KAROLINA HIRD AND DANIEL SHATS, WITH KILEY PITTMAN

# THE STRENGTHENING CHINA-RUSSIA NEXUS



ISW

INSTITUTE FOR THE

STUDY OF WAR

KAROLINA HIRD AND DANIEL SHATS, WITH KILEY PITTMAN THE STRENGTHENING CHINA-RUSSIA NEXUS ADVERSARY ENTENTE

Cover: TOPSHOT – In this pool photograph distributed by the Russian state agency Sputnik, Russia's President Vladimir Putin and China's President Xi Jinping attend an official welcoming ceremony in front of the Great Hall of the People in Tiananmen Square in Beijing on May 16, 2024. (Photo by Sergei BOBYLYOV / POOL / AFP) / \*\* Editor's note: this image is distributed by Russian state owned agency Sputnik \*\* (Photo by SERGEI BOBYLYOV/POOL/AFP via Getty Images)

All rights reserved. Printed in the United States of America. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage or retrieval system, without permission in writing or from the publisher.

©2025 by the Institute for the Study of War.

Published in 2025 in the United States of America by the Institute for the Study of War.

1400 16th Street NW, Suite 515 | Washington, DC 20036 understandingwar.org

#### ABOUT THE AUTHORS

Karolina Hird is a Russia Team Deputy Lead, Analyst, and Evans Hanson Fellow at ISW. Karolina leads the Adversary Entente Task Force, focusing on the Russia-China-Iran-North Korea relationship, and also has an interest in the human rights and humanitarian implications of Russia's war in Ukraine. Her work and analysis have been featured in the New York Times, The Washington Post, TIME, Associated Press, CNN, Foreign Policy, the Kyiv Independent, Politico, the Daily Telegraph, Reuters, and others. She holds a BA in International Affairs from the George Washington University (GWU).

Daniel Shats is a Researcher on ISW's China Team and Adversary Entente Task Force. His work has focused particularly on PRC short-of-war coercion of Taiwan, maritime confrontations in the South China Sea, and the Russia-China-Iran-North Korea entente. His analysis has been cited in news media such as *The Hill, Business Insider, The Washington Post*, and *Asia Times*. He holds a Master's degree in China Studies from the Johns Hopkins University School of Advanced International Studies (SAIS).

Kiley Pittman is a National Security and Intelligence Analysis intern on the China team at the Institute for the Study of War. Kiley is pursuing her master's in Statecraft and National Security Affairs with a specialization in Intelligence from the Institute of World Politics. Kiley is a 2025 recipient of the Rumsfeld Foundation Graduate Fellowship. Kiley's research focuses include Indo-Pacific security, Chinese politics, and military advancements within the People's Liberation Army. Kiley received a B.A. in Political Science and a B.A. in Journalism from Southern Methodist University in May 2024 where she also completed minors in Chinese and International Studies.

#### ACKNOWLEDGMENTS

The authors would like to extend their deepest gratitude to the combined teams at ISW and the American Enterprise Institute's Critical Threats Project (CTP), without whom this work would be impossible. We would especially like to thank ISW President Dr. Kim Kagan for her constant support, mentorship, and guidance, and CTP Director Dr. Frederick Kagan for his analytical leadership and thorough review of this text. We are also very grateful to China Team intern Kiley Pittman for her support in the data collection and analysis for this project. We thank Lisa Suchy and the team at Suchy Design for creating the graphics and for the design and formatting of this paper, and to ISW Production Manager and Editor Christopher Solomon and the members of the ISW External Relations team for publishing and promoting this work. Finally, we are deeply grateful to the entire ISW Russia and China teams, as their worldclass analysis and subject-matter expertise formed the foundation of this project.

#### ABOUT THE INSTITUTE

ISW is a non-partisan, non-profit, public policy research organization. ISW advances an informed understanding of military affairs through reliable research, trusted analysis, and innovative education. ISW is committed to improving the nation's ability to execute military operations and respond to emerging threats in order to achieve U.S. strategic objectives.

# THE STRENGTHENING CHINA-RUSSIA NEXUS

ISW-CTP believes superior strategic insight derives from a fusion of traditional social science research and innovative technological methods. ISW and CTP recognizes that the analyst of the future must be able to process a wide variety of information, ranging from personal interviews and historical artifacts to high volume structured data. ISW and CTP thank its technology partner, Praescient Analytics, for their support in this innovative endeavor. In particular, their technology and implementation assistance has supported creating many maps and graphics.



BabelStreet: Provides the most advanced identity intelligence and risk operations platform for the world's most trusted government and commercial organizations. The AI-enabled platform helps them stay informed and improves around-the-clock decision-making. Teams are empowered to rapidly detect and collaborate on what matters in seconds by transforming massive amounts of multilingual, enterprise and publicly available data into actionable insights so they can act with confidence. Babel Street is headquartered in the US with offices near Washington, DC, and Boston, along with Tokyo, Tel Aviv, London, Canberra, and Ottawa. For more information, visit babelstreet.com.



BlackSky: BlackSky integrates a diverse set of sensors and data unparalleled in the industry to provide an unprecedented view of your world. They combine satellite imagery, social media, news and other data feeds to create timely and relevant insights. With machine learning, predictive algorithms, and natural language processing, BlackSky delivers critical geospatial insights about an area or topic of interest and synthesizes data from a wide array of sources including social media, news outlets, and radio communications.



Neo4j: Neo4j is a highly scalable native graph database that helps organizations build intelligent applications to meet evolving connected data challenges including fraud detection, tax evasion, situational awareness, real-time recommendations, master data management, network security, and information technology operations. Global organizations like MITRE, Walmart, the World Economic Forum, UBS, Cisco, HP, Adidas, and Lufthansa rely on Neo4j to harness the connections in their data.



**Ntrepid:** Ntrepid enables organizations to conduct their online activities safely. Ntrepid's NFusion leverages the company's platform and fifteen-year history protecting the national security community from their most sophisticated global opponents. From corporate identity management to secure browsing, Ntrepid products facilitate online research and data collection and eliminate the threats that come with having a workforce connected to the Internet.



Sayari: Sayari is a search company, not a traditional data vendor. They build search products that allow users to find corporate, financial, and public records in hard-target countries. Sayari products cover emerging, frontier, and offshore markets, and include corporate registries, official gazettes, litigation, vital records, customs data, and real property. They collect, structure, normalize, enrich, and index this data, often making it searchable for the very first time.



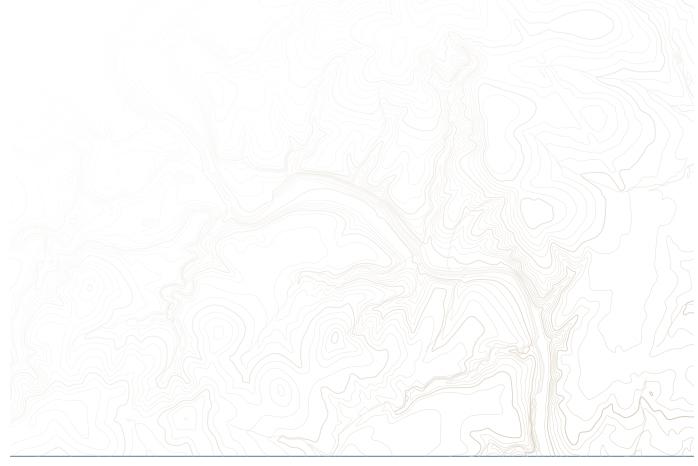
Esri: Esri is the global market leader in geographic information system (GIS) software, location intelligence, and mapping. Esri builds ArcGIS, the leading mapping and spatial analytics software for desktop, software as a service, and enterprise applications. ArcGIS is a comprehensive, scalable, and battle-tested digital mapping and analytics software that delivers location intelligence and meets digital transformation needs for organizations of all sizes.



Anomaly Six: Provides the most advanced commercially available location data and platform for the world's most trusted government and commercial organizations. Based on core data technologies, Anomaly Six helps analysts stay informed and enhances around-the-clock decision-making. Teams are empowered to rapidly detect and collaborate on what matters in seconds by transforming massive amounts of location data into actionable insights to act confidently. Anomaly Six is headquartered in the US and operates globally. For more information, visit www.anomalysix.com.

# **Table of Contents**

- 8 Executive Summary
- 9 Historical Relations Between the People's Republic of China (PRC) and Russia
- 13 Strategic Building Blocks of the Sino-Russian Nexus Since 2022
- 16 Areas of Cooperation
  - 16 Defense Industrial Base (DIB) Support
  - 19 Satellite and Space Cooperation
  - 19 Geospatial Intelligence Sharing
  - 19 Joint Military Exercises
  - 21 Russia-PRC Economic Relations
  - 23 Russia-PRC Bilateral and Multilateral Diplomacy
- 24 Implications of PRC-Russian Military Learning for Future Conflicts
- 25 Forecasts and Conclusions
  - 25 The North Korea Problem
  - 26 Prospects
- 29 Endnotes



# THE STRENGTHENING CHINA-RUSSIA NEXUS

# **Executive Summary**

The Sino-Russian relationship is closer and more interconnected in 2025 than it has ever been. The cooperation between Beijing and Moscow is a nexus—their relationship is a flexible and strategic knot of interconnections across the military, technological, economic, and political domains, and is not bounded by the structural rigidity of a formal defensive alliance. This Sino-Russian nexus has solidified against the backdrop of the war in Ukraine. Moscow and Beijing have both exploited the circumstances of the war to deepen their strategic entanglement, and it has therefore become strategically impossible to separate them at this time. The PRC's material support for the Russian war effort gives the PRC considerable influence over the outcome of the war in Ukraine. The PRC is undoubtedly watching the battlefield in Ukraine closely and observing international reactions to Russia's aggression and likely hopes to apply those military and diplomatic lessons to its future endeavors in the western Pacific, particularly in the case of an invasion of Taiwan.

Beijing and Moscow see their futures as intertwined, and US policy towards the two must reflect that reality. The idea of splitting Russia from China has always been and will always remain attractive. US President Richard Nixon's success, facilitated by Secretary of State Henry Kissinger's efforts, is often regarded as a model to be emulated. But the US-PRC rapprochement and the Sino-Soviet split occurred in the context of pre-existing severe tensions between the Soviet Union and the PRC, with the PRC looking for a way out of a desperate strategic situation facing a hostile Soviet Union. The PRC and Russian Federation today are close partners whose geopolitical ambitions are aligned in their strong opposition to the US-led global order. Any existing frictions in the relationship, even if exploitable by the United States, fall far short of the historical hostilities that precipitated the Sino-Soviet split — as a quick historical review of the relationship will show.

This paper is not a comprehensive study of all facets of the Russia-PRC relationship, historically or today. Rather, it is a general overview of the core features of the relationship and how it has evolved since Russia's invasion of Ukraine in February 2022. The paper examines key areas of Russia-PRC cooperation in relation to the war in Ukraine as well as the broader Russia-PRC economic and diplomatic relationship.

Beijing and Moscow see their futures as intertwined, and US policy towards the two must reflect that reality.

# Historical Relations Between the People's Republic of China (PRC) and Russia

The Sino-Soviet relationship in the early years of the People's Republic of China (PRC) was extremely close and, in fact, similar in many respects to the Sino-Russian relationship today. The Chinese Communist Party (CCP) and chairman Mao Zedong established the PRC in 1949 after winning a brutal civil war against the Chinese Nationalist Party, or Kuomintang (KMT), the remnants of which fled to Taiwan. The Soviet Union offered training, equipment, and other support to both parties throughout the war, wholly supporting the CCP only after it became clear that the CCP would win. Mao declared in July 1949 that China would "lean to one side" in supporting the Soviet Union and other countries in alignment with the global socialist movement.2 The Soviet Union became the first country to recognize the new Communist Chinese state after Mao declared the establishment of the PRC on October I, 1949.3

Soviet support for the PRC was crucial for the latter's legitimacy, security, economy, and technological advancement in its early years. The PRC and the Soviet Union signed the Sino-Soviet Treaty of Friendship, Alliance, and Mutual Assistance in February 1950 to solidify their relationship. The treaty obligated each country to immediately provide military and other aid to the other "by all means at its disposal" in the event of an attack by Japan or any state allied with Japan, in order to prevent a revival of Japanese imperialism. The treaty also obligated the signatories to refrain from joining alliances against each other and to develop economic relations. 4 The PRC used trade and aid from the Soviet Union to rebuild after the destruction of the Chinese civil war and Japan's invasion (1937-1945). Soviet assistance was critical to building the PRC's domestic industry and military, including the early stages of the PRC's nuclear weapons program.<sup>5</sup> The two countries were allies in supporting North Korea in the Korean War from 1950 to 1953, despite some mutual mistrust, and PRC "volunteer" forces critically intervened with Soviet air support to rescue the North Korean regime from destruction by the United States and its allies.<sup>6</sup>

Sino-Soviet relations soured within a decade, however. Mao resented Stalin for his often-condescending treatment of the PRC, but he staunchly defended Stalin's legacy against "revisionist" reforms by Stalin's successor, Nikita Khrushchev, who took over leadership of the Soviet Union upon Stalin's death in 1953. Mao's cult of personality, his style of Marxist-Leninist governance, and his economic policies closely resembled Stalin's, so in some ways Khrushchev's "de-Stalinization" of the Soviet Union was also a repudiation of Mao. Mao feared that this policy would spread within the CCP. He also believed that Khrushchev was too conciliatory toward the West. Mao's PRC thus sought to take leadership of the global Communist movement away from Khrushchev's Soviet Union. Differences in ideology and national ambitions culminated in a rupture in relations known as the Sino-Soviet Split. The two states began to openly criticize each other in official communications and international Communist meetings.7 The Soviet Union recalled all its technical specialists from the PRC and severed aid contracts in 1960, which conveniently allowed Mao to blame Khrushchev for the devastating famine that Mao's Great Leap Forward caused.8

Sino-Soviet relations in the 1960s were openly hostile. Beijing and Moscow competed for influence in the international Communist movement, and the Soviet Union dramatically increased its troop deployment along the Sino-Soviet border.9 Sino-Soviet hostility peaked in March 1969, when Chinese People's Liberation Army (PLA) troops ambushed Soviet troops on the disputed Zhenbao (Damansky) Island in the Ussuri River, which formed part of the border. This clash and several others along the border killed at least several dozen people on both sides and led the Soviet Union to contemplate a preemptive nuclear strike on the PRC. 10 The severity of the Sino-Soviet Split opened up the possibility of rapprochement between the PRC and the United States, and US President Richard Nixon met with Mao in Beijing in 1972. The United States and the PRC established diplomatic relations in 1979.11

Sino-Soviet tensions eased in the 1980s. Deng Xiaoping became the paramount (highest) leader of the PRC several years after Mao's death in 1976 and pursued dramatic economic reforms, largely removing the

UNDERSTANDINGWAR.ORG 9



# SINO-RUSSIAN RELATIONS, 1949-2022

#### 1949:

CCP wins the Chinese Civil War and founds the PRC. The Soviet Union is the first country to recognize the PRC.

#### 1969:

Sino-Soviet border conflict.

#### 1991:

Dissolution of the Soviet Union.

#### 1950-1953:

The PRC intervenes in the Korean War with Soviet air support.

#### 1979:

United States and PRC establish diplomatic relations.

#### 1950:

Sino-Soviet Treaty of Friendship, Alliance, and Mutual Assistance.

#### 1971:

PRC joins the United Nations.

#### 1996:

Sino-Russian relationship upgraded to "partnership of strategic coordination."

#### 1960:

The Sino-Soviet Split begins over ideological divisions. The USSR recalls advisers from the PRC.

#### 1989:

USSR and PRC normalize ties at Beijing summit.

# 2011: 2000: 2021: Sino-Russian relationship Vladimir Putin elected Renewal of Treaty of upgraded to "comprehensive to Russian presidency. Good Neighborliness strategic partnership." and Friendly Cooperation. 2013: 2004: Xi Jinping becomes General Secretary of the PRC and Russia resolve February 24, 2022: their border disputes. CCP and leader of PRC. Russia invades Ukraine. February 2022: 2012: 2001: PRC and Russia sign Treaty Xi and Putin meet for Beijing Putin's third term begins. of Good Neighborliness Olympics, announce that their and Friendly Cooperation. partnership has "no limits." SCO founded. 2008: 2019: Dmitry Medvedev elected Sino-Russian relationship upgraded to to Russian presidency. "comprehensive strategic partnership of coordination for the new era." © 2025 Institute for the Study of War

ideological component of the Sino-Soviet divide. Deng defined an end to Soviet support for the Vietnamese invasion of Cambodia and a withdrawal of Soviet troops from the shared border and from Afghanistan as preconditions for the normalization of Sino-Soviet relations. The two countries finally resumed diplomatic relations in May 1989, when Soviet leader Mikhail Gorbachev met Deng and CCP General Secretary Zhao Ziyang in Beijing.<sup>12</sup>

The collapse of the Soviet Union in 1991 ended the Cold War and reset the Sino-Russian relationship. The PRC and the nascent Russian Federation upgraded their relations to a "partnership of strategic coordination" in 1996 and signed confidence-building agreements together with Kazakhstan, Kyrgyzstan, and Tajikistan - collectively known as the Shanghai Five - to facilitate military cooperation and reduce military presence along their shared borders. 13 Russia and the PRC signed a Treaty of Good-Neighborliness and Friendly Cooperation in 2001, which lacked the mutual defense obligations of the 1950 treaty but nonetheless became the new linchpin of the Sino-Russian relationship. The treaty set the PRC's Five Principles of Peaceful Coexistence as the basis of the relationship, committed the two sides to resolving disputes peacefully, and laid the groundwork for bilateral cooperation in a variety of domains, including defense and counterterrorism. It also affirmed Russia's stance that Taiwan is part of the PRC.14 The two states also co-founded the Shanghai Cooperation Organization (SCO) in 2001, an organization consisting of the original Shanghai Five plus Uzbekistan, to promote regional economic and security cooperation.15

Moscow and Beijing's strategic relationship has continued to grow closer throughout the 21st century. The two resolved their remaining border disputes in 2004. They upgraded their relationship to a "comprehensive and strategic partnership of coordination" in 2011, the 10th anniversary of the 2001 treaty, then again to a "comprehensive strategic partnership of coordination for the new era" in 2019, and renewed their treaty on its 20th anniversary in 2021. Bilateral trade and cooperation grew exponentially over the same period.

Russia exported roughly \$10.1 billion worth of goods to the PRC in 2001, which grew to \$49.5 billion by 2011 and \$81.3 billion in 2021 - all inflation-adjusted to 2025 dollars. PRC exports to Russia likewise grew from \$2.9 billion to Russia in 2001 to \$68.5 billion in 2011 and \$86.1 billion in 2021, in 2025 dollars. The PRC is now Russia's largest trading partner for both imports and exports. 18 Energy has comprised the largest portion of Russia's exports to the PRC, spurred by the PRC's economic and population growth. The PRC and Russia have cooperated on several major projects that deliver energy to the PRC, including the Eastern Siberia-Pacific Ocean (ESPO) oil pipeline, the Power of Siberia natural gas pipeline, and the Tianwan and Xudapu Nuclear Power Plants. 19 The PRC views pipelines through Russia as a way to reduce its reliance on more vulnerable seaborne energy shipments.

Sino-Russian relations had reached heights in 2022 not seen since the early 1950s. The dynamic between the two states has changed in two key ways, however. First, ideology is no longer a core factor in the relationship. Russia and the PRC have some broad ideological commonalities, as two revisionist authoritarian states that seek to end US global dominance, but neither country's foreign policy is motivated by a desire to lead or advance global Communism. The PRC, in particular, is deeply integrated with the global economy and has a large stake in maintaining trade ties with capitalist countries, even though it is still officially Communist itself. Differences between Beijing's and Moscow's governing ideologies are unlikely to become a point of friction. Second, Russia has decidedly become the junior partner in the relationship, a reversal of the early Sino-Soviet dynamic. The PRC dwarfs Russia in economic and military might. It has assumed the Soviet Union's former role as the United States' chief geopolitical rival and pacing threat. Russia has become dependent on the PRC in a way that is not reciprocal: Russian trade with the PRC accounted for over one fourth of Russia's total trade volume in 2022, but only about three percent of the PRC's trade volume that year. 20 Russia's invasion of Ukraine in 2022 and subsequent international isolation have only exacerbated this dependency. It has also pushed Moscow and Beijing even closer together.

# Strategic Building Blocks of the Sino-Russian Nexus Since 2022

Russia and the PRC notably are not formal treaty allies bound to each other's defense, but they have come to share a close strategic relationship built on military, economic, and diplomatic ties despite their complicated shared histories.21 Both the PRC and Russia define the Sino-Russian relationship as "a comprehensive strategic partnership of coordination in the new era" (新时代全面战略协作伙伴关系 in Mandarin, and отношения всеобъемлющего партнерства и стратегического взаимодействия in Russian). The strategic buildings blocks of their relationship have been formed on the basis of the 1991 Sino-Soviet Border Agreement and the 2001 Treaty of Good-Neighborliness and Cooperation, but in many ways, the Sino-Russian relationship has deepened since Russia's full-scale invasion of Ukraine in February 2022.

Russia and the PRC issued a joint statement on "International Relations Entering a New Era and Global Sustainable Development" on February 4, 2022-20 days before Russia launched its full-scale invasion of Ukraine.<sup>22</sup> The joint statement defined Russia and the PRC as dominant world powers, stressed their roles as permanent members of the United Nations Security Council (UNSC) and decried the expansion of Western-led multilateral institutions such as NATO and AUKUS while emphasizing the expansion of Sino-Russian-led institutions like the Shanghai Cooperation Organization (SCO) and BRICS. It also enshrined the concept of a "no-limits" partnership with unbounded prospects for cooperation, although the actual boundaries of the relationship have become more evident since 2022. The joint statement affirmed Moscow's and Beijing's apparent commitment to the concept of "multipolarity"—a narrative ideal that both frequently invoke in relation to the war in Ukraine.

The PRC's diplomatic approach to Russia's February 24, 2022, full-scale invasion of Ukraine, at least

outwardly, was to posture itself as a neutral mediator.<sup>23</sup> PRC Foreign Minister Wang Yi stated on February 25, 2022, that the PRC respects both Ukraine's and Russia's sovereignty, but that Russian concerns over NATO expansion must be recognized.24 Other authoritative sources, such as Central Military Commission Vice Chairman Zhang Youxia and commentaries in the CCP newspaper People's Daily explicitly referred to the war in Ukraine as a US proxy war and blamed the United States and NATO for instigating it to maintain US hegemony. 25 Such statements are a direct reiteration of the long-standing and thoroughly debunked Russian justification for its invasion of Ukraine on the basis that it was an answer to alleged "NATO expansion."26 They serve PRC goals by warning other countries, such as Taiwan, that being a "pawn" of the United States will lead to war. PRC officials avoided outright condemning Russian actions in Ukraine, even as they have maintained some level of diplomatic contact with Kyiv.<sup>27</sup> The PRC maintained an ostensibly balanced approach towards both Russia and Ukraine throughout much of the first year of the full-scale invasion.

The Sino-Russian relationship had deepened by early 2023, however. Former Russian Security Council Secretary Nikolai Patrushev met with Wang in Moscow in February 2023 and stated that the development of a strategic Sino-Russian partnership is an unconditional foreign policy priority for the Kremlin. 28 The PRC Ministry of Foreign Affairs published its 12-point "peace plan" for the war in Ukraine on February 24, 2023, which reiterated boilerplate calls for both Ukraine and Russia to respect each other's sovereignty, lift sanctions, and cease hostilities—once again taking a middling route as a supposedly neutral mediator. 29 The PRC notably released this "peace plan" amidst growing warnings from US intelligence sources that Beijing was "seriously considering" sending lethal military support

Russia and PRC notably are not formal treaty allies bound to each other's defense, but they have come to share a close strategic relationship built on military, economic, and diplomatic ties despite their complicated shared histories.

to Russia, suggesting that the release of the peace plan may have been intended to distract from mounting indicators that the PRC was increasingly backing Russia.<sup>30</sup>

PRC President Xi Jinping travelled to Moscow to meet with Russian President Vladimir Putin in March 2023. The two heads of state signed a "Joint Statement by the Russian Federation and the People's Republic of China on Deepening Comprehensive Partnership and Strategic Cooperation, Entering a New Era" on March 2I, 2023, which defined Sino-Russian relations as comprehensive, strategic, and at the "highest level in history."<sup>31</sup> Despite the joint statement, Xi and Putin

offered slightly different interpretations of the Sino-Russian relationship in articles they authored for the Russian outlet Rossiyskaya Gazeta and the CCP's official newspaper People's Daily, respectively. 32 Putin argued that Russia and the PRC are jointly building a partnership for the formation of the multipolar world order in the face of an aggressive and expansionist collective West, whereas Xi stressed the PRC's commitment to multipolarity without necessarily placing blame on the West. Xi notably did not mention the "no limits" partnership that Putin likely desired, emphasizing an imbalance in the relationship that has remained a strategic point of tension for Russia. 33



# TIMELINE OF PRC SUPPORT TO RUSSIA, 2022-2025

#### February 2023:

US begins voicing concerns that the PRC is considering sending lethal aid to Russia.

#### March 21, 2023:

Xi and Putin sign the "Joint Statement by the Russian Federation and the People's Republic of China on Deepening Comprehensive Partnership and Strategic Cooperation, Entering a New Era."

#### **April 19, 2024:**

US intelligence reports that the PRC has "surged" the supply of microelectronics, machine tools, and technology to Russia.

#### February 24, 2023:

The PRC releases its 12-point peace plan for Ukraine.

#### September 2023:

NYT reports that the PRC had sent \$14.5 million in drone shipments to Russia, compared to \$200,000 sent to Ukraine.

#### April 6, 2024:

Anonymous sources warn that the PRC is providing Russia with geospatial intelligence.

14

Putin and Xi's most recent series of engagements during the Russian Victory Day celebrations in Moscow on May 8 and 9 illustrate the interconnectedness of the Sino-Russian nexus in 2025. Xi's visit to Moscow marked the third official Putin-Xi engagement of 2025 (including calls). The two signed a package of bilateral cooperation documents and released several joint statements highlighting Russia's and the PRC's historical and contemporary ties on May 8. One of the joint statements notably highlighted Russia's and the PRC's joint commitment to eliminating the "root causes" of the war in Ukraine to achieve a sustainable settlement, echoing similar language from a Xi-Putin joint statement in

May 2024. <sup>36</sup> Russian officials frequently invoke the concept of "root causes" of the war in Ukraine to signal Russia's maximalist war aims, including regime change in Kyiv and the complete crippling of the Ukrainian military. It is therefore noteworthy that the joint PRC statement utilized the same wording—suggesting a level of rhetorical alignment between Moscow and Beijing regarding Moscow's false justifications for its invasion of Ukraine. <sup>37</sup> PRC officials use the term "root causes" much less frequently than Russia in advocating an end to the war, so its use in Xi-Putin joint statements emphasizes the PRC's growing closeness with Russia. <sup>38</sup>



UNDERSTANDINGWAR.ORG 15

# Areas of Cooperation

ISW has observed the intensification of Sino-Russian relations against the backdrop of Ukraine in six major areas of cooperation—PRC support for Russia's defense industrial base, including through component shipments and direct drone development and production; satellite and space cooperation; geospatial intelligence sharing; joint military exercises; bilateral economic support; and political-diplomatic coordination. The Sino-Russian nexus is thus defined through these six areas of cooperation.

# Defense Industrial Base (DIB) Support

The PRC's support for Russia's DIB is the strongest example of how directly Beijing has become involved in the war in Ukraine. Russia's domestic DIB and production capabilities have been significantly hindered by a number of challenges created by the war and Putin's refusal to mobilize the Russian economy and society fully to support it, and Russia has turned to external partners—namely the PRC, Iran, and North Korea—to make up for its domestic shortcomings.<sup>39</sup> Ukrainian officials have recently estimated

that approximately 60 percent of all foreign components in Russian weapons found on the battlefield in Ukraine originate from the PRC.<sup>40</sup> A report published by the Kyiv School of Economics (KSE) found that the PRC supplied 76 percent of Russia's "battlefield goods" in 2023 alone, emphasizing that

the PRC is a "key enabler" of Russia's DIB through its provision of high-tech electronics, dual-use products, and industrial tools. <sup>41</sup>

#### Components

Western military and intelligence officials have raised concerns over the PRC's direct inputs into Russia's DIB. A US intelligence report released in April 2024 noted that the PRC had "surged" machine tools and microelectronics sales to Russia, which Russia was

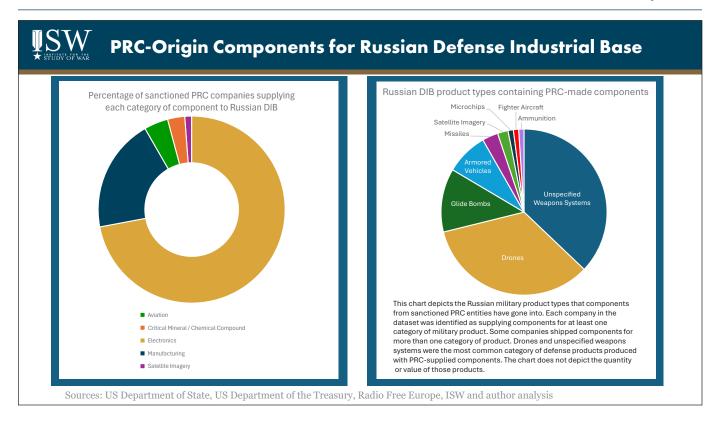
using to build missiles, tanks, aircraft, and other weapons.42 Ninety percent of Russia's microelectronics came from the PRC in 2023, and nearly 70 percent of Russia's machine tool imports in the last quarter of 2023 originated in the PRC, according to the US intelligence assessment. 43 The United States also warned that the PRC was increasingly supplying dual-use components, such as drone technologies and nitrocellulose (used for the manufacture of gunpowder), to Russia as of April 2024.44 Radio Free Europe/Radio Liberty's (RFE/RL) Schemes investigative unit published a report in January 2025 detailing how PRC-based firms are directly supplying Russia with critical minerals needed for drone and missile production, including gallium, germanium, and antimony.45

PRC-origin components are substantially augmenting the Russian war economy. ISW has compiled a dataset of 151 PRC-based entities that US, European, and Ukrainian sources report are providing components to Russian companies and entities involved in the Russian DIB. The sample set is drawn from sources such as the US Department of State, the US Department of the Treasury, European Council

rulings, and independent investigative reporting.<sup>46</sup> It was not possible with publicly available data to determine the precise quantity or value of components supplied by each company, but ISW identified the overall "type" of component that each company provided and the main type

of weapons systems that contain these components. An analysis of the data set found that the vast majority (over 72 percent) of PRC companies identified as enablers of Russia's war effort provided components that fall under the umbrella of electronics. The broad category of electronics includes various microelectronic inputs, servo motors, electronic integrated circuits, tantalum capacitors, and multilayer ceramic capacitors, all of which Russia is likely using in the production of critical military assets such as precision-guided weapons systems, drones, and

The PRC's support for Russia's DIB is the strongest example of how directly Beijing has become involved in the war in Ukraine.



glide bombs. The second largest component category (19.6 percent of the sample set) includes manufacturing components, such as bearings, machine tools, carbon fiber products, pressure sensors, and microcontrollers. Manufacturing components go into the production of Russian armored vehicles, drones, glide bombs, naval vessels, precision-guided weapons systems, and more. Most components from the PRC-based entities go into the production of various unspecified Russian weapons systems (36 percent of the sample set), drones (33 percent of the sample set), and glide bombs (12 percent of the sample set). Some companies produced components that went into multiple types of products.

Some of the PRC-based entities providing these components to Russian entities are state-controlled or have explicit or partial links to the Chinese Communist Party (CCP). The RFE/RL Schemes investigation found that some of the main PRC suppliers of critical chemicals to Russia include the Yunnan Lincang Xinyuan Germanium Industry company, whose largest stakeholder and chairman is CCP member Bao Wendong.<sup>47</sup> Schemes also linked the VITAL Technology Group and Hynhe Technology companies to the provision of critical chemicals to Russia, both of which are in part PRC

state structure-owned.<sup>48</sup> The US State Department released a sanctions list on January 15, 2025, that included the Wafangdian Bearing Company—a PRC state-owned enterprise that is allegedly supplying bearings to the Russian Aktsionernoe Obshchestvo Taskom freight-transport company.<sup>49</sup>

The majority of PRC-based companies that are sending components to Russia are based in Hong Kong or in Guangdong Province, according to ISW's analysis of the component origin sample set. Both locations provide unique development and export benefits that make it relatively easy to obfuscate export flows. Hong Kong boasts a friendly business environment that allows the rapid establishment of companies with minimal transparency requirements.50 US legislators have warned that Hong Kong has increasingly become a sanctions-evasion hub due to its lenient policy of enforcing Western sanctions.<sup>51</sup> The Port of Hong Kong is additionally one of the busiest ports in the world, which can be used to obscure certain shipments in a high-traffic environment.<sup>52</sup> Guangdong Province is an electronics manufacturing hub, which is noteworthy given that the vast majority of components that PRC-based companies are sending to Russia fall under the broad category of electronics.<sup>53</sup> Other major ports, such as

Shenzhen, are also located in Guangdong Province. PRC companies are likely leveraging Guangdong's status as a major trade hub to facilitate covert component exports to Russia.

#### Drone Development and Production:

The PRC's robust, cheap, and low-tech commercial drone industry has reaped disproportionate benefits for Russia. The PRC has overwhelming dominance in the commercial drone industry, controlling 90 percent of the global market.54 Both Russian and Ukrainian forces use cheap PRC-produced dualuse drones (such as the DJI Mavic quadcopter) on the battlefield, but a New York Times investigation from September 2023 found that the PRC sent Russia at least \$14.5 million in direct drone shipments from January to June 2023, compared to the \$200,000 it sent to Ukraine in the same period.55 Russian forces have integrated such PRC-made drones into their wider drone arsenal, using them for strikes, reconnaissance, and anti-drone operations.<sup>56</sup> The prevalence of PRC-made drones on the battlefield means that the Russian DIB can re-allocate resources away from drone production and development and towards the manufacture of higher-end missile and air defense systems, for example. Tactical drone

proliferation has also allowed Russia to husband artillery ammunition and munitions, as tactical drones can replace artillery in short and medium-range strikes.

Russian and PRC companies may also be directly collaborating on drone production. Two anonymous European officials told Bloomberg in July 2024 that Russian and PRC companies were working together to develop an attack drone analogous to the Iranian Shahed model.<sup>57</sup> The drone was still undergoing development and testing as of July 2024, and intelligence officials have not yet confirmed either its transfer to Russia or its use in Ukraine. Reuters, citing two unidentified European intelligence officials, later reported in September 2024 that Russia had established a "drone factory" in the PRC to develop and produce long-range attack drones for use in Ukraine.58 Reuters' sources stated that Russian state-owned arms company Almaz Antey subsidiary IEMZ Kupol developed and tested the "Garpiya-3" (G3) drone in the PRC with the help of PRC specialists. European Union (EU) diplomatic sources stated in November 2024 that the EU had "conclusive evidence" of this drone production scheme.<sup>59</sup> Intelligence sources told Reuters that Russia had used G3 drones against military and civilian infrastructure



in Ukraine as of September 2024, although PRC spokespeople denied the *Reuters* report and claimed that the PRC's strict drone export control laws prevent PRC companies from exporting such a system to Russia. <sup>60</sup> Given the length of the PRC-Russian land border, however, it is not infeasible that Russian and PRC entities could be smuggling systems into Russia out of the oversight of PRC export laws. <sup>61</sup>

# Satellite and Space Cooperation

The PRC and Russia have been deepening their cooperation in the space and satellite realm since 2022. The Russian space agency Roscosmos and the PRC's Commission on the Chinese Satellite Navigation System initially signed an agreement on February 4, 2022, during Putin's state visit to Beijing on "ensuring complementarity" and satellite synchronization between the Russian GLONASS and PRC BeiDou global navigation satellite systems (GNSS). 62 Russian GNSS experts noted that this was an important step in the creation of a "single international GNSS," which Russia and the PRC would presumably lead. 63 Russia and the PRC then signed contracts in September 2022 allowing for the deployment of GLONASS stations in the PRC cities of Changchun, Urümqi, and Shanghai, and the deployment of BeiDou stations in the Russian cities of Obninsk, Irkutsk, and Petropavlovsk-Kamchatsky. 64 Increased alignment between Russian and PRC satellite systems can lead to increased interoperability between the two, including military interoperability, and also replaces Russia's need to integrate with US or European GNSS systems (GPS and Galileo, respectively) in the face of international sanctions over the war in Ukraine. 65 GLONASS-BeiDou alignment also grants both Moscow and Beijing a level of mutual protection and reassurance—Russia is reportedly developing a spacebased anti-satellite weapon, and integration with BeiDou would likely mean Russia will not use, or threaten to use, such a technology against the PRC.<sup>66</sup>

Roscosmos and the PRC's Chinese National Space Administration (CNSA) also signed a bilateral space cooperation agreement in November 2022, which the Russian government approved in November 2023 to be active through 2027.<sup>67</sup> The 2023 agreement outlines three phases for the joint development

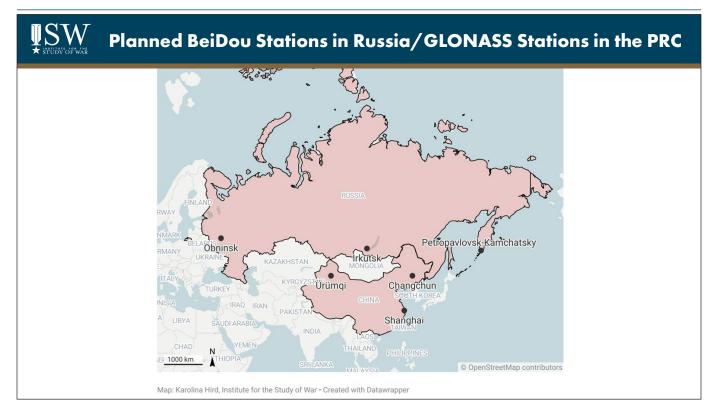
of the International Scientific Lunar Station and joint exploration of the moon's surface. Roscosmos Head Yuri Borisov also claimed in March 2024 that Russia and the PRC are considering the delivery and construction of a nuclear power plant on the moon in 2032–2035—an odd suggestion but one that is indicative of both Moscow and Beijing's willingness to deepen bilateral strategic ties and posture against the West in space.<sup>68</sup>

# Geospatial Intelligence Sharing

The PRC has likely leveraged its satellite technology capabilities to provide Russia with geospatial intelligence. Bloomberg, citing anonymous sources familiar with the matter, reported in April 2024 that the PRC had provided Russia with satellite imagery for military purposes. 69 Specifics of the type of geospatial intelligence remain unclear, but both Russia and Ukraine rely on geospatial imaging capabilities to develop situational awareness of the battlefield to plan offensive and defensive actions and conduct long-range strikes against assets in the opponent's rear. Russian photogrammetric technology company Racurs, which partners with the Russian Ministry of Defense (MoD), reported in April 2022 that it signed agreements for remote sensing and satellite data with PRC companies HEAD Aerospace and Spacety after Western remote sensing operators left Russia in response to the full-scale invasion. 70 Both of these PRC companies grant Russia remote sensing capabilities that cover large parts of Ukraine, and Russia has doubtless integrated these services into its wider remote sensing capabilities to build battlefield awareness and plan various operations.

## Joint Military Exercises

Russia and the PRC are frequent partners in joint military exercises, increasing their interoperability and providing both with a platform to observe and experiment with tactical and technological lessons. Both Russia and the PRC also use joint military exercises as a form of tangible pressure against the United States and its allies, providing a harder edge to other soft-power influence efforts. Russian forces and the PRC's People's Liberation Army (PLA) have participated in at least 31 bi- and multilateral aerial patrols, military competitions, and naval, coast guard, and



multidomain exercises since February 2022, according to CSIS's China Power Project.<sup>71</sup> The PRC also routinely participates in multilateral exercises with Russia and Iran. Russia has also been pursuing deepened relations with Iran since its invasion of Ukraine in tandem with its outreach to the PRC.<sup>72</sup> Russia, the PRC, and Iran have participated in the annual "Maritime Security Belt" exercise in the Gulf of Oman in 2019, 2022, 2023, 2024, and 2025.<sup>73</sup> The most recent iteration (Maritime Security Belt-2025) took place in March 2025.<sup>74</sup>

Bilateral Sino-Russian military exercises and patrols have caused concern among Western intelligence services, particularly as they have intensified since 2022 as a clear form of pressure against the United States and its regional allies. Russia and the PRC conducted a 13-hour joint patrol exercises with PRC H-6K and Russian Tu-95MS strategic bombers over the Sea of Japan and East China Sea on May 24, 2022, coinciding with former US President Joe Biden's visit to Tokyo for a meeting with the Quad coalition (Australia, Japan, India, and the United States). This was the first joint Sino-Russian exercise since Russia's February 2022 invasion of Ukraine, and senior US administration officials warned that the

exercise demonstrated the PRC's willingness to align itself with Russia against the backdrop of Russian aggression in Ukraine.76 Russia's Eastern Military District (EMD) then hosted the "Vostok-2022" exercises in Russia's Far East in September 2022. The PLA sent representatives of all three branches of its military to participate in "Vostok-2022" for the first time in history, and the PLA's official PLA Daily newspaper emphasized that the PLA's participation in the exercises was an opportunity to test and develop PLA capabilities and "deepen trust with partners."77 Russia and the PRC also participated in the "Northern/Interaction" exercises in 2023 and 2024, which involved joint naval and aerial exercises in and over the Sea of Japan and the Sea of Okhotsk, and the "Joint Sea" naval exercises in the East China Sea in 2022 and 2024.78 Russia and the PRC also notably flew the first known joint strategic bomber patrol with two Tu-95s and two H-6s near Alaska in July 2024, briefly crossing into the Alaskan air defense identification zone (ADIZ).79



# Russia-PRC Economic Relations

Trade between Russia and the PRC, which were already major trading partners before 2022, surged after Russia's invasion of Ukraine. Their total bilateral trade value, adjusted for inflation in 2025 dollars, I increased 46.7 percent from \$174 billion in 2021 to a record high of \$250 billion in 2023, according to PRC customs data. 80 The jump was largely driven by Russia's need to sustain its economy and fuel its defense production amid heavy sanctions from most of the world's advanced economies. Russia's trade in goods with the European Union (EU), its largest trading partner before the war, dropped from \$327.9 billion in 2021 to \$71.6 billion in 2024.81 Trade in goods with the United States over the same period dropped tenfold from \$42.6 billion in 2021 to \$3.6 billion in 2024.82

Russia's energy sector dominates its export sector, including its exports to the PRC. Crude petroleum alone accounted for nearly half of Russia's exports to the PRC each year from 2021 to 2023, in terms of

dollar value. The total value of Russia's mineral fuel exports to the PRC rose from \$63.9 billion in 2021 (out of \$87 billion of total exports to the PRC) to \$99.8 billion in 2023 (out of \$135.8 billion in total exports). 83

PRC exports to Russia have also increased since the invasion, but are more diverse. The PRC exported \$86.1 billion of goods to Russia in 2021, about half of which was electronics and machinery. This number increased to \$115.8 billion in 2023, particularly driven by the auto industry: PRC car and truck sales to Russia increased over 1,000 percent in three years to a value of \$23.7 billion in 2023. <sup>84</sup> The vast majority of these imports are ordinary consumer goods or industrial machines and components. However, Russia notably uses PRC-provided dual-use products, such as electronics, machinery, and civilian vehicles, for military purposes in Ukraine. <sup>85</sup>

The dramatic trade shifts since the start of the Ukraine war have made Russia much more economically dependent on the PRC. Russian Deputy Prime Minister Alexander Novak stated that the PRC

I All dollar values in this section are presented in 2025 dollars to account for inflation.

purchased between 45 to 50 percent of Russia's oil and fuel exports in 2023, functionally replacing Europe as the top customer for Russian energy. <sup>86</sup> On the other hand, although Russia overtook Saudi Arabia in 2023 as the PRC's top source of imported crude oil, the PRC imported only 19 percent of its crude oil from Russia in 2023 and did so at a significant discount. <sup>87</sup> The PRC prefers to maintain a diverse array of suppliers or to be self-sufficient, particularly in industries it considers critical. Beijing has delayed approval of the Russia-proposed Power of Siberia II natural gas pipeline, likely in part for this reason, and in part to negotiate more favorable terms and prices with Russia. <sup>88</sup>

International sanctions against Russia have hampered PRC economic support for Russia, however. Three of the PRC's "Big Four" state banks and 98 percent of PRC local banks began to reject financial transactions in Chinese yuan from sanctioned Russian institutions after the United States announced in December 2023 that it was levying secondary sanctions on financial institutions that facilitate trade with Russia. <sup>89</sup> Major PRC state-owned oil companies halted or reduced imports of Russian oil since January 2025 over concerns about US secondary sanctions on Russia's

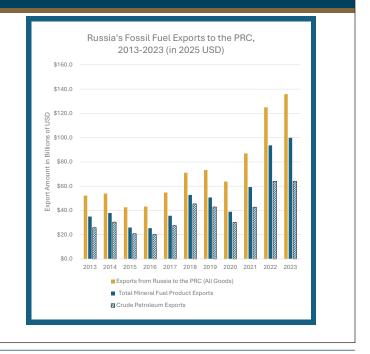
"shadow fleet" of foreign-flagged tankers, with the state-owned Shandong Port Group banning sanctioned tankers from its ports. 90 Beijing and Moscow are seeking ways to circumvent these restrictions, including through bartering and transshipments using unsanctioned ships, but PRC-Russia trade nevertheless slowed in 2024. 91

Finally, Russia-PRC cooperation on regional economic initiatives has not lived up to the lofty rhetoric of their "no-limits" partnership. Russia has not been enthusiastic about Xi Jinping's flagship Belt and Road Initiative (BRI), a colossal infrastructure investment project intended to build regional connectivity and PRC influence across the world.92 Although PRC sources list Russia as a participant in BRI, "membership" in BRI is vaguely defined, and Russia has never publicly signed any BRI-related agreement.93 The BRI is a potential competitor for Russia's own regional economic integration initiative, the Eurasian Economic Union (EAEU), even though the PRC has signed agreements to link the BRI with the EAEU. Additionally, the war in Ukraine has disrupted PRC plans to build rail links to Europe as part of the BRI, as many of these rail links would have passed through Russia and even Ukraine itself.94

# PRC-Russia Trade, 2013-2024 (in 2025 USD) \$300.0 \$250.0 \$250.0 \$150.0 \$100.0 \$50.0 \$100.0 \$100.0 \$100.0 \$100.0 \$2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 — Total Trade (2025 USD) — PRC Exports to Russia (2025 USD) — PRC Exports to Russia (2025 USD)

Source: Observatory of Economic Complexity

Russia-PRC Trade Relations Since 2013



# Russia-PRC Bilateral and Multilateral Diplomacy

As the only two members of the United Nations (UN) Security Council that are not aligned with the West, Moscow and Beijing are each other's most important diplomatic partners. This reality is reflected both in bilateral relations and in their overlapping multilateral initiatives. ISW has recorded, citing PRC readouts and news articles, that Xi Jinping has had 49 bilateral meetings or calls with Putin since he assumed the presidency of the PRC in March 2013. This is by far the most meetings Xi has had with any world leader, and more than double the number of meetings Xi had with US presidents. The trend persisted after Russia's invasion of Ukraine: Xi has met or spoken with Putin at least 12 times since February 2022, compared to five or fewer times with leaders of all other countries. Both countries use the term "comprehensive strategic partnership of coordination for the new era" or equivalent translation to describe their relationship, following PRC conventions. The Shanghai Institutes for International Studies (SIIS), a PRC government-affiliated think tank, categorizes the relationship in the first (highest) of four tiers of bilateral relations, II known as "special comprehensive strategic partnerships."95

The PRC and the Russian Federation often cooperate in their efforts to reshape the international order for their benefit. The two are frequent UN collaborators: neither has ever vetoed a resolution proposed by the other, and the PRC almost always sides with Russia or abstains from voting on resolutions that Russia vetoes. 96 Beijing and Moscow were on opposite sides of a UN vote only once in the past 20 years: a resolution in November 2024 that called for a ceasefire in the Sudanese civil war, which Russia vetoed but the PRC supported.<sup>97</sup> The two countries also collaborate in UN bodies, for example, using the UN Human Rights Council (UNHRC) to legitimize their opposition to unilateral sanctions under the pretext of protecting people from economic harm. 98 The PRC portrays itself as a defender of the international legal order, but in reality wishes to reshape it in its own favor. It does so

by claiming to be a champion of the "Global South," a broad group of developing countries - including the PRC itself - that Beijing says are unfairly marginalized by wealthy Western nations. 99 Russia has adopted similar rhetoric in recent years, often proclaiming itself part of the "World Majority" in standing against Western "neo-colonialism." Beijing's and Moscow's approaches differ in that Russia objects to US unipolar dominance of the world order on the grounds that other powers, such as Russia, are entitled to their own spheres of influence; the PRC, by contrast, publicly advocates for principles of respect for sovereignty and non-interference in other countries' affairs. 101 These principles, as well as the value Beijing still places on trade relations with the West, are a major reason why the PRC did not endorse the Russian invasions of Ukraine and Georgia and has not recognized Russia's annexation of Crimea or regions of the Donbas, even though Russia endorses Beijing's claim of sovereignty over Taiwan. 102

Moscow and Beijing also align in their joint or overlapping regional initiatives, many of which serve as alternatives or rivals to existing Western-led institutions. The Shanghai Cooperation Organization (SCO), though lacking the mutual defense obligations of an alliance like NATO, is a mechanism for interstate cooperation on regional security threats such as terrorism and separatism. The SCO admitted India and Pakistan in 2017 and has expanded again since 2022 to include Iran and Belarus, two of Russia's biggest enablers in the war in Ukraine. 103 The SCO is also an area of some tension between Russian and PRC interests, however: although Russia considers Central Asia to be part of its historic sphere of influence, the PRC has become the top trading partner for every Central Asian state and has grown its political influence in the region, benefiting from Russia's relative decline since the invasion. 104 The BRICS economic grouping is another key area of cooperation: Russia and the PRC have used the organization to promote new international payment systems and trading currencies and weaken the dominance of the US dollar. 105 BRICS expanded its membership in 2024 and 2025 to include five additional countries. 106 Putin has

II The four tiers are "special comprehensive strategic partnership" 特殊全面战略伙伴, "comprehensive strategic partnership" 全面战略伙伴, "strategic partnership" 战略伙伴, and "cooperative partnership" 合作伙伴, in descending order. The Russia-PRC "comprehensive strategic partnership of coordination in the new era" has a unique label that and is one eight grouped in the top tier. 59 countries had second-tier relations with the PRC in September 2024, 31 were in the third tier, and eight in the fourth tier. Several countries do not fall into any of these categories, including the United States and North Korea.

touted this expansion as a counterbalance to the West's "perverse methods." The inclusion of more countries in BRICS may dilute the ability of either Beijing or Moscow to control the organization's agenda, however.

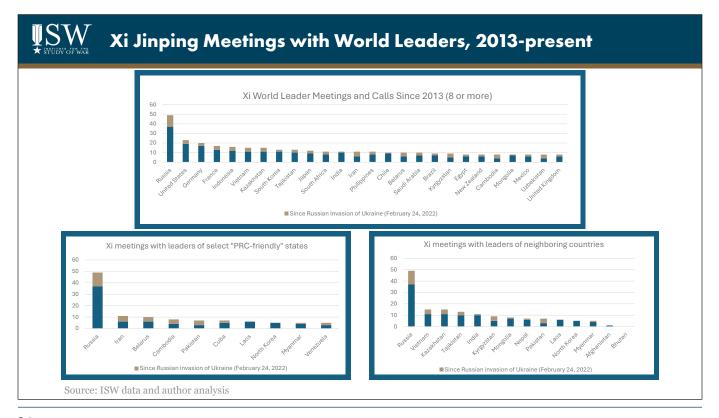
Putin's and Xi's bilateral engagements at Russia's May 8–9 Victory Day celebrations in Moscow showcase Sino-Russian alignment in the creation of an alternative, anti-Western bloc, despite both countries' frequent condemnation of "bloc thinking" and espousal of "multipolarity." Russia and the PRC issued

a joint statement on May 8 that highlighted their joint commitment to the creation of a "Eurasian security architecture," which Putin first proposed with Xi's support in June 2024. 108 Putin's envisioned Eurasian architecture is built on a number of multilateral organizations that Russia and the PRC dominate, such as the CSTO, SCO, and BRICS. 109 Both Moscow and Beijing condemn Western-led institutions as inhibitors of multipolarity and instead advocate for the creation or empowerment of alternative institutions that they lead.

# Implications of PRC-Russian Military Learning for Future Conflicts

Russia requires immediate material support to generate benefits from its relationship with the PRC to sustain its war effort, but the PRC has apparently decided that the longer-term benefits of aligning with Russia outweigh the potential costs of the relationship. This decision may be in large part because the PRC has much to learn from the war in Ukraine, particularly as it prepares itself for future wars and a

potential Taiwan contingency. The PRC has not officially sent soldiers to fight in Ukraine in the way that North Korea sent soldiers in late 2024 to support the Russian defense of Kursk Oblast, but there have been reports of PRC nationals fighting alongside Russian forces in Ukraine. Reuters, citing unnamed former Western intelligence officials, reported on April II that Beijing had authorized an unspecified number



of PLA officers to deploy to the theater in Ukraine "to draw tactical lessons from the war." The officially sanctioned presence of PLA officers strongly suggests that the PRC has officially invested in learning lessons from the war in Ukraine. 112

PLA military journals have provided ample evidence of the tactical, operational, and strategic lessons that the PRC hopes to learn from Ukraine.113 The war in Ukraine has been characterized by the proliferation of relatively cheap unmanned systems that have rendered the battlefield largely transparent, introduced new constraints on traditional mechanized maneuver, and decreased the efficacy of more expensive, exquisite weapons systems. 114 The PRC recognizes that these technology-driven battlefield realities will characterize all future conflicts, including any potential PRC attack on Taiwan. 115 Analysts from the PLA's National Defense University's Joint Operations College emphasized that "with the emergence and application of new technologies, drones will usher in a new round of development and play a greater role in future battlefields. 116 PRC analysts have identified the leading role that small, low-cost unmanned systems

have in Ukraine, noting that small loitering munitions (kamikaze-style drones) can destroy expensive high-value targets such as air defense radars.<sup>117</sup>

The proliferation of drones in Ukraine has also created the need for effective antidrone capabilities—another The PRC recognizes that these technology-driven battlefield realities will characterize all future conflicts, including any potential PRC attack on Taiwan.

adaptation that the PRC appears to be interested in implementing.118 Some PRC military analysts have noted, for example, that drone proliferation in Ukraine has underscored the need to combine mortar systems and portable electronic warfare (EW) systems, suggesting that the PLA utilize its new ultralight 120mm mortar system alongside mobile EW to counter incoming enemy drones. 119 PRC state-owned defense conglomerate Norinco announced in April 2025 that it had developed the world's first "close-in anti-drone barrage weapon system," dubbed the Bullet Curtain. 120 The Bullet Curtain is reportedly equipped with a 4 x 4 array of 35-millimeter barrels that fire a "curtain" of bullets to intercept incoming aircraft, drones, and missiles. Norinco claimed that the Bullet Curtain is a groundbreaking innovation against drone swarms and high-speed missiles. 121 The development of the Bullet Curtain suggests that the PRC has observed the reduced effectiveness of traditional EW to counter drones in Ukraine, as both sides have increasingly developed workarounds, such as fiber-optic cable drones, to resist EW jamming. 122 The PRC likely hopes to leverage systems such as the Bullet Curtain when operating in a drone-dense

combat environment. US and Taiwanese concepts for the defense of Taiwan heavily feature the use of cheap drones in repelling PRC attacks, and the PRC is evidently looking to lessons from the war in Ukraine to pre-empt this defensive technique. 123

## Forecasts and Conclusions

## The North Korea Problem

North Korea has emerged as an area of divergence between the PRC and Russia since 2022. The PRC and North Korea were each other's only formal treaty allies until 2024, bound by a 1961 treaty that they renewed in 2021. 124 North Korea relied on the PRC for over 98 percent of its imports in 2023. 125

The PRC has a stake in the North Korean regime's survival, not only because it is a fellow Communist state but also because Beijing wishes to maintain a buffer zone between itself and South Korea, a US ally that hosts 28,500 US troops. <sup>126</sup> Beijing has used its leverage as North Korea's sole patron to constrain Pyongyang's destabilizing behavior in the interest of maintaining stability on the Korean Peninsula. The

UNDERSTANDINGWAR.ORG 25

PRC hosted and participated in the Six Party Talks from 2003 to 2009 in an attempt to negotiate an end to North Korea's nuclear weapons program and repeatedly voted in favor of UN sanctions on North Korea until 2022, even though it helped North Korea evade those sanctions. <sup>127</sup> Pyongyang's belligerence and Beijing's attempts to control it have often led to tension in their relationship. <sup>128</sup>

Russia and North Korea have dramatically strengthened their relationship since 2022. North Korea is one of the few countries to openly support Russia's invasion of Ukraine. It sold Russia millions of artillery shells and hundreds of missiles throughout the war and recognized Russia's illegal annexation of Donetsk, Luhansk, Zaporizhia, and Kherson oblasts in 2022.129 Russia, in turn, dropped its opposition to North Korea's nuclear program: it vetoed a UN Resolution in 2022 to tighten sanctions on North Korea and another UN Resolution in 2024 to extend the mandate of the UN sanctions monitoring committee on North Korea, effectively ending UN sanctions compliance monitoring. 130 Russia's Foreign Minister Sergei Lavrov called North Korea's nuclear program a "closed issue" and said denuclearization was "off the table" in 2024. Is Russia also began providing North Korea with technical assistance for its space program and possibly military programs, in violation of UN sanctions. 132

Russia and North Korea signed a mutual defense treaty in June 2024 that is similar to the Sino-North Korean treaty. 133 North Korea deployed 10,000-12,000 troops to Russia beginning in October 2024 to help Russia repel Ukraine's August 2024 incursion into Kursk Oblast. Russian and North Korean officials confirmed North Korea's involvement in April 2025 and justified it by invoking the terms of the 2024 treaty, interpreting Ukraine's Kursk incursion as a hostile invasion of Russian territory. 134 Kremlin spokesperson Dmitri Peskov said that Russia is "absolutely" prepared to provide reciprocal military assistance to North Korea in the future. 135

The PRC's relations with North Korea appeared to deteriorate starting in 2022. The PRC joined Russia in vetoing further sanctions on North Korea in 2022 and abstained from the vote on extending the monitoring committee's mandate, but angered North Korea by continuing to discuss denuclearization. <sup>136</sup>

Diplomatic exchanges between the PRC and North Korea, communication between leadership, and bilateral trade all declined in 2024, despite earlier commitments to enhance relations in various fields and jointly celebrate the 75th anniversary of their diplomatic relations. 137 PRC officials have declined to comment publicly on the Russia-North Korea relationship, insisting that it has nothing to do with the PRC, but likely view it as destabilizing, as Russia's upgraded military and economic relations with North Korea reduce Beijing's leverage over Pyongyang. 138 Beijing does not want North Korea to start a war or trigger increased US military deployments to the region, even though it may see North Korea as a useful way to distract the US-South Korea-Japan alliance from its focus on the PRC. Moscow has less interest than Beijing in maintaining stability on the Korean Peninsula and may embolden North Korea to increase its bellicosity. 139

## **Prospects**

Russia and the PRC are more strategically aligned now than they have ever been, and the benefits that both Moscow and Beijing can accrue from maintaining their cooperation outweigh the potential policy wedges that the United States can drive between the two. Both countries seek to challenge and upend the US- and Western-led world order and see their cooperation as mutually beneficial to accomplishing this long-term strategic objective. Russia's war in Ukraine is in many ways the biggest challenge to the US-led world order of the 21st century, and the PRC's clear and increasingly one-sided support for Russia's war effort and wartime economy emphasize that Beijing has an interest in Russia winning the war, or at least not losing. Beijing likely sees the war as an opportunity to weaken the United States and its allies as Beijing's strategic competitors, including by occupying US and allied attention, draining their resources, and undermining their credibility as security guarantors. The Sino-Russian nexus will experience tensions, to be sure, but the paths of Russia and China forward are unlikely to drift apart as long as both share the mutual desire to challenge Washington-led international norms and institutions. Russia's battlefield outcomes in Ukraine, as well as the United States' political, economic, and diplomatic responses to Russian aggression, will

become one of the most defining factors shaping PRC considerations regarding aggression against US allies. The security of the Indo-Pacific is therefore inextricably tied to Ukraine's security. A Russian victory in Ukraine will prove to the PRC that Western will and unity can be broken, and the PRC is likely to implement tactical and technological lessons learned from Ukraine to threaten Taiwan and further break the current world order. US policy must not silo Ukraine away from its planning for future PRC-initiated conflicts, because neither Beijing nor Moscow see the world that way.

The PRC has emerged as the definitively stronger partner in the Sino-Russian relationship but appears largely uninterested in using its leverage to constrain or significantly influence Russia's behavior. Russia has become highly dependent on the PRC for both ordinary trade in goods and for critical minerals and components that support its defense industrial base. The PRC has exploited this dependency to extract favorable deals from Russia, including discounted energy. It exercises discretion in the extent to which it backs Russia's foreign policy behavior: for example declining to recognize Russia's illegal annexations of Ukrainian territory since 2014 or endorse Russia's military actions, but on the other hand paying lip service to Russia's "legitimate security concerns" and Russian invocations of "root causes" of the war. Russia, by contrast, fully endorses the PRC's claim to Taiwan in Beijing's own terms and at times has spoken against US and allied support for Taiwan as violations of PRC sovereignty. 140 Moscow and Beijing are each other's most important geopolitical partners in challenging US global dominance, but the PRC is able to set the terms of the relationship and does not need to endorse even core Russian foreign policy priorities to maintain the partnership. The PRC has not used its leverage over Russia to constrain or significantly shape Russia's international behavior, in contrast to its approach to North Korea. PRC banks and other institutions have complied with some Western sanctions on Russian entities to the extent necessary to avoid incurring secondary sanctions that would harm their business interests, but at the same time, the PRC has worked with Russia to find workarounds. Beijing has appeared to push back on Russian actions in Ukraine in only one respect: repeated admonitions against using nuclear weapons

(which Putin had threatened to do) or targeting nuclear power plants. 141

The PRC's oft-espoused "principles of peaceful coexistence" and its desire to maintain healthy trade relations with developed countries have restrained it from openly endorsing Russia's aggressive imperialism, unlike countries such as North Korea and Iran that have openly supported Russia. The PRC aims to portray itself as a "responsible great power" and an impartial mediator in global conflict, explicitly in contrast to the United States and implicitly in contrast to Russia. It has emphasized that it is not a party to wars in Ukraine, the Middle East, or elsewhere, but advocates peaceful political settlements of these conflicts, often through existing global governance mechanisms such as the United Nations. The PRC contrasts its historic non-interventionism in foreign conflicts with US foreign policy in order to present itself as a preferable alternative to US hegemony. Endorsing or militarily supporting Russia's war of aggression openly would strongly undermine this message, so Beijing largely limits itself to providing economic support and dual-use goods to Russia that it can portray as "normal trade relations." The PRC's own foreign policy behavior is much more cautious and less militarily aggressive than Russia's, with Beijing preferring to expand its regional control through long-term "salami slicing" and "gray zone" short-of-war activities that allow it to control escalation, rather than direct military intervention. Beijing also relies heavily on global trade and does not wish to jeopardize its trade relationships if possible-the European Union and the United States are much more important trading partners for the PRC than Russia is. 142

The PRC would prefer to play a role in negotiating an end to the war so that it can burnish its reputation as a "mediator," even though it is not truly neutral. Beijing's unwillingness to pressure Russia shows that PRC mediating an end to the war is not its top priority, however. Beijing, to date, has put forth two broad "peace plans" for the war but has failed to offer any viable, specific proposals that both sides will accept. It has repeatedly advocated for Russian participation in negotiations, for instance, refusing to attend a peace summit in Switzerland in June 2024 because Russia did not attend. 143 It even defended European interests and

advocated for Europe's participation in peace talks in March 2025, at a time when European countries felt sidelined by bilateral US-Russia negotiations and the PRC wanted to lure European countries away from the United States. <sup>144</sup>

The PRC likely does not have a strong preference on the timing and particulars of how the war in Ukraine ends, as long as Russia does not lose, because it can reap benefits from many possible scenarios without having to pay significant economic or reputational costs. It prefers outcomes that continue to hold NATO at risk. The PRC thus would prefer a definitive Russian victory, whether that victory is achieved on the battlefield or in a negotiated settlement. The definition of Russian "victory" in this case is not primarily about the amount of Ukrainian territory Russia is able to seize - Beijing very likely does not care about the precise location of the Russia-Ukraine border. Beijing would rather benefit from a victorious and resurgent Russia that has prevented Ukraine, a major Western partner, from joining a Western military alliance and a Russia that is now able to set its sights on other European countries, including NATO members. The PRC could use Russia to contain NATO to the North Atlantic region, as it has strongly objected to any moves toward NATO involvement in the Indo-Pacific. A clear Russian victory would also undermine international confidence in the West's ability to defend partner countries, including Taiwan, from invasion by stronger powers. It thus would have direct negative implications for the US relationship with Taiwan, Japan, the Philippines, and other Indo-Pacific coalition partners. An indefinite continuation of the Ukraine war would similarly serve some (but not all) PRC interests, however, by continuing to drain

Western resources, distract the United States from the Indo-Pacific theater, teach Beijing lessons about modern warfare, and increase Russia's dependence on the PRC.

A Russian defeat in Ukraine, particularly one that leaves Russia seriously weakened or destabilized, would be the worst-case outcome for Beijing. A definitive Russian battlefield defeat that involves pushing Russia out of occupied Ukrainian lands would likely create a severe political crisis that would force Putin to finally reckon with the domestic costs of his war that he has so far avoided. This political crisis would weaken one of the PRC's most reliable partners for decades. Political turmoil in Russia, the depletion of Russian resources and manpower in the war, and the humiliation of a costly defeat will make Russia less able to threaten Europe in the short to medium term, allowing the collective West to refocus its attention on building security and alliances in the Indo-Pacific. This outcome would also greatly bolster confidence in US and Western security commitments, particularly for Taiwan, which, like Ukraine, lacks any binding defense treaties.

A less total defeat for Russia may be one in which Russia keeps much of the land it has occupied but fails to achieve its objective of achieving regime change in Ukraine and turning Ukraine into a demilitarized, "neutral" buffer zone. Such an outcome would not satisfy the maximalist demands set forth by Putin upon the invasion of Ukraine. It would likewise demonstrate (albeit to a lesser degree than the first scenario) that Russian military aggression and threats failed to break Western resolve – a lesson that may weigh heavily on Beijing's calculus for pursuing aggression against Taiwan.

A Russian defeat in Ukraine, particularly one that leaves Russia seriously weakened or destabilized, would be the worst-case outcome for Beijing.

### **Endnotes**

- I http://muse.jhu.edu/pub/3/oa\_monograph/chapter/3308184
- 2 https://digitalarchive.wilsoncenter.org/document/mao-zedong-peoples-democratic-dictatorship-commemoration-twenty-eighth-anniversary
- 3 https://muse.jhu.edu/pub/3/oa\_monograph/chapter/3304450
- 4 https://www.cia.gov/readingroom/docs/CIA-RDP80R01443R000300050007-8.pdf
- 5 https://muse.jhu.edu/pub/3/oa\_monograph/chapter/3304450 https://nuclearweaponsedproj.mit.edu/1954-1959-soviet-union-aidschina-development-its-nuclear-weapons-program/
- 6 https://history.state.gov/historicaldocuments/frus1951v07p2/d135
- 7 https://daily.jstor.org/a-messy-divorce-the-sino-soviet-split/; Luthi, L. (2008) 'Historical Background, 1921–1955', in The Sino-Soviet Split: Cold War in the Communist World. Princeton, NJ: Princeton University Press.
- 8 https://digitalarchive.wilsoncenter.org/document/note-soviet-embassy-beijing-ministry-foreign-affairs-peoples-republic-china https://www.asianstudies.org/publications/eaa/archives/ chinas-great-leap-forward/
- 9 https://daily.jstor.org/a-messy-divorce-the-sino-soviet-split/
- ${\bf 10} \qquad https://www.hoover.org/research/I969-sino-soviet-border-conflicts-key-turning-point-cold-war$
- II https://history.state.gov/milestones/1969-1976/rapprochement-china
- 12 https://www.mfa.gov dot cn/eng/zy/wjls/3604\_665547/202405/ t2024053I\_II367539.html https://www.jstor.org/stable/2644761
- 13 https://www.mfa.gov dot cn/eng/zy/wjls/3604\_665547/202405/ t2024053I\_II367562.html https://peacemaker.un.org/en/node/9399
- 14 https://www.peaceagreements.org/viewmasterdocument/1735;
- ${\bf 15} \qquad https://www.cfr.org/backgrounder/shanghai-cooperation-organization$
- 16 https://www.fmprc.gov dot cn/mfa\_eng/wjb\_663304/zzjg\_663340/ dozys\_664276/gjlb\_664280/3220\_664352/3221\_664354/200410/ t20041014\_557294.html
- 17 https://www.reuters.com/world/china/russia-china-extend-friendship-cooperation-treaty-kremlin-2021-06-28/; http://static.kremlin dot ru/media/events/files/en/ Bo3RF3JzGDvMAPjHBQAuSemVPWTEvb3c.pdf
- 18 https://wits.worldbank.org/CountryProfile/en/Country/RUS/ Year/2021/TradeFlow/EXPIMP
- 19 https://www.bloomberg.com/news/articles/2018-0I-0I/second-chinese-crude-oil-pipeline-linked-to-russia-s-espo-opens; https://www. congress.gov/crs-product/IFII514; http://www.en.kremlin dot ru/ events/president/news/65606
- 20 https://www.cfr.org/article/ where-china-russia-partnership-headed-seven-charts-and-maps
- 21 https://www.congress.gov/crs-product/IF12100; https://www.cfr.org/backgrounder/china-russia-relationship-xi-putin-taiwan-ukraine
- en.kremlin dot ru/supplement/5770
- 23 https://www.theguardian.com/world/2022/mar/OI/ china-mediate-ukraine-russia-war
- 24 https://www.understandingwar.org/backgrounder/ukraine-conflict-update-2; https://www.reuters.com/world/europe/china-says-it-respects-ukraines-sovereignty-russias-security-concerns-2022-02-25/
- 25 https://www.newsweek.com/china-taiwan-no-mercy-wartalk-us-1838936 http://paper.people.com dot cn/rmrb/html/2022-03/15/nw.DII0000renmrb\_20220315\_2-17.htm http://paper.people.com dot cn/rmrb/html/2022-03/29/nw.DII0000renmrb\_20220329\_2-03.htm
- 26 https://www.nato.int/cps/en/natohq/II5204.htm
- 27 https://www.npr.org/2023/04/26/II64668179/xi-putin-summit-zelenskyy-china-russia-ukraine; https://www.reuters.com/world/ukraines-foreign-minister-arrives-china-discuss-fair-peace-2024-07-23/; https://www.reuters.com/world/russia-vetoes-un-security-action-ukraine-china-abstains-2022-02-25/

- 28 https://www.reuters.com/world/europe/putin-ally-tells-top-chinese-diplomat-we-back-beijing-against-west-2023-02-21/; https://ria dotru/20230221/vstrecha-1853501059.html
- 29 https://www.mfa dot.gov.cn/eng/zxxx\_662805/202302/ t20230224\_II0307I3.html
- 30 https://www.cnn.com/2023/02/24/politics/us-intelligence-china-drones-russia-ukraine/index.html
- 31 http://kremlin dot ru/supplement/5920
- 32 http://kremlin dot ru/events/president/news/70743; https://rg dot ru/2023/03/20/uporno-dvigatsia-vpered-k-novym-perspekti-vam-druzhby-sotrudnichestva-i-sovmestnogo-razvitiia-kitaia-i-rossii. html
- 33 https://isw.pub/UkrWaro4o523; https://isw.pub/UkrWaro4o623; https://isw.pub/UkrWaro8o723; https://isw.pub/UkrWaro8o823
- 34 https://understandingwar.org/backgrounder/ russian-offensive-campaign-assessment-may-8-2025
- 35 https://understandingwar.org/backgrounder/russian-offensive-cam-paign-assessment-may-8-2025; http://www.news dot cn/world/20250508/0c984f826fd8484f83d24287fca96416/c.html; http://www.newsdot cn/world/20250508/53e27a12b51f4423b4b2602323b16015/c.html
- 36 http://www.news dot cn/world/20250508/53e27aI2b5If4423b4b-2602323bI60I5/c.html https://www.mfa.gov dot cn/zyxw/202405/t202405I6\_II305860. shtml
- 37 https://www.understandingwar.org/backgrounder/russian-of-fensive-campaign-assessment-march-18-2025; https://understandingwar.org/backgrounder/russian-offensive-campaign-assessment-april-30-2025; https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-april-13-2025
- 38 https://understandingwar.org/backgrounder/ russian-offensive-campaign-assessment-may-8-2025
- 39 https://understandingwar.org/backgrounder/ russias-weakness-offers-leverage
- 40 https://newsukraine.rbc dot ua/news/zelenskyy-s-adviser-namesmain-source-of-1727168325.html
- 41 https://kse dot ua/about-the-school/news/china-supplied-76-of-rus-sia-s-battlefield-goods-in-2023-kse-institute-report/
- 42 https://apnews.com/article/united-states-china-rus-sia-ukraine-war-265df843be030b7183c95b6f3afca8ec
- 43 https://apnews.com/article/united-states-china-russia-ukraine-war-265df843be030b7183c95b6f3afca8ec
- 44 https://www.politico.eu/article/ us-accuses-china-backing-russias-invasion-of-ukraine/
- 45 https://www.rferl dot org/a/china-critical-minerals-russia-weap-ons-ukraine-2024/33295674.html; https://www.youtube.com/watch?v=YuO-Z5Z5Rl8
- 46 https://www.rferl.org/a/china-critical-minerals-russia-weapons-ukraine-2024/33295674.html; https://www.reuters.com/markets/companies/002428.SZ; https://www.occrp.org/en/news/china-becomes-russias-lifeline-for-critical-war-minerals; https://2021-2025.state.gov/office-of-the-spokesperson/releases/2025/01/sanctions-to-disrupt-russias-military-industrial-base-and-sanctions-evasion/; https://home.treasury.gov/news/press-releases/jy2700; https://2021-2025.state.gov/new-measures-targeting-third-country-enablers-supporting-russias-military-industrial-base/; https://eurlex.europa.eu/legal-content/EN/TXT/?uri=OJ:L\_202403182; https://ofac.treasury.gov/recent-actions/20240501; https://2021-2025.state.gov/new-measures-to-degrade-russias-wartime-economy/; https://www.rferl.org/a/russia-ukraine-china-sanctions-dual-use-yang-jie-technology/33223415.html
- 47 https://www.rferl.org/a/china-critical-minerals-russia-weapons-ukraine-2024/33295674.html; https://wap.asianmetal.dot.com/ interview/2017/interview\_baowendongEn.shtml
- 48 https://www.rferl.org/a/china-critical-minerals-russia-weapons-ukraine-2024/33295674.html
- 49 https://2021-2025.state.gov/office-of-the-spokesperson/ releases/2025/01/sanctions-to-disrupt-russias-military-industrial-base-and-sanctions-evasion/

- 50 https://www.ft.com/content/7faeb2fe-44e7-468b-9efi-05def97245ef
- 51 https://www.fdd.org/analysis/2024/II/27/house-select-committee-shines-light-on-hong-kongs-role-in-sanctions-evasion/; https://glo-balinvestigationsreview.com/news-and-features/investigators-guides/hong-kong/article/hong-kong-playing-indispensable-role-undermining-western-sanctions
- 52 https://www.tradecorp-usa.com/blog/ busiest-ports-in-the-world-2024/
- 53 https://wcham.org/mapping-chinas-industrial-strength-keymanufacturing-hubs/
- 54 https://www.yahoo.com/news/china-dominates-drone-industry-west-IIOOOO53.html?guccounter=I
- 55 https://www.nytimes.com/2023/09/30/technology/ukraine-russiawar-drones-china.html
- 56 https://www.understandingwar.org/backgrounder/russian-offensive-campaign-assessment-january-26-2025; https://www.understandingwar.org/backgrounder/ russian-offensive-campaign-assessment-august-18-2024
- 57 https://www.bloomberg.com/news/articles/2024-07-02/china-is-building-and-testing-lethal-attack-drones-for-russia?embedded-checkout=true
- 58 https://www.reuters.com/world/russia-has-secret-war-drones-projectchina-intel-sources-say-2024-09-25/
- 59 https://www.scmp dot com/news/china/diplomacy/article/3286819/ eu-has-conclusive-proof-armed-drones-russia-being-made-chinasources
- 60 https://www.reuters.com/world/europe/russia-produces-new-kamika-ze-drone-with-chinese-engine-say-european-intel-2024-09-13/
- 61 https://www.csis.org/analysis/why-chinas-uav-supply-chain-restrictions-weaken-ukraines-negotiating-power; https://www.business-humanrights.org/en/latest-news/chinese-companies-allegely-ship-dual-use-equipment-to-russia-exposing-loopholes-in-western-sanctions/
- 62 http://vestnik-glonass dot ru/news/tech/ekspert-soglashenie-o-vzaimodopolnyaemosti-glonass-i-beydou-shag-k-edinoy-mezhdunarodnoy-gnss/
- 63 http://vestnik-glonass dot ru/news/tech/ekspert-soglashenie-o-vzaimodopolnyaemosti-glonass-i-beydou-shag-k-edinoy-mezhdunarodnoy-gnss/
- 64 https://www.interfax.dot.ru/russia/865104
- 65 https://www.cna.org/reports/2023/06/china-russia-space-cooperation-may-2023; https://jamestown.org/program/ beidou-and-strategic-advancements-in-prc-space-navigation/
- 66 https://www.understandingwar.org/backgrounder/ russian-offensive-campaign-assessment-march-5-2024
- 67 https://tass.dot.ru/kosmos/16711435
- 68 https://www.rbc dot ru/ politics/05/03/2024/65e70e6c9a7947650a24258e
- 69 https://www.bloomberg.com/news/articles/2024-04-06/china-is-providing-geospatial-intelligence-to-russia-us-warns?embedded-check-
- 70 https://racurs dot ru/press-center/news/itogi-postavok-sput-nikovykh-dannykh-dzz-v-2022-godu/; https://www.rusi.org/explore-our-research/publications/commentary/hi-tech-high-risk-russo-chinese-cooperation-emerging-technologies
- 71 https://chinapower.csis.org/data/china-russia-joint-military-exercises/
- 72 https://www.understandingwar.org/sites/default/files/The%20Russia-Iran%20Coalition%20Deepens%20013025.pdf
- https://apnews.com/article/d4837be91b07721428230a5ad-dc00a9d; https://www.reuters.com/world/india/iran-china-rus-sia-hold-naval-drills-north-indian-ocean-2022-01-21/; https://www.reuters.com/world/china-russia-iran-conduct-four-day-na-val-exercises-gulf-oman-2023-03-15/; https://www.reuters.com/world/india/iran-china-russia-hold-naval-drills-north-indian-ocean-2022-01-21/; https://www.reuters.com/world/russia-iran-china-hold-warship-drills-gulf-oman-2024-03-11/; https://www.iranintl dot com/en/202201216654; https://www.aljazeera.com/news/2024/3/12/china-iran-and-russia-stage-joint-naval-drills-in-gulf-oroman; https://www.reuters.com/world/russia-iran-china-hold-warship-drills-gulf-oman-2024-03-11/; https://www.fdd.org/analysis/op\_eds/2024/03/14/

- russia-china-and-iran-deepen-ties-with-naval-drill/; https://www.usnews.com/news/world/articles/2024-03-12/iran-russia-and-china-show-off-their-ships-in-a-joint-naval-drill-in-the-gulf-of-oman
- https://tass dot ru/mezhdunarodnaya-panorama/23346799; http://
  www.mod dot gov.cn/gfbw/qwfb/16373805.html; https://t.me/mod\_
  russia/49913; https://www.voanews.com/a/iran-russia-china-to-holdjoint-military-exercises/8004134.html; https://en.mehrnews dot com/
  news/229405/Iran-China-Russia-to-hold-joint-naval-drill; https://
  meduza dot io/news/2025/03/09/rossiya-kitay-i-iran-provedutsovmestnye-ucheniya-v-indiyskom-okeane; http://www.mod dot gov.
  cn/gfbw/qwfb/16373805.html
- 75 https://www.interfax.dot.ru/world/842584
- 76 https://www.washingtonpost.com/national-security/2022/05/24/rus-sia-china-military-exercise/; https://www.nytimes.com/2022/05/24/us/politics/russia-china-bombers-biden.html
- 77 https://www.scmp dot com/news/china/diplomacy/article/3192074/ signs-china-russia-military-trust-vostok-2022-war-games
- 78 https://www.globaltimes dot cn/page/202212/1282324.shtml; https://
  news.usni.org/2022/12/28/russian-chinese-naval-exercise-wrapsin-east-china-sea; https://www.euronews.com/2022/12/28/russia-and-china-practice-capturing-a-submarine-in-joint-military-drills; https://www.reuters.com/world/china-russia-startjoint-air-sea-drill-sea-japan-2023-07-16/; https://www.voanews.com/a/analysts-see-china-russia-exercise-as-sign-of-deepening-cooperation/7188482.html; https://chinapower.csis.org/data/
  china-russia-joint-military-exercises/
- 79 https://www.norad.mil/Newsroom/Press-Releases/ Article/3849184/norad-detects-tracks-and-intercepts-russianand-prc-aircraft-operating-in-the-a/; https://www.ft.com/content/ b2ef8e97-55b1-474b-acbf-a44f55892a1e
- 80 https://www.globaltimes dot cn/page/202201/12469II.shtml; http://reuters.com/markets/china-russia-2024-trade-value-hits-re-cord-high-chinese-customs-2025-0I-13/
- 81 https://tradingeconomics.com/european-union/exports/russia https://tradingeconomics.com/european-union/imports/russia
- 82 https://www.census.gov/foreign-trade/balance/c4621.html
- 83 https://oec.world/en/profile/bilateral-country/rus/partner/chn
- $\bf 84 \qquad https://oec.world/en/profile/bilateral-country/rus/partner/chn$
- https://www.reuters.com/world/eu-sees-signs-china-supplying-dual-use-components-russia-dombrovskis-says-2024-04-18/; https:// www.pbs.org/newshour/world/u-s-intelligence-shows-china-is-surging-equipment-sales-to-russia-to-help-war-effort-in-ukraine-ap-says ; https://mil.in dot ua/en/articles/how-chinese-golf-carts-help-russian-invaders; https://www.kyivpost dot com/post/39487
- 86 https://oilprice.com/Latest-Energy-News/World-News/China-and-India-Account-for-More-Than-90-of-Russian-Oil-and-Fuel-Exports.html
- 87 https://oec.world/en/profile/bilateral-product/crude-petroleum/ reporter/chn?selectorII5Iid=2023 https://www.banque-france.fr/en/publications-and-statistics/publications/ china-has-reduced-its-energy-bill-thanks-russian-oil-discounts
- 88 https://www.energypolicy.columbia.edu/publications/the-future-of-the-power-of-siberia-2-pipeline/
- 89 https://finance.yahoo.com/news/over-98-chinese-banks-not-I0I9I4009.html https://iz dot ru/1653256/mariia-kolobova-milana-gadzhieva/komissi-ia-bez-perevoda-tri-krupneishikh-banka-knr-perestali-prinimat-platezhi-iz-rf
- 90 https://www.reuters.com/business/energy/china-state-firms-curb-russian-oil-imports-sanctions-risks-sources-say-2025-03-14/ https://www.reuters.com/business/energy/chinas-shandong-portgroup-blacklists-us-sanctioned-oil-vessels-say-traders-2025-01-07/
- 91 https://www.reuters.com/markets/first-russia-china-barter-trade-may-come-this-autumn-sources-say-2024-08-08/https://www.reuters.com/business/energy/russian-oil-cargo-trans-ferred-sanctioned-tankers-discharged-into-china-data-2025-03-19/https://www.intereconomics.eu/contents/year/2025/number/2/article/china-russia-cooperation-economic-linkages-and-sanctions-evasion.html
- 92 https://www.scmp dot.com/news/china/diplomacy/article/3258142/why-russia-might-be-warming-chinas-belt-and-road-plans-central-asia
- 93 https://greenfdc.org/countries-of-the-belt-and-road-initiative-bri/ www.yidaiyilu.gov dot cn/country/

- 94 https://www.voanews.com/a/war-in-ukraine-challenging-china-strain-routes-to-europe/6530632.html
- 95 https://www.siis.org dot cn/updates/cms/cms/2024II/15I0I844hgjt.
- 96 https://research.un.org/en/docs/sc/quick; https://www.cfr.org/report/ no-limits-china-russia-relationship-and-us-foreign-policy
- 97 https://apnews.com/article/un-sudan-russia-ceasefire-resolution-85e2b7bb49edc8ca104cf3b9a887c859; https://research.un.org/en/docs/sc/quick
- 98 https://www.ohchr.org/en/press-releases/2024/05/china-un-expert-says-unilateral-sanctions-must-not-be-used-foreign-policy; https://russiaun.dot.ru/en/news/arria\_sanctions\_25II24; https://www.ref-world.org/reference/mission/unhrc/2017/en/118476
- 99 https://www.globaltimes dot cn/page/202504/1331405.shtml; https://www.globaltimes dot cn/page/202412/1325249.shtml; http://en.fao.xm.gov dot cn/2023-II/03/c\_936122.htm
- 100 https://eng.globalaffairs dot ru/articles/ the-vision-of-a-multipolar-world/
- 101 https://www.fmprc.gov dot cn/eng/xw/zyjh/202406/ t20240628\_II443852.html
- 102 https://www.nytimes.com/2023/04/05/world/europe/eu-china-em-bassador-russia-fu-cong.html; https://www.ukrinform dot net/rubric-polytics/3228896-china-confirms-nonrecognition-of-at-tempted-annexation-of-crimea-and-ban-on-contacts-with-occupation-authorities.html; https://www.cer.eu/publications/archive/bulletin-article/2008/russia-china-and-georgia-dimension https://web.archive.org/web/2022022132007/https://www.fmprc.gov.cn/fyrbt\_673021/202202/t20220222\_10644486.shtml; https://www.reuters.com/world/russias-lavrov-says-stands-alongside-china-taiwan-other-issues-2024-10-03/
- 103 https://mofa.gov dot pk/pakistans-membership-of-the-shanghai-co-operation-organization-sco; https://caspiannews.dot.com/news-detail/iran-becomes-full-member-of-shanghai-cooperation-organization-2023-7-5-51/; https://www.interfax.dot.com/newsroom/top-stories/104013/
- 104 https://www.fpri.org/article/2024/05/china-russia-and-power-transition-in-central-asia/; https://oec.world/en/profile/country/kaz
- 105 https://carnegieendowment.org/research/2023/12/the-difficult-realities-of-the-brics-dedollarization-effortsand-the-renmin-bis-role?lang=en
- 106 https://carnegieendowment.org/research/2025/03/brics-expansionand-the-future-of-world-order-perspectives-from-member-statespartners-and-aspirants?lang=en
- 107 https://www.cbsnews.com/news/russia-putin-brics-summit-chinaukraine-war-us-nato-sanctions-perverse-methods/
- 108 https://understandingwar.org/backgrounder/ russian-offensive-campaign-assessment-june-21-2024
- 109 https://understandingwar.org/backgrounder/russian-offensive-campaign-assessment-june-14-2024; http://kremlin dot ru/events/president/transcripts/76872; http://kremlin dot ru/events/president/news/76873; http://kremlin dot ru/events/president/transcripts/76871; http://www.news dot cn/world/20250508/53e-27a12b51f4423b4b2602323b16015/c.html; http://www.news dot cn/world/20250509/32253c7ff4d9487e9c68a8d58a315112/c.html
- 110 https://www.reuters.com/world/chinese-nationals-fighting-russia-ukraine-are-mercenaries-us-officials-2025-04-II/; https://t.me/V\_Zelenskiy\_official/13828; https://www.washingtonpost.com/world/2025/04/IO/china-russia-ukraine-fighters-zelenskyy-donetsk/bac930d8-I6IO-IIFO-8c4c-4878d48028cI\_story.html
- III https://www.reuters.com/world/chinese-nationals-fighting-rus-sia-ukraine-are-mercenaries-us-officials-2025-04-II/
- II2 https://understandingwar.org/backgrounder/ china-taiwan-weekly-update-april-18-2025
- 113 https://www.defenseone.com/ideas/2024/12/ how-china-adopting-battlefield-lessons-ukraine/401694/;
- 114 https://www.understandingwar.org/sites/default/files/Ukraine%20 and%20the%20Problem%20of%20Restoring%20Maneuver%20 in%20Contemporary%20War\_final.pdf
- II5 https://www.understandingwar.org/sites/default/files/A%20 Defense%20of%20Taiwan%20with%20Ukrainian%20 Characteristics\_0.pdf
- 116 http://www.81 dot cn/yw\_208727/16347192.html
- 117 https://www.rand.org/pubs/commentary/2023/II/chinese-strate-gists-evaluate-the-use-of-kamikaze-drones.html; http://www.81 dot cn/yw\_208727/16347192.html

- 118 https://www.defenseone.com/technology/2025/05/chinas-counter-uav-efforts-reveal-more-technological-advancement/405031/
- iii https://www.163 dot.com/dy/article/JI8DARA00535T18G. html?spss=dy\_author
- 120 https://www.scmp dot com/news/china/military/article/3306199/chi-nese-weapons-giant-develops-anti-drone-barrage-system-count-er-wartime-swarm-tactics; https://understandingwar.org/backgrounder/china-taiwan-weekly-update-april-18-2025
- 121 https://www.scmp dot com/news/china/military/article/3306199/chinese-weapons-giant-develops-anti-drone-barrage-system-counter-wartime-swarm-tactics
- 122 https://understandingwar.org/backgrounder/ china-taiwan-weekly-update-april-18-2025
- 123 https://thediplomat.com/2020/II/ taiwans-overall-defense-concept-explained/
- 124 https://www.lowyinstitute.org/the-interpreter/ why-china-north-korea-decided-renew-60-year-old-treaty
- 125 https://www.nknews dot org/2024/07/north-koreas-economic-dependence-on-china-reached-new-heights-in-2023-report/?t=1721844407759
- 126 https://crsreports.congress.gov/product/pdf/IF/IF1I388; https://www.ncnk.org/resources/briefing-papers/all-briefing-papers/china-north-korea-relations
- 127 https://www.mfa.gov dot cn/web/wjb\_673085/
  zzjg\_673183/yzs\_673193/dqzz\_673197/cxbdhwt\_673311/jbqk\_673313/; https://apnews.com/article/
  china-north-korea-sanctions-6e69cd6coc17fba261f62ea8e5bc25c5
- 128 https://www.wsj.com/articles/north-korea-lashes-out-at-china-1493822167; https://www.ncnk.org/resources/briefing-papers/all-briefing-papers/china-north-korea-relations
- 129 https://time.com/6988568/north-korea-russia-artil-lery-shell-south-korea-defense-minister/; https://www.nknews.dot.org/2022/10/north-korea-voices-support-for-russias-annexation-of-ukrainian-territory/
- $\label{localization} \textbf{130} \quad \text{https://press.un.org/en/2022/scI49II.doc.htm} \; ; \; \text{https://press.un.org/en/2024/scI5648.doc.htm} \;$
- 131 https://www.nknews.dot.org/2024/09/russia-says-north-korean-denuclearization-off-the-table-due-to-us-threats/
- 132 https://www.armscontrol.org/act/2024-07/news/ north-korea-russia-strengthen-military-ties
- 133 https://kcnawatch.org/newstream/1718870859-459880358/dprk-russia-treaty-on-comprehensive-strategic-partnership/
- 134 https://www.npr.org/2025/04/28/nx-sI-5379436/north-korea-russia-ukraine-troops-putin-kim
- 135 https://ria dot ru/20250428/kndr-2013781959.html https://understandingwar.org/backgrounder/ russian-offensive-campaign-assessment-april-28-2025
- 136 https://www.reuters.com/world/asia-pacific/rare-spat-shows-chinanorth-korea-still-odds-nuclear-weapons-2024-05-29/
- 137 https://www.understandingwar.org/backgrounder/ china-taiwan-weekly-update-january-9-2025
- 138 https://www.fmprc.gov dot cn/eng/xw/fyrbt/lxjzh/202412/ t20241217\_11495808.html; https://www.mfa.gov dot cn/eng/xw/fyrbt/lxjzh/202412/t20241217\_11495703.html
- 139 https://www.understandingwar.org/backgrounder/north-korea-joins-russias-war-against-ukraine-operational-and-strategic-implications
- 140 https://www.mfa.gov dot cn/eng/xw/zyxw/202505/ t20250509\_11617679.html; https://tass dot com/politics/1778683
- 141 https://www.politico.eu/article/china-xi-jinping-warns-vladimir-putin-not-to-use-nuclear-arms-in-ukraine-olaf-scholz-germany-peace-talks/
  - https://www.fmprc.gov dot cn/mfa\_eng/zxxx\_662805/202302/t20230224\_II030713.html https://www.uscc.gov/research/ chinas-position-russias-invasion-ukraine
- 142 https://oec.world/en/profile/country/chn?selector359id=HS2
- 143 https://www.reuters.com/world/china-will-not-join-swiss-peace-con-ference-ukraine-sources-say-2024-05-31/
- 144 https://www.understandingwar.org/backgrounder/ china-taiwan-weekly-update-march-14-2025

UNDERSTANDINGWAR.ORG 31

