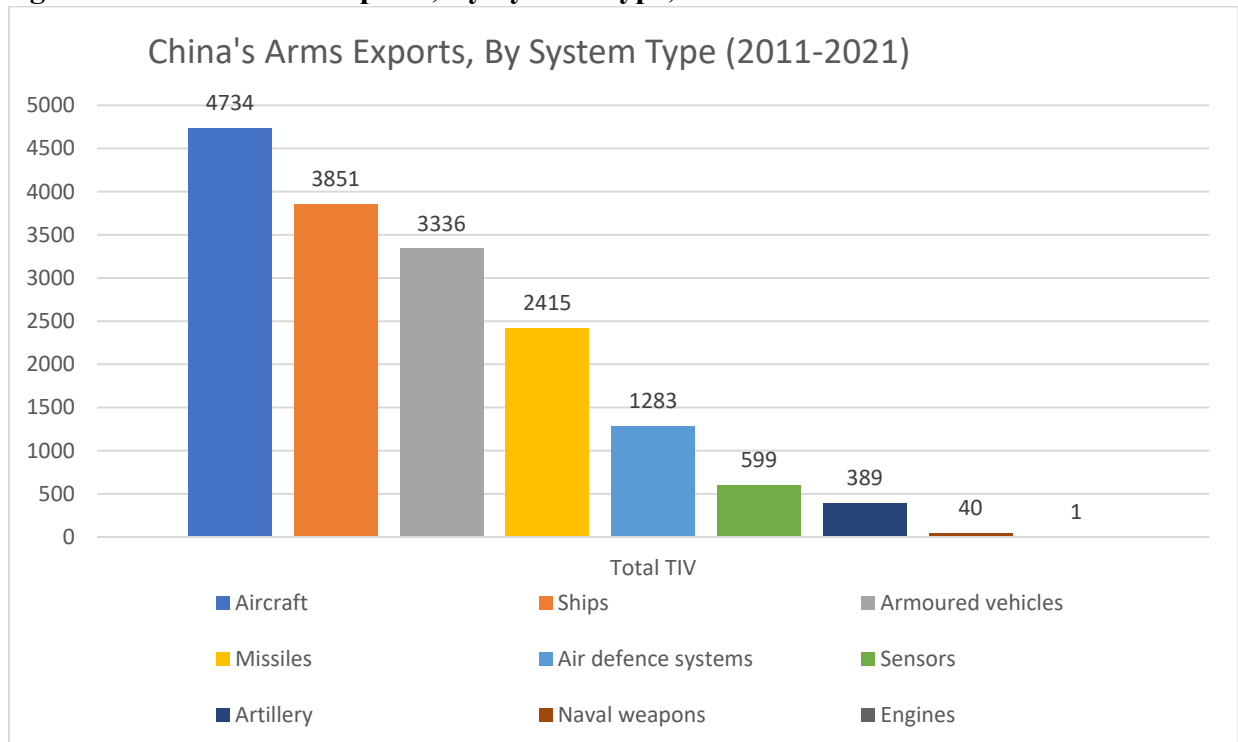
*CGN works primarily on civilian nuclear energy projects but has been identified as an entity that works with the PLA by the US government. See: US Department of Defense, “Qualifying entities prepared in response to Section 1237 of the National Defense Authorization Act for Fiscal Year 1999 (Public Law 105-261), June 12, 2020, <https://www.cotton.senate.gov/files/documents/Sen%20Cotton%20NDAA%20FY%201999%20Sec%201237%20Response%2006242020.pdf>.

Figure 1: Top Global Arms Exporters, 2011-2021



Source: SIPRI Arms Transfers Database, “TIV of arms exports from the top 10 largest exporters, 2010-2021,” figures on Y-axis are in SIPRI trend indicator values (TIV), expressed in millions. Percentages on the top of each bar represent the total share of global exports from that individual country based on SIPRI data generated on January 18, 2023, https://armstrade.sipri.org/armstrade/html/export_toplist.php.

Figure 2: PRC Defense Exports, By System Type, in Trend Indicator Values



Source: SIPRI *Arms Transfers Database*, “TIV of arms exports from the top 10 largest exporters, 2010-2021,” figures on Y-axis are in SIPRI trend indicator values (TIV), expressed in millions, with precise estimates on top of each bar based on SIPRI data generated on January 18, 2023, https://armstrade.sipri.org/armstrade/html/export_toplist.php.

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<http://www.npc.gov.cn/npc/c30834/202010/cf4e0455f6424a38b5aecf8001712c43.shtml>.
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