THE RUSSIA-IRAN COALITION DEEPENS



Karolina Hird and Kitaneh Fitzpatrick





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Cover: MOSCOW, RUSSIA - JANUARY 17: (RUSSIA OUT) Russian President Vladimir Putin (R) and Iranian President Masoud Pezeshkian (L) hold signed documents during their meeting at the Grand Kremlin Palace, January 17, 2025, in Moscow, Russia. Pezeshkian arrived to Moscow for treaty signing with Putin. Source: (Photo by Contributor/Getty Images)

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Executive Summary

Russia's 2022 full-scale invasion of Ukraine has fundamentally shifted and intensified the Russo-Iranian relationship. Tehran has leveraged Moscow's growing material and financial requirements to sustain its war effort to support Tehran's own domestic and foreign policy objectives. The core of the Russo-Iranian relationship is a mutually binding interest in challenging and eventually overturning the US-led world order. This shared ideological core allowed the Russo-Iranian relationship to weather and survive tensions and challenges that have arisen since 2022, and the United States should not expect this ideological core to weaken in the years ahead. Russo-Iranian cooperation is occurring along seven major axes that relate to and overlap in the defense, economic, and political spheres. It is also not a perfectly one-to-one relationship—Moscow and Tehran are seeking different outcomes from their collaboration. The interrelated nature of these nodes of cooperation should emphasize to the United States and its allies that the success of Russia cannot be separated from the success of Iran.

A Brief History of Russo-Iranian Relations

Russo-Iranian cooperation has historically been fraught. Events in 2015 caused a major turning point in Tehran and Moscow's military alignment, and 2022 ushered in a new era of consolidated cooperation. Scholars have referred to the Russo-Iranian relationship as a "partnership of convenience" with a distinctly "transactional quality." ^I Both countries have historically shared a distrust of the US and Westernled international institutions, but the degree to which that sentiment has bonded them has fluctuated over time. The Soviet Union was the first state to recognize the establishment of the Islamic Republic of Iran following the 1979 Iranian revolution, but it militarily backed Iraq throughout the Iran-Iraq War of 1980 to 1988.² Iran in response adopted a "neither East nor West" strategy, emphasizing domestic self-sustainability and reliance throughout most of the 1980s.³ Upon the end of the Iran-Iraq War, however, Iran moderated its confrontational stance towards Moscow and secured a series of deals with the Soviet Union between 1989 and 1991 for the acquisition of MiG-29 and Su-24 fighter aircraft, air-to-air⁴ The deal also notably included licensed manufacturing for tanks and armored vehicles and a IO-year agreement on the provision of machine parts, enabling Iran to domesticize tank production.⁵ The 1989 deals kickstarted a new phase of intensified Iranian purchases of Russian arms following the fall of the Soviet Union, which lasted into the late 1990s.

Russia's approach to Iran somewhat shifted in the late 1990s, however, as Russian leadership tried to align itself more closely with US and Western interests. Then-Russian Prime Minister Viktor Chernomyrdin signed a secret agreement with American Vice President Al Gore in June 1995 under which Russia would not sign any new arms deals with Iran and would complete all existing arms deals by December 31, 1999 in exchange for US support for Russia's participation in the newly founded arms trade regime—the 1996 Wassenaar Agreement.⁶ Russia also joined the Missile

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Technology Control Regime (MTCR) in 1995, which placed restrictions on Russian sales of advanced missile technologies to Iran and other states.⁷ Russia continued to support the Iranian missile program in other ways in subsequent years, but Moscow's joining of the MTCR imposed another obstacle on its support to Iran's missile industry, which Iranian leaders presumably detested.

Russian assistance to Iran's civilian nuclear program grew in the 1990s despite friction about arms control.⁸ Russia and Iran signed an agreement in January 1995 and an addendum in 1998 stating that Russian nuclear technology company Atomstroyexport (a subsidiary of Russian State Atomic Energy Corporation Rosatom) would complete the construction of a power unit at Iran's Bushehr Nuclear Power Plant (BNPP).⁹ The agreement required Iran to transfer spent fuel to Russia for long-term storage and processing, while the Russian Novosibirsk Chemical Concentrate Plant would supply nuclear fuel to the BNPP.¹⁰ Construction of the BNPP concluded in 2009, and the plant began operating in November 2010.¹¹ The BNPP connected to the Iranian energy grid in September 2011.¹²

Russian President Vladimir Putin's election in 2000 marked the start of a new chapter of Russo-Iranian cooperation. Putin immediately appeared

The core of the Russo-Iranian

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overturning the US-led world order.

more open to cooperation with Iran than his predecessors and cancelled the Gore-Chernomyrdin Agreement in the first year of his presidency.¹³ Russia and Iran signed the "Treaty on the Fundamentals of Relations and Principles of Cooperation" and an

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agreement "on cooperation in the field of training military personnel" in 2001.¹⁴ Russian conventional arms sales and technological, space, nuclear, and missile development cooperation with Iran persisted in the early 2000s.¹⁵

The tenor of Russo-Iranian relations once again shifted during Dmitry Medvedev's 2008-2012 presidency, however. Medvedev signed a decree in June 2010 stipulating that Russia would begin implementing UN Security Council (UNSC) Resolution 1929, which imposed further sanctions against Iran over its nuclear program.¹⁶ Medvedev's decree prohibited Russia from transferring to Iran promised S-300 long-range surface-to-air missile systems as well as other conventional weapons systems such as armored vehicles, combat aircraft and helicopters, warships, and all missiles and missile systems. Former Iranian President Mahmoud Ahmadinejad decried Medvedev's decision as "an advertisement of a propaganda show, which is going to be performed by America."¹⁷

The start of Putin's second term in 2012 once again reinvigorated Russo-Iranian relations, despite the frictions that had arisen during Medvedev's presidency.¹⁸ Putin met with Ahmadinejad on the sidelines of the Shanghai Cooperation Organization (SCO) Summit in June 2012 and invoked Iran's role as Russia's "historical partner," and then sent Foreign Minister Sergei Lavrov to Tehran the following week.¹⁹ Putin maintained a relationship with Ahmadinejad's successor, Hassan Rouhani, after Rouhani took office in 2013.²⁰

The year 2015 marked the first watershed moment of Russo-Iranian relations in the 21st Century. Islamic Revolutionary Guards Corps (IRGC) Quds Force Commander Major General Qassem Soleimani

> arrived in Moscow in July 2015 to seek Russia's help in keeping Syrian President Bashar al Assad in power during the Syria Civil War.²¹ Russia's declared purpose in entering the Syrian Civil War on Iran's behalf was to counter the Islamic State of Iraq and al Sham (ISIS) in

Syria alongside Assad's forces, Iranian troops, and Iranian proxies, but, in reality, the Russian military focused on cracking down against anti-Assad opposition and helping Assad consolidate power.²² Russia sent combat aircraft, intelligence and electronic warfare (EW) assets, Spetsnaz (Russian Special Forces), and a small contingent of ground forces to Syria, some of which remained in Syria through the fall of Assad's regime in December 2024 and continued to operate in support of Iranian objectives in the region.²³ Iran and Russia both learned valuable lessons from the creation of their military coalition—lessons on which they would later build during Russia's full-scale invasion of Ukraine.

Russia and Iran continued military, technical, and nuclear cooperation in the years between Russia's entry into the Syrian Civil War and its 2022 invasion of Ukraine.²⁴ Russia continued to cooperate with the UNSC in a limited sense against Iranian nuclear activities under the Joint Comprehensive Plan of Action (JCPOA) and maintained a relationship with Israel, Turkey, and the Gulf States—Iran's predominant regional adversaries. Former Iranian Foreign Minister Mohammad Javad Zarif alleged in a leaked audio tape in early 2021 that Soleimani was working with Russia to "sabotage" the JCPOA, although Moscow strongly decried President Donald Trump's withdrawal from the agreement in 2018.²⁵

Iranian President Ebrahim Raisi, who succeeded Rouhani and died in a helicopter crash in 2024, identified relations with Russia as a foreign policy priority when he took office in 2021.²⁶ Raisi travelled to Moscow in January 2022 to present his draft for his envisioned 20-year cooperation agreement, which his successor Masoud Pezeshkian signed on



January 17, 2025.²⁷ Russia invaded Ukraine a month after Raisi's visit to Moscow, setting in motion a historic intensification in Russo-Iranian relations. Russia's incentives to cooperate with Iran increased exponentially as the material constraints on Russia's war machine became apparent. Iran called the invasion of Ukraine as a moment when "the regional and global order has undergone a new change and redefinition" and "a starting point for changing the global order."²⁸ Tehran has used its relationship with Russia to align itself with a partner with a similar interest in undermining the US-led world order, and to leverage Russian political influence in various international forums, including the UNSC.

Iran and Russia are learning from each other's respective conflicts—Russia's war in Ukraine and Iran's escalation cycle with Israel and its peripheral involvement in the Israel-Hamas war. The battlefield in Ukraine has become a testing ground for Russia's partners—Iran and North Korea—to test their weapons systems against a Western-supported adversary.²⁹ Russia uses Iranian-provided drones against Ukraine on a nearly daily basis, allowing Iran the opportunity to observe how its weapons fare against Western-provided air defense systems

RUSSO-IRANIAN RELATIONS, 1979–2022

2015

Russia begins cooperating with Iran in the Syria Civil War.

2011

Bushehr Nuclear Power Plant connects to Iranian power grid after Russian construction completes.

2021 Election of Iranian President Ebrahim Raisi.

February 2022 Russia invades Ukraine.

January 2022

Raisi travels to Moscow to present a 20-year comprehensive

partnership agreement.

2012 Putin's third term begins.

2010

Russian joins UNSC Resolution 1929 to sanction Iran over its nuclear program. Medvedev aborts all weapons transfers to Iran.

2018 US withdraws from JCPOA.

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and Ukraine's innovative electronic warfare (EW) jamming techniques. Iran's failed April 13, 2024 combined missile and drone strike against Israel was an example of what Iran has been hoping to learn from Russia's use of its drones (as detailed in a subsequent portion of this paper).³⁰ Russia has provided diplomatic cover for Iran and its proxies in the Middle East, frequently condemning Israel and the West for taking actions against elements of Iran's Axis of Resistance (AoR).³¹ Following the failed April 13 strike on Israel, Russia used its UNSC position to amplify Iran's justification for the strike and condemn Israel and the United States for their military actions in the Middle East.³² Russia has even reportedly considered transferring weapons and other military equipment to Yemen's Houthis, which strongly underlines the deepening and expansion of the Russo-Iranian relationship.³³

A weaker Russia, therefore, means a weaker Iran, and vice versa. The success of one has become inextricable from the growth of the other. The Russo-Iranian relationship has consolidated around Russia's war in Ukraine, and the convergence of their respective anti-US ideologies has rendered it nearly impossible for the West to drive any sort of wedge between Moscow and Tehran. The outcome and prospects of their relationship are therefore in large part contingent on the outcome of the war in Ukraine. If Russia loses in Ukraine, it will be greatly weakened by years of grueling conflict and a major military loss, weakening its position in the eyes of its partners and its ability to re-pay the debts it owes to its supporters. If Russia wins, however, it will protect its reputation in the eyes of its partners and be able to exploit this influence, as well as the material benefits it will accrue from the domination of Ukraine, for the benefit of the alternate world order Moscow seeks to install. The Russo-Iranian network will deepen as the war in Ukraine continues and will consolidate around a Russian win. Russia's victory in Ukraine is Iran's victory.³⁴

Organizing Principles of the Russo-Iranian Relationship

Russo-Iranian cooperation is complex and multilayered. At the core of their relationship lies a mutual commitment to challenging and overturning the US-led world order.³⁵ The strength of this ideological core supersedes many of the tensions and disagreements that have historically characterized the relationship and therefore defines and shapes the way Moscow and Tehran interact. Economic cooperation emanates from the anti-US ideological core of the Russo-Iranian relationship. Both countries are heavily sanctioned and face domestic economic challenges that have increased the stakes of their mutual cooperation. Russia's war in Ukraine and Putin's management of that war have brought about a plethora of self-imposed economic struggles, some of which Moscow has looked to Tehran to alleviate. Military cooperation is a natural result of their economic ties—Russia relies on Iran for material inputs to conduct its war against Ukraine, and Iran is looking to Moscow to learn important lessons about the modern battlefield in order to indigenize such lessons and apply them to its own regional conflicts. Finally, Iran and Moscow use their political and diplomatic cooperation to organize and coordinate their bilateral relationship at the highest strategic levels.

Axes of Cooperation

The Russo-Iranian cooperation network is comprised of seven axes along which Moscow and Tehran are sustaining and building their relationship—arms transfers; defense industrial base support; technological cooperation and knowledge transfers; military exercises; economic cooperation; political and diplomatic cooperation; and media cooperation.

1). Arms Transfers

Iranian Arms Transfers to Russia

Arms transfers between Iran and Russia significantly expanded in frequency and scope following Russia's February 2022 invasion of Ukraine. ISW-CTP observed a significant increase in the number of bilateral meetings between senior Russian and Iranian defense officials following Russia's 2022 full-scale invasion, as both Tehran and Moscow appeared to be negotiating the terms of their cooperation during the war. Several arms deals likely resulted from these meetings. Iran provided Russia with roughly 46 drones for Russia to use in Ukraine in August 2022—the first such Iranian weapons transfer since the beginning of the war.³⁶ Iran has since supplied Russia with additional drones, drone operator training, and other weapons such as short and close-range ballistic missiles, military hardware, and glide bombs.³⁷ Russia in turn has provided Iran with an unspecified number of Yak-130 combat trainer aircraft and material support for Iran's network of partners and proxies in exchange for Iranian weapons transfers since 2022.³⁸ Russia has also supplied Iran with captured Western hardware, likely for Iranian study and eventual reverse-engineering.³⁹

Iran has exploited the revenue from its weapons sales to Russia to generate revenue for the Iranian economy and advertise itself as an effective arms exporter to other international buyers. Iranian weapons sales to Russia have become a muchneeded boon for Tehran amidst deteriorating domestic economic conditions.⁴⁰ The expiration of UN restrictions on Iran's ability to import and export missiles and drones in October 2023 has further facilitated weapons sales between Tehran and Moscow, allowing Iran to meet Russia's military needs without violating sanctions or requiring Russia to do so.⁴¹ The international Prana Network hacker group hacked an Islamic Revolutionary Guards



AND CRITICAL THREATS



June 2023:

Iranian Law Enforcement Commander Ahmad Reza Radan discusses internal security cooperation with Russian security service heads in Moscow.



September 2023:

Russian Defense Minister Sergei Shoigu discusses expanding cooperation with senior Iranian defense officials in Tehran.

August 2023:

Iranian Artesh Ground Forces Commander Kioumars Heydari discusses increasing cooperation with his Russian counterpart Oleg Salyukov in Moscow.



November 2023:

Russian President Vladimir Putin's Special Representative for Syrian Affairs Alexander Lavrentiev discusses security coordination and Syria with Iranian Supreme National Security Council Secretary Ali Akbar Ahmadian in Tehran.



RUSSO-IRANIAN BILATERAL MEETINGS SINCE 2022: SENIOR DEFENSE OFFICIALS



February 2024: Russian Republic of Tatarstan Head and Tupolev Aircraft Board of Directors Chairperson Rustam Minnikhanov visits Esfahan, the heart of Iran's military industrial complex.



September 2024: Russian Security Council Secretary Sergei Shoigu meets with his Iranian counterpart Ali Akbar Ahmadian in Tehran.

August 2024:

Russian Security Council Secretary Sergei Shoigu meets with his Iranian counterpart Ali Akbar Ahmadian in Tehran.



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Corps (IRGC) email server in February 2024 and found documents indicating that Russia had paid \$193,000 per unit for a total of 6,000 Iranianmade Shahed-136 drones—a steep price increase from the previously estimated cost of production of \$20,000-\$50,000 per drone-amounting to a total of \$1.1 billion in revenue for Iran.42 Tehran also views its drone sales to Russia as an opportunity to promote and expand weapon exports to other revisionist states that are friendly to the Moscow-Tehran entente. Iranian officials frequently advertise Iranian drones and boast about the large number of countries wishing to purchase Iranian-made weapons.43 Former Defense Minister Mohammad Reza Ashtiani, for example, claimed in March 2024 that Iran had increased arms exports "four or five times" since March 2022 and expressed confidence that this figure would continue to rise.44

Drones

Tehran has supplied Russia with thousands of Iranian-developed drones to support Russia's

war in Ukraine.⁴⁵ Ukraine's Foreign Ministry reported in September 2024 that Russia had launched over 8,000 Iranian-developed Shahed-136 drones into Ukrainian territory since the start of the war in February 2022.⁴⁶ This report excluded other Iranian-made drones, such as the Mohajer-IO,

which suggests that the total number of Iranianmade drones used in Ukraine far exceeds 8,000 units. The Prana Network's February 2024 hack also found that that Russia had purchased 6,000 Shahed-136 drones and planned to purchase 677 of one model of Shahed-238 and 2,310 of another model of Shahed-238 drones, and 2,310 Shahed-107 drones on an unspecified date.⁴⁷ Tehran has additionally deployed Iranian military personnel to occupied Crimea and trained Russian drone operators in Iran to instruct Russian forces on the use of Iranian-made drones.⁴⁸ Russia's purchase of Iranian-made drones allows the Kremlin to circumvent domestic production challenges caused by its invasion of Ukraine and international sanctions. The Russian military has suffered significant materiel losses in Ukraine, which have depleted its preexisting supply of drones and high-precision missiles and strained its production lines. Replacing such losses requires time and resources, which Russia has struggled to sustain.49 Western sanctions and export controls have compounded damage to the Russian economy, further exacerbating supply chain shortages and arms production challenges.⁵⁰ Sanctions and export controls have additionally constrained Moscow's access to critical technologies and the components required for drone production.⁵¹ Russian acquisition of Iranian drones has eased some pressure on Russia's defense industry and allowed Moscow to prioritize domestic production of high-demand military equipment such as tanks, artillery, and advanced munitions.⁵²

Russia has leveraged both the quantity and offensive capability of Iranian-produced drones on

the battlefield in Ukraine. Although Russia indigenously produced its own drones before its invasion of Ukraine in 2022, these models were limited in number, costly to produce, or had insufficient combat and loitering capabilities necessary for prolonged and contemporary offensive

operations.⁵³ The Russian Orlan-IO and Eleron-3 reconnaissance drones, for example, have high attrition rates and limited offensive capabilities, making them inefficient models in combat conditions in Ukraine.⁵⁴ Russian forces have employed the domestically-produced Lancet-3 loitering munition in Ukraine, but low production figures have limited the drone's utility.⁵⁵

Russia has used Iranian drones, specifically loitering munition models such as the Shahed series, to supplement this limited drone fleet since 2022. Iranian drones are mass-supplied and therefore expendable, allowing Russia to deploy and replenish them large

Russian acquisition of Iranian drones has allowed Moscow to prioritize production of highdemand systems like tanks, artillery, and advanced munitions.





IRANIAN DRONES IN UKRAINE: SPECIFICATIONS AND USE CASES

Model	Туре	Mass	Launch System	Range	Use Cases	
Shahed-131	Loitering munition	135 kg	Rapid launch	900 km	 Targeted strikes on Ukrainian infrastructure Strike packages using swarming tactics 	
Shahed-136	Loitering munition	200 kg	Rapid launch	2,500 km	• Advanced system of Shahed-131	
Mohajer-6	Multi- role	600-670 kg	Runway	200 km	 Used to guide Shahed loitering munitions to their targets in Ukraine Carried Qaem-5 bombs to strike targets in Ukraine 	
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quantities.⁵⁶ Russia often deploys large quantities of Iranian Shahed 136 and 131 in strike packages targeting Ukrainian military and critical infrastructure. Russian forces typically first launch large numbers of slower drones, such as Shaheds, and cruise missiles to distract and overwhelm Ukrainian air defense systems in order to allow ballistic missiles, which are much harder to shoot down, to reach their targets.⁵⁷ Russia has additionally used Iranianproduced Mohajer-6 drone multi-role drones in Ukraine to supplement the effects of Shahed drones in wider strike packages.⁵⁸

Iranian drones are cost-efficient alternatives to Russian and international munitions. The Russian Kalibr cruise missile roughly costs \$1 million per system compared to the Iranian-produced Shahed-136 drone, which costs an estimated \$20,000-\$50,000 per unit to produce and which Iran reportedly sold to Russia for \$193,000 per unit.⁵⁹ Iranian drones also cost significantly less than similar systems on the international market such as the Turkish Bayraktar TB2, which has an estimated cost of production of \$5 million per unit.⁶⁰ Russian milbloggers have framed Moscow's purchase of Iranian drones-even at steep markups-as a cost-efficient, and long-term investment in Russia's domestic defense capabilities.61 Such milbloggers argued that purchasing Iranian-produced drones was a temporary measure that would allow Russia to sustain long-range strikes against Ukraine and would eventually result in Moscow reverse engineering Iranian drones, thereby domestically producing its own systems at a significantly lower price point.⁶²

Missiles

Iran has also supplied Russia with short-range ballistic missiles (SRBMs).⁶³ US officials confirmed in September 2024 that Iran had shipped an unspecified number of Fateh-360 SRBMs to Russia.⁶⁴ The Fateh-360 has a range of around 120 kilometers and can carry a payload of 150 kilograms.⁶⁵ This shipment followed a December 2023 agreement for Iran to provide Russia with both the Fateh-360s and Ababil close-range ballistic missiles (CRBMs), which have a range of 86 kilometers and can carry a payload of 45 kilograms.⁶⁶ Western media separately reported in February 2024 that Tehan had provided Moscow with "hundreds" of Iranian-made SRBMs in January 2024, including the Fateh-IIO and the Zolfaghar models, in one of five such shipments since December 2023.⁶⁷ There have been no confirmed cases of the use of any of these SRBMs in Ukraine as of December 2024.

The Fateh-360 and Ababil missiles do not inherently provide an operational advantage over Russianmade systems. Russian procurement of Iranian SRBMs, rather, allows Russia to maintain a missile strike campaign against Ukraine while preserving its indigenously made, longer-range systems. Iranian missile shipments, like Iranian drone shipments, provide Moscow with the flexibility to ease pressure on its defense industrial complex and supplement its preexisting arms inventory.

Guided Air-to-Ground Bombs

Iran has supplied Russia with guided air-to-ground bombs to supplement Moscow's growing Iranian drone inventory. German outlet *BILD* reported in May 2024 that Iran likely supplied Russia with Qaem-5 television-guided air-to-ground bombs, which Iran started producing as recently as 2019.⁶⁸ *BILD* noted that an Iranian-provided Mohajer-6 drone carrying the Qaem-5 bombs crashed in Kursk Oblast, the first Qaem-5 use-case in Ukraine.⁶⁹ The Qaem series guided air-to-ground bomb is additionally compatible with other Iranian drones, including the Iranian Aircraft Manufacturing Industries Corporation (HESA) Hamaseh reconnaissance drone.⁷⁰

Military Hardware

Iran has leveraged unregulated trade routes in the Caspian Sea and its Axis of Resistance to transfer military hardware to Moscow. Sky News reported in June 2023 that Iran sold "varying types of artillery, tank shells, and rockets" to Russia for roughly \$I million, citing an unverified sarms contract from September 2022.⁷¹ The Sky News report also found that Iran supplied Russia with barrels for a T-72 tank for a Howitzer artillery piece, as well as artillery shells for approximately \$740,000 in a separate but linked, unverified contract.⁷² The Wall Street Journal reported in April 2023 that Iran had shipped "more than 300,000



artillery shells and a million rounds of ammunition" through the Caspian Sea to resupply Russian troops fighting in Ukraine in a six-month timeframe.⁷³ The *Guardian* reported in April 2022, citing Iraqi officials, that Iran had helped Iraq dispatch anti-tank missiles, rocket-propelled grenades, and rocket launchers to Russia through the Caspian Sea.⁷⁴

Russian Arms Transfers to Iran

Russia has in turn been providing concrete reciprocal military support to Iran, albeit at a lower level than Iranian arms transfers to Russia. Iran has long maintained an extensive "wish list" of weapons systems it seeks from Russia, although Russia to-date has only provided a small portion of the conventional military support for which Iran has asked.⁷⁵ Iranian Deputy Defense Minister Mahdi Farahi reported in November 2023 that Russia and Iran had "finalized" arrangements for Russia to deliver Su-35 fighter jets, Mi-28 attack helicopters, and Yak-130 jet trainers to Iran.⁷⁶ IRGC-affiliated Tasnim News Agency confirmed that as of September 2023 Iran had received a small number of Yak-130s.77 German aviation-focused outlet Flug Revue notably reported on November 29, 2024 that Iran received its first two Su-35s from Russia on November 18.78 Flug Revue noted that Iran received the two jets in disassembled form and would transport them to the 3rd Tactical Arm Base near Hamadan, western Iran, for re-assembly. Neither official Iranian nor Russian outlets have confirmed the transfer, but several IRGC-affiliated platforms amplified the *Flug Revue* article.⁷⁹ Israeli media also speculated in August 2024 that Russia transferred an unspecified number of Iskander ballistic missiles and Murmansk-BN electronic warfare (EW) systems to Iran, but these reports remain unconfirmed.⁸⁰ Russia is unlikely to have given Iran these systems in a quantity sufficient to augment Iran's domestic arsenal due to Russia's own missile and EW requirements for operations in Ukraine. Russia similarly finalized a deal on the transfer of S-300 surfaceto-air missile systems to Iran in 2016 (which Israel notably destroyed during a strike on October 27, 2024) but then refused to sell more advanced S-400 surface-to-air missiles to Iran in 2019, and to date still has not provided Iran with S-400s.⁸¹

Iran may not be looking for one-for-one arms exchanges with Russia, however, and is instead likely seeking to indigenize aspects of defense production and bolster domestic self-sufficiency. Iran has historically placed great emphasis on defense self-sufficiency.⁸² Supreme Leader Ali Khamenei often stresses the need to bolster Iran's indigenous defense capabilities and frames Tehran's defense industry as demonstrative of "resistance" to US-led Western sanctions.⁸³ Both the IRGC and the Artesh (Iran's conventional military) have "Research and Self-Sufficiency Jihad" departments that focus on research and development of conventional weapons systems.⁸⁴ Iran's propensity for reverse-engineering critical weapons systems is a core pillar of its drive towards self-sufficiency-Iran created its "Toofan" anti-tank missile by reserve-engineering the American BGM-71 TOW missile in the 1970s, and later created a drone based on a US RQ-170 "Sentinel" that Iranian forces downed and captured in late 2011.85

Russia has delivered captured Western weapons systems to Iran since 2022. *Sky News*, citing an anonymous security source, reported in November 2022 that a Russian military aircraft transported a captured British NLAW anti-tank missile, US Javelin anti-tank missile, and a US Stinger man-portable air-defense system (MANPAD) to Tehran in August 2022.⁸⁶ *CNN* later reported in March 2023 that Russia has been capturing Western equipment left by Ukrainian forces on the battlefield and sending these systems to Iran, likely for Iran to reverse-engineer.⁸⁷

Russia has allegedly provided Iran with the legal licenses required for Iran to actually manufacture Russian-designed weapons. An Iranian journalist who focuses on Russo-Iranian relationships alleged on October 21 that Russia gave Iran a license to domestically manufacture Russian-designed Su-30 and Su-35 fighter jets, and that Iran intends to assemble between 48 and 72 Su-35s using this production license.⁸⁸ Iran would theoretically only need a few jets and a production license in order to start the process of indigenizing the manufacture of Su-35 analogues-bolstering Iran's conventional air power capabilities and aviation industry in the longer-term. Russian arms exchanges with Iran emphasize the fact that Iran may not be looking for a perfectly equitable quid pro quo from Russia, instead focusing on select weapons systems that Tehran views as keys to securing Iran's self-sufficiency in the long-term.

Beyond arms deliveries directly to Iran, Russia has also provided material support to Iran's Axis of Resistance (AoR). This dynamic has become particularly evident since Hamas' October 7, 2023 attack on Israel and the war that has followed. US intelligence sources reported in November 2023 that Russia's Wagner Group was planning to transfer an SA-22 "Pantsir" air defense system to Lebanese Hezbollah (LH), although as of 2024 the completion of that transfer has not been confirmed in the open-source.⁸⁹ Hezbollah reportedly targeted Israel's Meron air control base with Russia-made "Kornet" anti-tank missiles in January 2024.90 Israel has subsequently reported finding "Kornets" at abandoned LH positions in southern Lebanon.91 Israeli military sources reportedly found Russian-made 9MII3 "Konkurs" wire-guided anti-tank missiles in an LH compound in southern Lebanon in October 2024.⁹² Russia likely gave the missiles to the Syrian Arab Army (SAA) before "they found their way...into the hands of Hezbollah" under the cover of the Syrian Civil War, according to Israeli military intelligence.93 Reuters reported in September 2024 that Iran and Russia agreed on a deal for Russia to transfer Yakhont (also known as P-800 "Oniks") missiles to Yemen's Houthi rebels.⁹⁴ Russia has yet to finalize the

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transfer, but the Yakhont missiles would strengthen the Houthi's ability to threaten commercial vessels in the Red Sea. The *Wall Street Journal* reported in October 2024 that Russia provided targeting data to the Houthis to assist drone and missile strikes on Western ships in the Red Sea.⁹⁵

2). Defense Industrial Base

Iran has provided Russia with critical inputs to Russia's defense industrial base (DIB), allowing Russia to increasingly indigenize and scale up the production of Iranian drone models and sustain its war in Ukraine. US and other Western intelligence sources began reporting in November 2022 that Russia and Iran covertly reached an agreement for Russia to begin domestically manufacturing "hundreds" of drones following Iran's transfer of designs and key components to Russia.⁹⁶ US-aligned officials reported by February 2023 that Russia and Iran were "moving ahead" with a \$1 billion deal to construct a new drone production factory in the town of Yelabuga (in Russia's Republic of Tatarstan), with the intention of producing at least 6,000 Shahed-style drones.⁹⁷ US-aligned officials noted that the Iranian delegation that visited Russia in early January 2023 was comprised of the head of the IRGC Aerospace Force Research and Self-Sufficiency Jihad Organization, Brigadier General Abdollah Mehrabi, and Chief Executive of Iran's Quds Aviation Industry, Ghassem Damavandian. US National Security Council Spokesperson John Kirby warned in June 2023 that joint construction on the plant was underway at the Alabuga Special Economic Zone (ASEZ) in Yelabuga, noting that Iran had provided Russia with the necessary drone manufacturing equipment in May 2023.98 Russian independent investigative outlet Protokol reported in July 2023 that an insider source at the ASEZ estimated that the Russo-Iranian drone production contract totaled about 115 to 130 billion rubles (\$1 billion to \$1.2 billion), and established supply

routes through which Iran sent Shahed components directly to the Begishevo airport in Nizhnekamsk, Tatarstan, after which trucks transported the components to the ASEZ for production.⁹⁹ The Washington Post reportedly obtained leaked Russian documents in August 2023 that detailed the intended stages of drone manufacture at the ASEZ, starting with the Russian assembly of Iranian-delivered drone components until mid-2023, then the Russian production of airframes until late 2023, and the final stage independent Russian production of over 4,000 Shahed-type drones at the ASEZ.¹⁰⁰ The ASEZ owes the Russian Ministry of Defense (MoD) the last of the 6,000 contracted drones by September 2025, according to the leaked documents.

Iran's support for Russia's DIB has already concretely manifested on the battlefield in Ukraine. UK-based Conflict Armament Research conducted a component analysis of a downed Russian "Geran-2" drone in Ukraine in July 2023 and concluded that the Geran-2 was essentially the Russian version of a Shahed-suggesting that Russia had started producing and using its own Shahed analogues as early as summer 2023.101 Ukrainian forensic specialists are now finding three categories of Shahed-type drones in Ukraine-those marked "M," indicating Iranian production; those marked "I," indicating those produced in Russia using imported Iranian components; and those marked "K," indicating Russian production with Russian components.¹⁰² The number of Shahed-type drones marked "I" or "K" that Ukrainian forces are downing has reportedly increased significantly in recent months, suggesting that Russia has substantially scaled up its domestic Shahed production. A Ukrainian aviation expert suggested that Russia may now also be producing Shahed variants at the "Kupol" electromechnical plant in Izhevsk, Udmurt Republic.¹⁰³

Russia is now launching a record number of Shaheds and Shahed variants at Ukraine, largely because of increased domestic production at the

Iran's support for Russia's DIB has likely allowed Russian Shahed production to surpass Russian production goals nearly a full year early. ASEZ.¹⁰⁴ The Institute for Science and International Security, citing tabulated data from the Ukrainian Air Force, found that between September 2022 (when Russia first began using imported Shaheds on the battlefield) to December 2023, Russia launched nearly 4,000 Shahed-type drones at Ukraine.¹⁰⁵ This number rose to 7,550 by the end of August 2024. A Royal United Services Institute (RUSI) analysis published in June 2024 found that joint Russo-Iranian Shahed production has surpassed 250 Shaheds per month, far exceeding the original Iranian production rates of 40 Shaheds per month.¹⁰⁶ ISW calculations, using Ukrainian Air Force data, show that in November 2024 alone, Russian forces launched nearly 32 percent more Shaheds at Ukraine than in October 2024.¹⁰⁷ The data on the number of Shahed launches throughout 2023 and 2024 strongly suggests that Russian production at the ASEZ has likely surpassed its 6,000 Shahed goal for 2025, nearly a year early.¹⁰⁸ *CNN* noted on December 27, 2024, citing Ukrainian defense intelligence sources, that Russia produced

<image/> Image: Study of WarImage: AndImage: Critical threatsImage: Study of WarImage: Study of War<					
Su-35 Fighter jets	Poseidon unmanned submarines	Electronic warfare capabilities Murmansk BN jamming systems			
S-400 Air Defense systems	Mil Mi-28 anti- armor attack helicopters	Cyber warfare capabilities			
Yak-130 jet trainers	US Systems found in Ukraine for reverse engineering	Advanced missile systems technology and support			

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5,760 Shahed type drones at the ASEZ between January and September 2024 alone, over double what the ASEZ produced in 2023.¹⁰⁹

3). Technological Cooperation and Knowledge Transfers

Bilateral Russo-Iranian knowledge and technological transfers supplement the effects of arms transfers and concrete defense industry support. Knowledge and technological transfers enable both countries to integrate and institutionalize the impacts of their collaboration. Russia's and Iran's knowledge and technological transfers occur along the following lines: electronic warfare (EW); satellite and space cooperation; surveillance technology; and nuclear technology. Knowledge and technological transfers in these spheres allow both Russia and Iran to build their respective capacities and capabilities beyond just the military realm. Russian technology and knowledge transfers to Iran are particularly beneficial to Iran's ambitions of domestic self-sufficiency, as Moscow is giving Tehran ample opportunities to learn about new technologies and adaptive battlefield tactics from its own experience in Ukraine, which Tehran can later implement to bolster its domestic resilience.

Electronic Warfare (EW)

Russia's support for Iranian electronic warfare (EW) capabilities has significantly increased Iran's ability to threaten Israel, and by extension US interests in the Middle East. Israeli intelligence sources reported in March 2024 that Russia is helping Iran upgrade its EW and GPS denial capabilities, largely by using lessons that Russia learned with these capabilities in Syria and Ukraine.¹¹⁰ Iran's historic propensity for reverse-engineering imported systems is a critical component of its ability to implement Russian EW practices. The Iranian Cobra-V8 EW system, for example, closely resembles the Russian Krasukha-4 EW system.^{III}

Iran and Russia are engaged in an iterative implementation cycle of jamming and spoofing Global Navigation Satellite Systems (GNSS) signals (GNSS includes country/region specific GNSS IANUARY 2025

constellations such as America's GPS, Russia's GLONASS, China's BeiDou, Europe's Galileo, and others). GNSS jamming refers to the practice of using signals to prevent GNSS receivers from tracking authentic GNSS signals, while GNSS spoofing involves the transmission of false GNSS signals to generate false location data and confuse GNSS trackers.¹¹² Russia has notably been employing and refining GNSS jamming and spoofing tactics for over a decade, particularly during its first invasion of Ukraine in 2014 and its operations in Syria since 2015, but its full-scale invasion of Ukraine has led to unprecedented use of these tactics and technologies.¹¹³ Iran has likely observed and absorbed the GNSS jamming and spoofing lessons that Russia has iterated on over the last decade and recently implemented these lessons in fall 2023 to disrupt commercial air traffic over the Middle East. Dozens of commercial flights over the Middle East fell prey to spoofing attacks that caused significant airspace disruptions in September 2023.¹¹⁴ The University of Texas' Radio Navigation Laboratory traced the origin of some of the spoofing to the eastern outskirts of Tehran.¹¹⁵ Russia may have then observed the impacts of large-scale commercial air traffic disruptions in the Middle East and applied this tactic to the European theater. The Financial Times estimated as of April 2024 that Russian GNSS jamming or spoofing had impacted "tens of thousands" of civilian flights in the preceding months, emphasizing the scale of this hybrid warfare tactic.¹¹⁶ Several European intelligence sources and officials have reported that Russia was jamming GNSS signals across northern and eastern Europe to unprecedented levels throughout 2024, impacting commercial air traffic.¹¹⁷ The ultimate effect of these exchanges is a less secure commercial air spaceboth in the Middle East and in Europe.

Satellite and Space Cooperation

Russia is providing Iran with critical support for its satellite and space program, expanding Iran's long-range targeting and surveillance capabilities under the pretext of civilian space cooperation.¹¹⁸ US and Middle Eastern officials warned in 2021 that Russia was planning to supply Iran with the "Khayyam" satellite (also known as the Kanopus-V),

which would grant Iran the "unprecedented" ability to track military targets and US and allied military assets throughout the Middle East.¹¹⁹ Iran's Ministry of Communication announced in August 2022 that Russia and Iran would begin joint Khayyam production and collaborate on future production of the second, third, and fourth versions of the Khayyam.¹²⁰ Russia has launched four satellites on Iran's behalf since 2022-the Khayyam remote sensing satellite in August 2022; the "Pars-I" research-sensing satellite in February 2024; and the "Kowsar" (or "Kousar") high-resolution sensing satellite and the "Hodhod" internet communications satellite in November 2024.121 A Russian research and production enterprise in Obinsk, Kaluga Oblast, notably manufactured parts of the 2022 Khayyam satellite for Iran-emphasizing the growing links between Russo-Iranian DIB cooperation and the space industry.¹²² Russia's Roscosmos Space Agency also signed a memorandum with Iran's Space Agency in December 2022 on continued space cooperation and further joint satellite production projects beyond the Khayyam satellites.¹²³ US intelligence officials notably have assessed that Russia is providing Iran with technical support for the Iranian Space Launch Vehicle (SLV) program, which can support the development of nuclear-capable intercontinental ballistic missiles (ICBMs).¹²⁴

Surveillance Technology

Moscow has supplied Tehran with equipment and specialized knowledge to support Iran's repressive internal security apparatus. Russia has likely provided Iran with anti-riot equipment and advanced surveillance technology, including facial recognition software and cyber capabilities, to help Tehran identify and suppress regime dissidents.¹²⁵ A March 2023 *Wall Street Journal* report stated that Russia provided Iran with "eavesdropping devices, advanced photography devices, and lie detectors" in exchange for Iranian drones to use in Ukraine.¹²⁶ Russian telecommunications firm Protei Limited has separately helped strengthen the Iranian regime's ability to monitor and intercept all domestic mobile communications.¹²⁷ Moscow has likely also provided Tehran with intelligence assessing the strength of anti-regime networks during periods of unrest.¹²⁸ Such tools allow the regime to monitor and crack down on dissidents and export these tools to other revisionist states.

Nuclear Technology

Russia could share technological expertise to help develop Iran's nuclear weapons program in exchange for material support for the war in Ukraine. Iran and Russia have enhanced bilateral scientific cooperation-including on Iran's civilian nuclear program—in recent years.¹²⁹ The Iranian Atomic Energy Organization's Technology Research Institute shares a close partnership with its Russian counterpart, the Kurchatov Institute.¹³⁰ Kurchatov President Mikhail Kovalchuk has framed this partnership as an extension of the broader Russo-Iranian strategic alignment and stated in May 2024 that "Iran can always count on Russia's help in the field of nuclear technology."131 Iranian officials have separately suggested that Russia will help Iran build "several nuclear powerplants," one of which was allegedly the Bushehr Nuclear Power Plant facility (on which Russia completed construction in 2009) and two of which are allegedly still under construction at unspecified locations.¹³²

Unverified media reports citing Western officials from 2024 claimed that Russia is more broadly aiding the development of Iran's nuclear weapons program. One such report from September 2024 suggested that Russia had provided Iran with assistance in exchange for ballistic missiles.¹³³ A separate report from November 2024 stated that Iran asked

Russian technology and knowledge transfers to Iran are particularly beneficial to Iran's ambitions of domestic self-sufficiency, as Moscow is giving Tehran ample opportunities to learn about new technologies and adaptive battlefield tactics from its own experience in Ukraine, which Tehran can later implement to bolster its domestic resilience. Russia with help acquiring unspecified nuclear materials and nuclear fuel fabrications.¹³⁴

It is unclear whether the Kremlin assesses that a nuclear Iran is in its long-term strategic interests, however. Russia possesses the technical expertise to help develop Iranian nuclear delivery systems, warhead development, and miniaturization, but it appears unlikely that the Kremlin is actually willing to do so. Russia has historically advocated against Iranian nuclear proliferation and expressed concerns that Iranian nuclearization will spark a regional nuclear arms race.135 Iran furthermore publicly maintains its commitment to Supreme Leader Khamenei's 2010 fatwa forbidding nuclear weapons under Islamic law, although conversations about reversing this religious edict have become increasingly common in the Iranian political space in the past several months.¹³⁶

4). Joint Military Exercises

Russia and Iran have used joint military exercises before and since Russia's invasion of Ukraine to pressure the US and its allies, improve interoperability, and disseminate technical and tactical lessons. Joint military exercises serve many purposes. They are forms of tangible pressure on the United States and its allies that back up diplomatic, economic, and other soft-power efforts and they can force the United States to re-evaluate threats and future conflict scenarios that can pin American military forces into awkward deployments. Combined exercises most importantly improve military interoperability and allow military forces to learn from one another. Russia and Iran had the opportunity to hone their interoperability in Syria for nearly a decade prior to the fall of Bashar al Assad's regime in December 2024, and military exercises beyond the Syrian theater have allowed the two countries to expand on this interoperability.¹³⁷

Russia and Iran have conducted various ground and naval force exercises in the years leading up to, and following, Russia's invasion of Ukraine, including the "Maritime Security Belt" exercises with the People's Republic of China (PRC) in the Gulf of Oman in 2019, 2022, 2023, and 2024 and most recently the "IMEX 2024" drills in the Indian Ocean in October 2024.¹³⁸ The most recent iteration of "Maritime Security Belt" took place in March 2024 and was a joint naval and aviation exercise in the Gulf of Oman and Arabian Sea, intended to practice naval and aviation maneuvers to strengthen "the security of international maritime trade, combating piracy, and maritime terrorism."¹³⁹ "IMEX 2024" aimed to bolster collective security and multilateral cooperation between Russia, Iran, and Oman, which also participated.¹⁴⁰ A Russian SB-45 tug vessel additionally participated in Iranian naval exercises in the Caspian Sea in July 2024.¹⁴¹

Joint military training also critically functions as a core form of knowledge transfer and information sharing, allowing each participant to learn new military lessons that it can further disseminate and institutionalize in the long run. Ukraine's Main Military Intelligence Directorate (GUR) reported in February 2024 that LH and IRGC elements were training Russian drone operators on Iranian Shahed, Ababil, and Raad drones at the Shayrat Airfield in Syria.¹⁴² Iran's direct training of Russian military personnel has allowed Russian forces to acquire new technical skills to apply to the battlefield in Ukraine.

5). Economic Cooperation

Economic cooperation between Russia and Iran, which aims to undermine Western sanctions, is a critical component of the broader Russo-Iranian strategic partnership. Russia and Iran have expanded economic cooperation following Russia's full-scale invasion of Ukraine. This symbiotic partnership allows Moscow and Tehran to enhance bilateral trade and circumvent sanctions through joint de-dollarization efforts. Deepening bilateral trade has separately bolstered energy cooperation between Russia and Iran, allowing Tehran to import Russian gas amid severe shortages in recent years.¹⁴³ Russia and Iran have increasingly discussed finalizing nodes in multi-modal trade routes such as the International North-South Corridor (INSTC) to further facilitate trade, although they are unlikely to complete such routes in the coming years. Moscow and Tehran currently leverage other trade routes like the Caspian Sea to facilitate bilateral trade and evade sanctions.¹⁴⁴ Ongoing Russian-Iranian

economic collaboration, with its emphasis on sanctions evasion, thereby reinforces other spheres of the Russo-Iranian cooperation network. A sanctions-resilient economic model autonomous from Western financial markets provides Moscow and Tehran with greater resources to invest in their respective defense industries, for example.

Sanctions Evasion and De-Dollarization Efforts

Russian and Iranian officials frame the Russo-Iranian economic partnership as part of a broader shared effort to undermine the US-led world order. Russia and Iran are some of the most sanctioned countries in the world, alongside North Korea and Syria.¹⁴⁵ The Russian state-funded think tank Primakov Center described joint Russo-Iranian sanctions evasion efforts as a means to "counter the aggressive military and political ambitions pursued by the US in Europe and the Middle East."146 Iranian Supreme Leader Khamenei similarly called the United States "both bullies and deceitful" and emphasized the importance of Russo-Iranian financial coordination in neutralizing sanctions in a meeting with Russian President Vladimir Putin in July 2022.¹⁴⁷ Moscow likely seeks to leverage its economic partnership with Tehran to learn from Iranian sanctions evasions tactics and expertise to mitigate increased Western sanctions resulting from Russia's invasion of and aggression against Ukraine. Such tactics include using an illicit network of foreign-based front companies and obfuscating vessels transporting sanctioned goods such as energy exports and arms sales.¹⁴⁸ Tehran, in turn, views Russian financial partnership as an opportunity to inject much-needed capital into its deteriorating economy and further pursue de-dollarization efforts.

Russia and Iran have significantly intensified efforts to de-dollarize their bilateral trade and financial transactions since 2022. Moscow integrated Iranian banks into its Mir payment system in November 2024.¹⁴⁹ The Russian Central Bank established Mir in 2015 as an alternative to international payment systems such as Visa and MasterCard after the United States sanctioned Russian banks over Russia's 2014 annexation of Crimea.¹⁵⁰ Tehran's integration into the Mir system allows Russia and Iran to reduce their reliance on international financial messaging systems such as the Society for Worldwide Interbank Financial Telecommunication (SWIFT), which has excluded Iranian and Russian banks since 2018 and 2022 respectively.¹⁵¹ Iran connected its domestic payment system, Shetab, to Russian banks in November 2024 to facilitate financial transactions in rubles and rials, further limiting Moscow and Tehran's reliance on the US dollar and Western international economic systems.¹⁵² The Kremlin claimed in October 2024 that over 96 percent of Russo-Iranian payments took place using national currencies.¹⁵³

Moscow and Tehran have discussed leveraging cryptocurrency to advance joint de-dollarization and sanctions mitigation efforts.¹⁵⁴ Russian state business outlet Vedomosti reported in January 2023 that Russia and Iran discussed the establishment of a joint gold-backed cryptocurrency, which would allow foreign trade settlements to use a cryptocurrency token as a means of payment in foreign trade settlements.¹⁵⁵ Russian State Duma Head of Committee on Financial Markets Anatoly Aksakov later stated in January 2024 that Russia may issue stablecoins (digital financial assets, backed by physical assets such gold or gold bars) as a means of payment for mutual settlements between Russia and Iran.¹⁵⁶ Iranian Embassy in Russia Trade Attache Rahimi Mohsen noted in an interview with Russian state news outlet Izvestia in May 2024 that Russia and Iran are discussing the development of digital currencies such as the digital ruble and crypto-rial in order to simplify bilateral trade and mitigate sanctions.¹⁵⁷ Dmitry Antonov, business ambassador to Iran for the Delovaya Rossiya All-Russian Public Organization, has similarly advocated for Russia to create a stablecoin tied to fiat currency or a physical asset to conduct trade with Iran.¹⁵⁸

Bilateral Trade

Russia and Iran are leveraging strategic agreements and joint participation in multilateral institutions to boost bilateral trade. Moscow has intensified efforts to trade with Iran more urgently since 2022 in response to growing global isolation and international sanctions.¹⁵⁹ Russia and Iran have signed dozens of memorandums of understanding (MoU) aimed at facilitating trade since 2022.¹⁶⁰ These MoUs sometimes encompass other regional partners, allowing Iran to access a broader market. The Eurasian Economic Union (EAEU), a Russianled economic organization comprised of Armenia, Belarus, Kazakhstan, Kyrgyzstan, and Russia, signed a trade agreement with Iran in November 2023 to reduce customs duties.¹⁶¹ Tehran separately signed an MoU in May 2024 with Belarussian, Kazakh, and Russian shopping centers aimed at improving Iranian market share in these countries.¹⁶² Moscow and Tehran have also established several joint economic institutions and forums in recent years to further enable Russo-Iranian trade.¹⁶³ Both Moscow and Tehran still appear to be experiencing some friction in adequately implementing and leveraging their trade agreements-Russo-Iranian trade in fact decreased by 17 percent between 2022 and 2023 and did not surpass Iran's trade with the European Union (EU).¹⁶⁴ Forthcoming strategic partnership agreements between Russia and Iran will likely aim to smooth over this friction and boost bilateral trade as the West maintains sanctions on both parties. Russian foreign investments and trade with Iran nevertheless provide Tehran with much-needed financial help amid deteriorating economic conditions. Russia overtook China as the largest foreign investor in the Iranian economy in 2022, contributing to two-thirds of Iranian total foreign direct investment (FDI) totally \$4.2 billion.¹⁶⁵ Iran amassed \$1.42 billion total FDI in 2021 by comparison.¹⁶⁶

Energy

Russia and Iran have signed significant energy trade agreements since 2022, allowing Tehran to address increasingly disruptive domestic gasoline shortages. Russian state-owned energy company Gazprom signed an agreement with the National Iranian Oil Company (NIOC) to invest an estimated \$40 billion in multiple Iranian oil fields, energy swaps, and the construction of gasoline export pipelines.¹⁶⁷ Gazprom Head Alexei Miller later signed a 30-year memorandum with the NIOC in July 2024 to supply Iran with 300 million cubic meters of Russian gas daily, which amounts to over- one third of Iran's current domestic production rates.¹⁶⁸ The agreement also stipulated that Moscow would construct a new pipeline under the Caspian Sea to connect Russo-Iranian gas transmission grids, although such construction will likely take several years to complete.¹⁶⁹ Then-Iranian Oil Minister Javad Owji hailed the agreement as a "masterpiece" in energy diplomacy and claimed it would allow Tehran to become a regional hub in gasoline exports.¹⁷⁰

The Gazprom-NIOC agreement simultaneously allows Russia to address domestic issues with excess gasoline supply and Iran to confront increasingly severe gasoline shortages. Iran has been facing an energy crisis over the past several years due to aging and poorly managed energy infrastructure and the impacts of US sanctions, despite possessing the second largest reserves in the world after Russia.¹⁷¹ Iran's energy crisis has crippled Iranian industry and frequently disrupts daily life-in late December 2024, 50 of Iran's industrial parks shut off to conserve energy, factories, schools and businesses closed, and President Pezeshkian asked Iranians to lower their home thermostats by 2 degrees Celsius to conserve energy.¹⁷² Iran has often had to shift to using Mazut (a lower quality heavy fuel oil that contains high quantities of sulfur) to mitigate gas shortages, leading to detrimental health and environmental impacts.¹⁷³ Gas shortages have previously triggered civil unrest in Iran, posing some level of threat to regime stability.¹⁷⁴ Iran has evidently identified Russia as the most capable partner to remedy such deficits in the Iranian domestic energy system, and the January 17 Russia-Iran Comprehensive Strategic Partnership Agreement heavily addresses energy relations.¹⁷⁵

Trade Routes

Russia and Iran are leveraging international land- and sea-based trade routes to circumvent Western sanctions and sustain bilateral trade. Tehran and Moscow have long pursued the completion of the International North-South Transport Corridor (INSTC)—a 7,200-kilometer-long land and sea route connecting Russia with India via the Caspian Sea and Iran. Then-Russian Transportation Minister Vitaly Savelyev signed an \$1.6 billion agreement in May 2023 with then-Iranian Roads and Urban Development Minister Mehrdad Bazrpash on Russia's financing of the Rasht-Astara railroad, connecting Iran's northern cities of Rasht and Astara via rail and completing the INSTC rail link between St. Petersburg and the Persian Gulf.¹⁷⁶ The Rasht-Astara line was still in development as of December 2024, but Russian officials have strongly stressed Russia's commitment to seeing the project through in order to maximize the effectiveness of the INSTC.177 The INSTC and the Rasht-Astara line will allow Iran and Russia to engage in direct trade without having to use the existing sea-based route, which runs around Europe and through the Mediterranean Sea and Suez Canal and is therefore vulnerable to international sanctions.¹⁷⁸ Russia and Iran have especially relied on the Caspian Sea as a major route for illicit trade, especially since Iran began sending arms to Russia in 2022. Several Western think tanks and new outlets have noted that the number of Russian and Iranian-flagged vessels conducting "dark" port calls (port calls made with the vessel's mandatory automatic identification system [AIS] deliberately turned off) at Russian and Iranian Caspian Sea ports has increased significantly since 2022.¹⁷⁹

6). Political and Diplomatic Cooperation

Russia is providing Iran with critical diplomatic cover on the international stage. Iran has routinely benefited from Russia's United Nations Security Council (UNSC) veto power-for example Russia vetoed a UNSC resolution in 2018 aimed at pressuring Iran in response to Iran's apparent violation of a UN arms embargo on Yemen's Houthis.¹⁸⁰ Russia has vetoed 17 UNSC resolutions on Syria, including resolutions to deliver humanitarian aid to northern Syria, thus supporting Iranian efforts to back and legitimize Assad's regime.¹⁸¹ Russia has continued to wield its diplomatic power for Iran's benefit since the full-scale invasion of Ukraine in exchange for Iran's military support of Russia, for example hindering the International Atomic Energy Agency's (IAEA) access to Iranian nuclear facilities and blocking a vote in 2023 to condemn Iran's provision of drones to Russia.¹⁸²

Russia's diplomatic and rhetorical support for Iran and its AoR has become particularly evident over the course of Israel's war in Gaza. Kremlin officials have frequently denounced Israel's actions and the actions of the United States and its allies targeting Iranian-aligned groups in the Middle East since October 7, 2023. Russia's Foreign Ministry condemned the US and UK for joint strikes on Houthi military targets in the Red Sea in January 2024, Israel's operation targeting LH pagers and Israel's assassination of Hezbollah Secretary General Sayyed Hassan Nasrallah in September, and Israel's ground operation into Lebanon in October 2024.¹⁸³ Russia "strongly condemned" Israel's killing of Hamas leader Ismail Haniyeh and stated that it had "deep concerns" over the death of Hamas Political Bureau Chairman Yahya Sinwar.¹⁸⁴ Russia has also diplomatically pushed for an end to the war in Gaza on terms more favorable to Iran and its AoR-Putin for example sent a delegation to Israel with a message to Israeli Prime Minister Benjamin Netanyahu asking him to end the war in Gaza and Lebanon in October 2024.185 A senior Hamas official also told Russian RIA state news agency in October 2024 that Hamas wanted Russia to push Palestinian President Mahmoud Abbas to beginning negotiations on a Palestinian unity government following the war in Gaza.¹⁸⁶

Iran has joined several Russia-dominated multilateral economic institutions, to Tehran's benefit. Iran officially joined the Shanghai Cooperation Organization in July 2023, signed a free trade agreement with the Eurasian Economic Union (EAEU) in December 2023, and became a member of BRICS in January 2024.¹⁸⁷ Russia uses these international economic institutions as a platform from which to challenge Western led-multilateral institutions and build a coalition of support against the United States and its allies. Iran's inclusion in these institutions more firmly aligns Tehran with Moscow diplomatically and provides Iran with critical economic avenues through which it can address its domestic economic woes.

Russia and Iran are coordinating their diplomatic engagement with other revisionist states. Iran has pursued its own relationships with several of Russia's international partners such as North Korea, Belarus, and Venezuela. Public high-level meetings

Sanctions Evasions: The International North-South Transport Corridor



between various Russian, Iranian, Belarusian, and North Korean officials surged in April 2024, for example, with a North Korean economic delegation visiting Tehran and an Iranian defense delegation visiting Minsk.¹⁸⁸ Both Iran and Russia have retained and even intensified their level of cooperation with Venezuela, as both Tehran and Moscow view Caracas as a means of confronting the United States in the Western hemisphere.¹⁸⁹ Iran and Belarus have expanded their defense and military cooperation in tandem with the expansion of Russo-Iranian military cooperation—Iran likely seeks to benefit from Russia's de-facto annexation of Belarus to build its own relationship with Minsk and build alternative trade and sanctions-mitigation avenues.¹⁹⁰

7). Media and Information Space Cooperation

Russia and Iran are cooperating in the media sphere to more closely align their domestic populaces with the core anti-US ideology that defines the Russo-Iranian partnership. Media cooperation is exemplary of this facet of their relationship, as both countries have tightly controlled information spaces that disseminate regime narratives and talking points. Russia and Iran have shared membership on the Russo-Iranian Committe on Media Cooperation Representatives since before 2022 and have used this committee to coordinate anti-Western narratives.¹⁹¹ Representatives of the Russian Ministry of Digitial Development, Communications, and Mass Media met with their counterparts at the Iranian Ministry of Culture and Islamic Orientation in March 2023 and highlighted recent media-space developments, including: a program to send Russian journalists to work in Iran, training for both Russian and Iranian journalists, and joint television and film production.¹⁹² Iranian state-affiliated media outlet Mehr News Agency General Director Mohammad Shojaeian stressed the importance of Russo-Iranian media cooperation following the March 2023 meeting and said that Iran and Russia "need to show what is happening in our countries through the eyes of our own journalists, and not through the prism of Western media."193 Kremlin newswire TASS announced in August 2024 that it planned to open its first news bureau in Iran, which would establish a prominent Russian media base within Iran.¹⁹⁴ Tehran and Moscow both benefit greatly from aligning counter-Western information operations and narratives and will be able to do so more competently as they increasingly merge objectives within the media space.

Forecasts and Conclusions

Russia and Iran signed their long-anticipated Comprehensive Strategic Partnership Agreement on January 17, 2025.¹⁹⁵ The agreement codifies Russo-Iranian cooperation in areas including defense, intelligence sharing, nuclear energy use and cooperation, the development of the INSTC, the economy, and the social sphere. Much of the 2025 agreement mirrors the language and implications of the 2001 agreement and is in the standard format Iran and Russia use for strategic partnership agreements.¹⁹⁶ The 2025 agreement stresses military-technical cooperation and intelligence coordination—a clear reflection of increased Russo-Iranian cooperation along these axes since Russia's invasion of Ukraine in 2022. The 2025 agreement notably does not contain a mutual defense clause, unlike Russia's June 19, 2024, Comprehensive Strategic Partnership with North Korea.¹⁹⁷ Iran's Ambassador to Moscow, Kazem Jalali, noted this difference on January 16 and stressed that Iran is "not interested in joining any bloc."¹⁹⁸ Neither Russia nor Iran has any interest in mutual defense commitments—Russia has no desire to be pulled into Iran's proliferating conflicts in the Middle East, and Iran has no desire for its troops to be deployed directly into a European war. The lack of a mutual defense clause in the 2025 agreement, and the text of the rest of the agreement, strongly underlines the fact that Russo-Iranian cooperation extends far beyond the military realm—it is not a simple *quid pro quo* of military support. For Iran particularly the comprehensive strategic partnership agreement with Russia will set long term conditions for economic recovery and growth to the extent that it is implemented. For Russia, the agreement will further codify the basis for Tehran's continued military support for Russia's war effort. Most important for both parties, however, is the fact that it will provide them both with a 20-year framework on the basis of which they

The potential consequences of tensions between Russia and Iran are belied by both the short and long-term strategic value of their partnership.

Their historical relationship has been plagued by ebbs and flows. They seem at face value diametrically opposed on certain ideological issues the Kremlin's empowerment of Russian ultranationalism and the Russian Orthodox Church, as well as its systematic disenfranchisement of Muslim migrants from

will further challenge the West.

Central Asian countries, place it at odds with Iran's implementation of Islamic doctrine and Shiite sectarianism. Some analysts have suggested that Russia's lack of desire or inability to provide Iran with long sought-after weapons systems is introducing increased friction into their partnership, while others have posited that Tehran's fundamental desire for self-sufficiency has distanced Iran from fully committing to Russia.¹⁹⁹ None of these factors have meaningfully impacted the progression of the Russo-Iranian relationship since 2022, however.

Russian and Iranian officials have made a concerted effort to downplay tensions as they arise, emphasizing the fact that the value of the relationship outweighs whatever ideological frictions Iran and Russia may face. Russian Foreign Minister Lavrov, for example, announced on August 19, 2024, that Russia supports the Zangezur Corridor,

Russia and Iran are more aligned now than ever, and they have identified their cooperation as a way of challenging the Western-led order.

which would connect Azerbaijan to its Nakhchivan Autonomous Region via southern Armenia.²⁰⁰ Iran has historically opposed efforts to establish the Zangezur Corridor as it would sever Iranian land access to Russia and Europe through Armenia.²⁰¹ Iranian National Security Council Secretary Ali Akbar Ahmadian met with both Shoigu and Putin in September 2024 following Lavrov's statement, however, and emphasized that nothing has changed in the Russia-Iran relationship.²⁰² Russian Foreign Ministry Spokesperson Maria Zakharova likewise said that Russia has "provided all necessary clarifications" on the issue, which Iran "heard and accepted."²⁰³

The Russo-Iranian partnership will continue to

expand beyond the military realm. Russia and Iran are more ideologically aligned now than ever before, as they have both identified their cooperation as a major avenue for challenging and overturning the Western-led international order. Russia needs Iran in order to maintain its war in Ukraine, both

via direct Iranian arms inputs and via Iran's assistance to Russia's struggling defense industrial base. Iran needs Russia in order to wedge itself into international institutions, help proliferate its Axis of Resistance and build a coalition to counterbalance the West. Iran's interests in a relationship with Russia extend far beyond reciprocal military support, and indeed reciprocal military support is likely only a fraction of what Iran is hoping to obtain as part of its cooperation with Russia.

America's Iran strategy therefore must be inextricably tied to its Russia strategy and vice versa.²⁰⁴ The United States and its allies must recognize that they will not be able to drive a wedge between Moscow and Tehran—the two have proven themselves adept at papering over tensions and committing to their anti-US ideological core and mutually-beneficial cooperation.

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