



Delhi Policy Group

Advancing India's Rise as a Leading Power

POLICY BRIEF

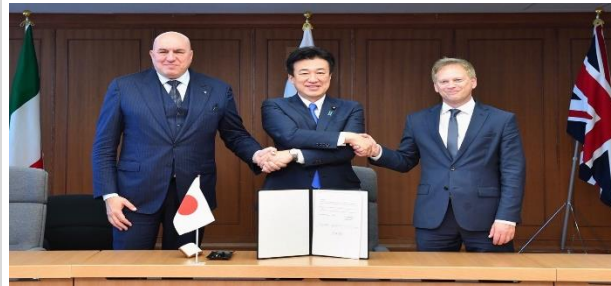
Japan's GCAP Partnership and India

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Volume X, Issue 20

July 16, 2025



Delhi Policy Group

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www.delhipolicygroup.org



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Policy Brief Vol. X, Issue 20

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ABOUT US

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Cover Photographs:

H.E. Mr. Ishiba Shigeru, Prime Minister of Japan, the Rt Hon Keir Starmer MP, Prime Minister of the UK and H.E. Ms. Giorgia MELONI, Prime Minister of Italy attended Japan-Italy-United Kingdom Leaders' Meeting on Global Combat Air Programme (GCAP) on November 19, 2024 in Rio de Janeiro, Brazil. Source: [Ministry of Foreign Affairs of Japan](#)

The signing of the Convention on the Establishment of the "Global Combat Air Programme – GCAP International Government Organisation by the then Defence Minister of the UK, Japan and Italy on December 14, 2024. (Right to left)

Source: [@MofaJapan_en](#)

Defence Secretary the Rt Hon John Healey met with Mr. Gen Nakatani from Japan and Mr. Guido Crosetto of Italy to discuss skills, economic benefits and key milestones under GCAP. Source: [X/@DefenceHQ](#)

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Introduction

In the rapidly evolving world order, the strategic posture of the US has changed significantly, which has prompted a strategic recalibration by other leading countries. The emergence of multiple power centres, along with accelerated technological advancement, has created significant new opportunities for nations across the globe.

With growing apprehensions about the continued reliability of US commitments, especially for security-related support, US allies are actively seeking to strengthen their sovereign national capabilities and exploring partnerships with other nations with converging interests and shared political values.

One such country is Japan. In collaboration with the United Kingdom and Italy, Japan is undertaking the Global Combat Air Programme (GCAP), to develop a next-generation fighter jet.¹ Recently, the three countries have also expressed their intention to expand the programme to countries with similar strategic ambitions to boost their respective aerospace capabilities.²

India is one such potential candidate. It has long pursued the goal of self-reliance in defence manufacturing, from developing indigenous missile systems to now venturing into the development of its own advanced fighter jets. In May 2025, the Government of India approved a new execution model under the Advanced Medium Combat Aircraft (AMCA) Programme for the development of its indigenous fifth-generation stealth fighter.³

Given this background, this paper outlines the nature of the trilateral GCAP programme, and examines India's indigenisation efforts under its defence self-

¹ Ministry of Defence. "Joint Development of Next-Generation Fighter Aircraft." Ministry of Defence, Japan, November 20, 2024.
<https://www.mod.go.jp/en/article/2024/11/7ce09d22b74b63561dfcfbea644b4ba76e1397df.html>

² Dominguez, Gabriel. "Japan, U.K. And Italy Discuss Inviting More Countries to Joint Fighter Project." The Japan Times, November 20, 2024.
<https://www.japantimes.co.jp/news/2024/11/20/japan/gcap-fighter-jets/>

³ Ministry of Defence, The Government of India. "Aatmanirbhar Bharat: Raksha Mantri Approves Advanced Medium Combat Aircraft Programme Execution Model through Industry Partnership." Pib.gov.in, May 27, 2025.
<https://www.pib.gov.in/PressReleseDetailm.aspx?PRID=2131528>

reliance strategy. While there are benefits to India's possible collaboration with GCAP, this needs to be carefully assessed in relation to the success of India's own AMCA programme.

The Global Combat Air Programme

The Global Combat Air Programme is a trilateral initiative aimed at developing the next generation combat aircraft through close collaboration between the governments and defence industries of the participating countries. The genesis of GCAP was the UK government's Combat Air Strategy of 2018, which delineated an ambitious plan for the procurement of new advanced air combat capabilities, especially as its Eurofighter Typhoon is expected to retire from service in 2030. The initial exploration of the potential plan was undertaken in partnership with Sweden after signing a Memorandum of Understanding in 2019. However, in December 2022, the UK formalised cooperation with Italy and Japan through the Global Combat Air Programme agreement for developing their combat air capabilities. Later, in December 2023, the defence ministers from the three countries signed the Convention on the Establishment of the Global Combat Air Programme, elevating the agreement to the status of an international treaty.⁴

The treaty set 2035 as the year for the proposed aircraft to enter the deployment phase and established the Global Combat Air Programme (GCAP) International Government Organisation, an agency tasked to guide, direct, supervise and manage the programme on behalf of the participating nations. The Global Combat Air Programme International Government Organisation (Immunities and Privileges) Order 2024 provided that the governmental delivery body for the programme will be headquartered in the UK, with Japan appointing its first Chief Executive Officer (CEO). The corresponding industrial delivery entity will also be based in the UK but with the leadership (CEO) from Italy.⁵ These offices were inaugurated on July 7, 2025, in the presence of representatives from the member states at Green Park, Reading, Berkshire, in the UK.⁶

The trilateral consortium of companies supporting GCAP is led by the UK's BAE Systems, Italy's Leonardo S.p.A. and Mitsubishi Heavy Industries from Japan. These lead firms, BAE Systems, Mitsubishi Heavy Industries, and Leonardo

⁴ Petrie, Lucy. "What Is the Global Combat Air Programme (GCAP)?" House of Commons Library, November 14, 2024. <https://researchbriefings.files.parliament.uk/documents/CBP-10143/CBP-10143.pdf>

⁵ Ibid

⁶ Aldridge, James. "Offices for Major Global Fighter Jet Opened in Reading." Reading Chronicle, July 7, 2025. <https://www.readingchronicle.co.uk/news/25295762.offices-major-global-fighter-jet-opened-reading/>

Aircraft, will collaborate on the development of the aircraft's airframe. Engine development will be undertaken jointly by Rolls-Royce (UK), IHI Corporation (Japan), and Avio Aero (Italy). Further, as announced at DSEI Japan in March 2023, Leonardo UK, Mitsubishi Electric (Japan), Leonardo Italy, and Elettronica (Italy) will partner on electronics. Weapons development and integration will be carried out by MBDA (UK and Italy) in partnership with Mitsubishi Electric Co. (MELCO).⁷

Lately, there have been negotiations towards expanding the membership of the programme. In 2023, speculation arose following a report suggesting that Germany might exit the Franco-German-Spanish Future Combat Air System (Système de Combat Aérien du Futur – SCAF) to join GCAP. However, nothing in relation to this was confirmed by the concerned parties. A similar hypothesis has been made for Saudi Arabia as the potential new partner under GCAP, since it signed an independent Statement of Intent with the UK in March 2023, for collaborating on combat air capabilities.⁸ More recently, there have been media reports on India's possible inclusion in the programme, as part of broader efforts to revitalise the India-Japan bilateral relationship in line with shared long-term security and technological objectives.⁹

India's Defence Indigenisation Plans

India's threat landscape remains highly disturbed due to the adversarial relationship it shares with its two neighbouring countries, China and Pakistan. Pakistan has persistently posed serious security challenges through cross-border terror attacks within Indian territory carried out by state sponsored extremist groups. With China, on the other hand, India faces a tense situation along its northern frontier, marked by recurring border standoffs and coercive manoeuvring. China's increasing strategic alignment with Pakistan, to whom it provides defence equipment and other forms of strategic support, further intensifies India's security concerns. These security challenges impinge on India's growing global stature and aspirations, necessitating the strengthening

⁷ Chelton, Simon, and Dr Philip Shetler-Jones. "The Global Combat Air Programme: The First Round of Hard Choices?" *rusi.org*, September 13, 2023. <https://www.rusi.org/explore-our-research/publications/commentary/global-combat-air-programme-first-round-hard-choices>

⁸ Defence Committee. "The Global Combat Air Programme (Third Report of Session 2024–25)." The UK Parliament. House of Commons, January 14, 2025. <https://committees.parliament.uk/publications/46236/documents/231724/default/>

⁹ EurAsian Times Desk. "Japan Invites India to 6th-Gen GCAP Fighter Program, Kyodo News Agency Claims; Will Delhi 'Bite the Bullet?'" *EURASIAN TIMES*, May 3, 2025. https://www.eurasiantimes.com/japan-invites-india-to-6th-gen-fcas-fighter-program/#google_vignette

of its national defence and strategic capabilities. This requires fostering indigenous, state-of-the-art defence manufacturing capabilities.

India remains heavily dependent on foreign defence procurement for meeting its national defence requirements. The SIPRI's 2024 Trends in International Arms Transfers report has observed that India is the world's second-largest arms importer¹⁰ with the fifth-largest military spending, totalling as much as USD 86.1 billion¹¹. Moreover, in recent years, the Government of India has pivoted towards significant efforts in defence indigenisation under its 'Make in India' initiative. Indigenous defence production has substantially increased, and India's defence exports have grown to reach ₹23,622 crore in FY 2024–25.¹²

India today develops a range of advanced indigenous military platforms including the Dhanush Artillery Gun System, Advanced Towed Artillery Gun System (ATAGS), Main Battle Tank (MBT) Arjun, Light Specialist Vehicles, High Mobility Vehicles, Light Combat Aircraft (LCA) Tejas, Advanced Light Helicopter (ALH), Light Utility Helicopter (LUH), Akash Missile System, Weapon Locating Radar, 3D Tactical Control Radar, and Software Defined Radio (SDR).¹³ The Indian Navy has long been domestically developing and producing its major assets, including destroyers, aircraft carriers, submarines, frigates, corvettes, fast patrol vessels, fast attack craft, and offshore patrol vessels, either independently or through international collaborations.¹⁴

The Indian Air Force, however, majorly procures its combat and transport fleet from foreign suppliers. The existing fleet comprises ageing Russian and European aircraft, with only a few recent foreign acquisitions like Rafale fighter jets and Boeing CH-47F Chinook heavy-lift helicopters adding some modern capabilities. The state-owned Hindustan Aeronautics Limited (HAL) has made some progress in indigenisation with developing defence helicopter platforms

¹⁰ George, Mathew, Katarina Djokic, and et al. "SIPRI Fact Sheet, Trends in International Arms Transfers, 2024." [spiri.org](https://www.sipri.org/sites/default/files/2025-03/fs_2503_at_2024_0.pdf), March 2025. https://www.sipri.org/sites/default/files/2025-03/fs_2503_at_2024_0.pdf

¹¹ Seethi, K M. "How India's Defence Spending Is Aligned with Its Regional Ambition." *The Indian Express*, June 18, 2025. <https://indianexpress.com/article/upsc-current-affairs/upsc-essentials/how-indias-defence-spending-is-aligned-with-its-regional-ambition-10072298/>

¹² Ministry of Defence, The Government of India. "Defence Exports Surge to a Record High of Rs 23,622 Crore in Financial Year 2024-25, a Growth of 12.04% over 2023-24." [Pib.gov.in](https://www.pib.gov.in/PressReleasePage.aspx?PRID=2117348), April 1, 2025. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2117348>

¹³ Ministry of Information & Broadcasting, The Government of India. "Akashteer: The Unseen Force behind India's New War Capability." [Pib.gov.in](https://www.pib.gov.in/PressReleasePage.aspx?PRID=2129132), May 16, 2025. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2129132>

¹⁴ Ibid

such as (ALH)-Dhruv¹⁵, (ALH)-Rudra¹⁶ and the recently developed Light Combat Helicopter (LCH) Prachand¹⁷, which is over 65% indigenous and is designed for high-altitude warfare and precision attack capabilities. HAL has also home-built its LCA-Tejas¹⁸, with its advanced version, MK1A under production and the more advanced MK2 variant in a developmental stage¹⁹.

Air power is a particularly critical domain in a country's military arsenal as it offers the ability to transcend geographical constraints and provide rapid, decisive force projection. This was clearly witnessed during India's recent military conflict with Pakistan, Operation Sindoor in the aftermath of the Pahalgam terror attack. However, India's heavy reliance on foreign fighter jets and other combat air assets, which involves high procurement costs and other technical complexities in terms of procurement, maintenance, and upgradation, makes it difficult to maintain a modern fleet inventory. This has negatively affected India's defence posture, compelling it to focus on establishing robust domestic capabilities.

Guided by this renewed emphasis, the Defence Research and Development Organisation (DRDO) displayed a full-scale model of India's first 5.5-generation stealth-Advanced Medium Combat Aircraft (AMCA) at Aero India 2025.²⁰ It also presented other development projects, including the Twin Engine Deck Based Fighter (TEDBF), the LCA Mk-2 model, the Air Droppable Container (ADC)-150, the Advanced Lightweight Torpedo, the Kaveri Derivative Aero Engine (without afterburner) for unmanned combat aerial vehicle (UCAV) applications, and the Naval Anti-Ship Missile-Medium Range among others.²¹

To further these developmental efforts of DRDO, on May 27, 2025 the Ministry of Defence approved the execution model for the AMCA programme.²² Under

¹⁵ Ministry of Defence, The Government of India. "Defence Hardware Sector." Pib.gov.in, August 11, 2017. <https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=169891>

¹⁶ Ministry of Defence, The Government of India. "Chief of Army Staff witnesses Aero India 2017, appreciates Synergy." Pib.gov.in, February 14, 2017. <https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=158447>

¹⁷ Ministry of Defence, The Government of India. "Make in India Powers Defence Growth." Pib.gov.in, March 29, 2025. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2116612>

¹⁸ Ministry of Defence, The Government of India. "Light Combat Aircraft Tejas Completes." Pib.gov.in, June 30, 2023. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1936373>

¹⁹ Ministry of Defence, The Government of India. "Prime Minister Flies in The Indigenously Designed, Developed and Manufactured Twin Seater Fighter Aircraft LCA Tejas." Pib.gov.in, November 25, 2023. <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=1979832>

²⁰ Ministry of Defence, The Government of India. "DRDO Showcases Indigenously Developed State-of-The-Art Technologies and Systems, Working Models and Innovations at Aero India 2025." Pib.gov.in, February 11, 2025. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2101598>

²¹ Ibid

²² Supra Note. 3

this model, 5 prototypes of the DRDO's concept AMCA will be developed, which will then be put into production for being inducted into military service. The said aircraft will be a twin-engine, medium-weight (25-tonne) stealth aircraft, built for deep-penetration missions. It will be equipped with internal weapons bays having the capability of deploying long-range air-to-air missiles and precision-guided bombs, along with other advanced features such as super-cruise capability, 360-degree situational awareness, sophisticated avionics and complex computer applications.²³

The Aeronautical Development Agency (ADA), under the Department of Defence Research and Development (DR&D) of the Ministry of Defence, will oversee the programme.²⁴ The AMCA project will provide equal opportunities for both public and private sector participation, with tenders being awarded on a competitive basis.²⁵ The successful development and induction of this fifth-generation aircraft under the programme will bring India's air power capabilities at par with those of countries operating some of the world's most advanced fighter jets, including the US with its F-35 Lightning II, Russia's Sukhoi Su-57, and China's Chengdu J-20.

Analysing the potential of India-GCAP Collaboration

India is taking accelerated steps towards developing air power self-sufficiency, as the recent unveiling of its 5.5-generation fighter jet concept indicates. However, there are some practical considerations which need to be addressed. The fundamental concern is that India does not have adequate experience in aerospace manufacturing to support the large-scale production of advanced indigenous fighter jets. Its manufacturing capability is limited to co-production under licence from foreign Original Equipment Manufacturers (OEMs) of defence aircraft, such as the Sukhoi-30 MKI, Hawk, and Dornier 228.²⁶ The modest indigenisation it has achieved includes the LCA Tejas and a range of defence helicopters, which too have come under scrutiny due to

²³ ET Online. "India Opens Bids for 5th Gen Stealth Fighter Jet, Sets 2029 Flight Target." The Economic Times. Economic Times, June 18, 2025.

<https://economictimes.indiatimes.com/news/defence/india-opens-bids-for-5th-gen-stealth-fighter-jet-sets-2029-flight-target/articleshow/121935094.cms?from=mdr>

²⁴ Supra Note. 3

²⁵ Ibid

²⁶ Supra Note 14.

isolated safety incidents²⁷, general efficacy and unproven competitiveness compared to similar global platforms, as well as the issues of delivery delays²⁸.

India's lack of access to reliable and capable jet engines for mass production is another major stumbling block for indigenisation. The technological know-how to develop fighter jet engines is only held by a handful of countries, including the US, UK, France, Russia, and, a more recent entrant, China. For instance, Turkey and South Korea recently introduced the prototype of their locally developed advanced fighter jets, the fifth-generation KAAN and KF-21 Boramae respectively, both of which are powered by General Electric (GE) engines.²⁹ India's LCA Tejas is also powered by GE F404-IN20 engines. However, GE has fallen behind its contractual delivery timeline by almost two years, which has significantly impacted Tejas production and subsequent induction in service, widening India's defence capacity gap.³⁰

To tackle this problem, HAL, as the executing agency for the Government of India, signed a Memorandum of Understanding (MoU) in 2023 with GE for the local production of its F414 engines.³¹ The terms of contract, particularly key aspects such as Transfer of Technology (ToT) and other core provisions, are still under negotiation between the two enterprises.³² India is also reaching out to other global stakeholders for co-development and co-production of fighter

²⁷ Chandra, Jagriti. "HAL Asks Civil Operators to Ground Dhruv Choppers after January 5 Crash." *The Hindu*, January 11, 2025. <https://www.thehindu.com/news/national/hal-asks-civil-operators-to-ground-dhruv-choppers-after-january-5-crash/article69089358.ece>; Chhina, Man Aman Singh. "Third Coast Guard Chopper Crash in Less than 2 Years: Why Are There Repeated Concerns over HAL's Indigenous Military Helicopter?" *The Indian Express*, January 7, 2025. <https://indianexpress.com/article/explained/concerns-hal-indigenous-military-helicopter-9765403/>

²⁸ HT News Desk. "IAF Chief Bombshell on Delayed Delivery of Defence Projects: 'We Know While Signing Contracts Systems Will Never Come' | Latest News India - Hindustan Times." *Hindustan Times*, May 29, 2025. <https://www.hindustantimes.com/india-news/iaf-chief-bombshell-on-delayed-delivery-of-defence-projects-we-know-while-signing-contracts-systems-will-never-come-101748510128133.html>

²⁹ Sumit Ahlawat. "'Critically Dependent' on U.S. Tech, How IAF Missed out on Made in India Fighter Jet Much before LCA Tejas." *Eurasian Times*, February 17, 2025. <https://www.eurasiantimes.com/edited-the-geopolitics-of-jet-engines-the-last/>

³⁰ Kumar, Bhaswar. "Delayed Engines Slow down Tejas Mk1A Project. When Will GE Deliver Them?" *Business Standard*, October 29, 2024. https://www.business-standard.com/external-affairs-defence-security/news/delayed-engines-slow-down-tejas-mk1a-project-when-will-ge-deliver-them-124102900914_1.html

³¹ Peri, Dinakar. "MoU between General Electric and Hindustan Aeronautics Limited – an Opportunity for India to Master Jet Engine Technologies." *The Hindu*, June 23, 2023. <https://www.thehindu.com/news/national/mou-between-general-electric-and-hindustan-aeronautics-limited-an-opportunity-for-india-to-master-jet-engine-technologies/article67001507.ece>

³² PTI. "India-US Deal to Produce F-414 Jet Engines to Be Sealed by March: HAL Chief Sunil." *The Economic Times*. *Economic Times*, June 24, 2025. <https://economictimes.indiatimes.com/news/defence/india-us-deal-to-produce-f-414-jet-engines-to-be-sealed-by-march-hal-chief-sunil/articleshow/122048485.cms?from=mdr>

jet engines, including the UK-based Rolls-Royce, France's Safran SA, and reportedly Japan's IHI.³³

According to cited government sources, Britain's Rolls-Royce and France's Safran SA have recently offered to collaborate with DRDO's Gas Turbine Research Establishment lab in Bengaluru with full Transfer of Technology and Intellectual Property rights. DRDO will be submitting a Cabinet Note to the Government for its evaluation and approval of the said partnership. Rolls Royce has proposed developing of high-thrust turbofan engines used in transport and civilian aircraft, whereas Safran is offering development of a prototype based on its M88 engine which powers Rafale fighter jets.³⁴ If they materialise, both of these partnership plans will mark critically important step towards enhancing India's strategic capabilities in aerospace. There are media reports that Japan may also be open to offering the IHI XF9-1 engine, which can be reviewed along with other options.³⁵

India's inclusion in the GCAP project will facilitate collaboration with more experienced nations in the aerospace sector, exposing its domestic industry to their mature defence manufacturing ecosystems. Among the three member states, the UK has the most advanced and extensive aerospace and defence industrial complex, ranking the second-largest in the world after the US. Its aerospace sector, which is primarily export-oriented, has established itself as a global centre of excellence for the design and production of engines, wings, aircraft structures, helicopters and integrated systems, including in the maintenance, repair, and overhaul (MRO) sector. More than 3,000 companies operate in the UK, including domestic champions like BAE Systems and Rolls-Royce, along with major international players such as Leonardo, Boeing, Airbus, GE, Lockheed Martin, MBDA, Safran and others.³⁶ Companies leading the UK's side in GCAP, including BAE Systems, Rolls-Royce, Leonardo, and MBDA, have been an integral part in the development and production of some

³³ Ranjan Sen, Sudhi (Bloomberg). "India Explores Partners beyond US to Build Fighter Jet Engines." The Economic Times. Economic Times, May 30, 2025. <https://economictimes.indiatimes.com/news/defence/india-explores-partners-beyond-us-to-build-fighter-jet-engines/articleshow/121510149.cms?from=mdr>

³⁴ Magazine, Aanchal, and Anil Sasi. "UK Or France? Cabinet Waits for DRDO on Combat Aircraft Engine." The Indian Express, July 11, 2025. <https://indianexpress.com/article/business/uk-or-france-cabinet-waits-for-drdo-on-combat-aircraft-engine-10119118/>

³⁵ ET Online. "India Focusing On...: Top Defence Ministry Official Reveals What India Is Planning for 5th-Gen Fighter J." The Economic Times. Economic Times, July 8, 2025. <https://economictimes.indiatimes.com/news/defence/india-focusing-on-top-defence-ministry-official-reveals-what-india-is-planning-for-5th-gen-fighter-jets/articleshow/122315077.cms?from=mdr>

³⁶ International Trade Administration. "United Kingdom - Aerospace and Defense." www.trade.gov, November 3, 2023. <https://www.trade.gov/country-commercial-guides/united-kingdom-aerospace-and-defense>

of the world's most advanced fighter jets, including the F-35³⁷ and Eurofighter Typhoon³⁸.

Italy, too, has a robust aerospace sector with strengths in the production of both fixed and rotary-wing airframes, propulsion systems, and defence electronics. The major stakeholders include Leonardo, Fincantieri, Ge Avio Aero, Thales Alenia Space Italia, Avio S.p.A. and Elettronica.³⁹ Leonardo, Italy's biggest defence company and its lead partner in GCAP, alongside other industry players, has had notable experience collaborating in key multinational aircraft development programmes like the Eurofighter Typhoon and M-346 FA (Fighter Attack).⁴⁰ The company is also the Final Assembly and Check-Out (FACO) base for Italian and Dutch F-35s, and the Cameri plant is the European regional heavy airframe Maintenance, Repair, Overhaul & Upgrade (MRO&U) centre.⁴¹

Japan, on the other hand, has significant experience in US defence technologies and licensed production of US-origin fighters, including the F-15⁴² and F2⁴³ which is a variant of F-16 fighter jets, with restrictions on modifications and upgrades.

India's partnership in GCAP also stands to benefit the three member states substantially. The development and production of a high-tech next-generation fighter jet is a capital-intensive affair, and India's inclusion can help mobilise additional funding and other resources necessary for the programme's advancement. The integration of India's technologically skilled workforce into critical stages of design, development, and manufacturing also offers a strategic advantage in terms of both capability and cost-efficiency, making the fighters produced under GCAP globally competitive.

India's value proposition in GCAP is also its rapidly growing private defence industry. The TATA Group, one of the country's largest private conglomerates, is emerging as a leader in the aerospace sector. Tata Advanced Systems Limited

³⁷ Airframer. "Lockheed Martin F-35 Lightning II - Program Supplier Guide." [www.airframer.com](https://www.airframer.com/aircraft_detail.html?model=F-35_JSF), n.d. https://www.airframer.com/aircraft_detail.html?model=F-35_JSF

³⁸ Airframer. "Eurofighter Typhoon - Program Supplier Guide." [www.airframer.com](https://www.airframer.com/aircraft_detail.html?model=Eurofighter_Typhoon), n.d. https://www.airframer.com/aircraft_detail.html?model=Eurofighter_Typhoon

³⁹ International Trade Administration. "Aerospace Defense Market Resource Guide - Italy." Trade.gov, 2020. <https://www.trade.gov/aerospace-defense-market-resource-guide-italy>

⁴⁰ Leonardo. "Fighter Jet and Plane: Defence Aircraft." Leonardo.com, 2022. <https://aircraft.leonardo.com/en/fighters>

⁴¹ Leonardo. "F35 JSF Joint Strike Fighter." Leonardo.com n.d. <https://aircraft.leonardo.com/en/products/f-35-lightning-ii>

⁴² Mitsubishi Heavy Industries, Ltd. "Mitsubishi Heavy Industries, Ltd. Global Website | F-15J Fighter Plane," n.d. https://www.mhi.com/products/defense/f_15j_jet_fighter.html

⁴³ Lockheed Martin. "F-2 Support Fighter," 2023. <https://www.lockheedmartin.com/en-us/products/f-2.html>

(TASL), a subsidiary of the group, partnered with Dassault Aviation to produce fuselage assemblies for Rafale jets.⁴⁴ TASL also has a joint venture with Lockheed Martin since 2010, to produce aero structures, including wings for the C-130J Super Hercules, and operates an MRO facility.⁴⁵ It will also execute the ₹21,935-crore contract with Airbus Defence and Space SA to manufacture C-295 transport aircraft⁴⁶ and has announced the establishment of a Final Assembly Line for Airbus' H125 civil helicopter in Kolar, Karnataka⁴⁷. Similarly, other Indian private companies such as Larsen & Toubro (L&T), Mahindra Group, and Adani Defence are gaining ground in the aerospace defence ecosystem through joint ventures and technology transfers in the manufacturing of aircraft components, co-production of missile systems, development of unmanned vehicles, and other high-tech defence solutions.

Moreover, for the programme to be successful and sustainable in the long term, it is imperative to reduce the per-unit production cost, something that can only be achieved if the aircraft is manufactured and sold in larger quantities. This would require a broad market base. While the UK and Italy enjoy established reputations in the aerospace industry, their global market reach remains relatively limited compared to major players such as the US, France, and Russia. India adds significant value as both a large domestic market and an emerging defence exporter, particularly to developing countries, making it a key potential partner in expanding GCAP's market potential and strategic impact.

India and Japan share a defence partnership, formalised in 2015 through an Agreement on the Transfer of Defence Equipment and Technology.⁴⁸ The agreement intended to promote joint research, development, and production

⁴⁴ Bharadwaj, Swati. "1st Time Rafale Parts to Be Made Outside France: Dassault Ties up with Tata to Make Rafale Jet Fuselage in Hyderabad." The Times of India. Times of India, June 5, 2025. <https://timesofindia.indiatimes.com/city/hyderabad/dassault-ties-up-with-tata-grp-to-make-rafale-fighter-jet-fuselage-in-hyd/articleshow/121658488.cms>

⁴⁵ PRNewswire. "Lockheed Martin and Tata Advanced Systems Announce Agreement to Expand C-130J Super Hercules Opportunities in India." Media - Lockheed Martin, September 10, 2024. <https://news.lockheedmartin.com/2024-09-10-Lockheed-Martin-and-Tata-Advanced-Systems-Announce-Agreement-to-Expand-C-130J-Super-Hercules-Opportunities-in-India>

⁴⁶ Ministry of Defence, The Government of India. "Prime Minister & His Spanish Counterpart Jointly Inaugurate TATA Aircraft Complex for Manufacturing of C-295 Aircraft in Vadodara." Pib.gov.in, 2024. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2068818>

⁴⁷ ET Online. "Tata Is Giving Wings to Make in India Aviation Dream." The Economic Times. Economic Times, May 28, 2025. https://economictimes.indiatimes.com/industry/transportation/airlines/-aviation/tata-is-giving-wing-to-make-in-india-aviation-dream/articleshow/121461371.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst

⁴⁸ Ministry of Defence, The Government of India. "Signing of Military and Defence Agreements." Pib.gov.in, August 8, 2017. <https://www.pib.gov.in/newsite/PrintRelease.aspx?relid=169713>

to bolster both nations' security and defence capabilities. However, nearly a decade into this promised collaboration, it has not yielded any substantial results. Initiatives such as the US-2 amphibious aircraft deal⁴⁹, Project 75(I)⁵⁰, and partnerships on Unmanned Ground Vehicles (UGVs) and robotics⁵¹ have failed to progress or demonstrate any tangible results, mostly because of Japan's difficulties with defence exports. It is only recently that there has been some headway, with the two countries agreeing to co-develop the Unified Complex Radio Antenna (UNICORN), intended to enhance the stealth capabilities of naval platforms.⁵² India's involvement in GCAP could mark a major step towards more meaningful and defence industrial cooperation with Japan. It also presents an opportunity for India to build a trusted, forward-looking defence partnership with the UK and Italy. India and the UK are already engaged in bilateral discussions to explore a potential defence partnership.

While this partnership holds significant promise for India and the existing GCAP member states, both sides must carefully consider as to when and how India can enter the project. The programme's 2035 timeline is ambitious⁵³ and would need effective streamlining to prevent any possible delay. Bringing a new country on board would require navigating complex bureaucratic, political, and technical procedures, which would only contribute to further delays. This might result in India not being involved in the early stages of development and instead being brought into the programme at a later stage, undertaking production, system integration, and export to third countries. Such later involvement, though important from a commercial and industrial standpoint, does not offer the same strategic advantages as engagement at an early-stage. Early involvement would allow India to shape the strategic agenda of the programme, participate in decision making, access cutting-edge or

⁴⁹ Philip, Snehash Alex. "Indian Navy's Amphibious Aircraft Deal Unlikely to Be Signed at Modi-Abe Meet next Week." ThePrint. theprint, December 10, 2019. <https://theprint.in/defence/indian-navys-amphibious-aircraft-deal-unlikely-to-be-signed-at-modi-abe-meet-next-week/332682/>

⁵⁰ TNN. "Japan, Spain Opt out of Mega Submarine Project, Four Left in Fray." The Times of India. Times Of India, October 22, 2017. <https://timesofindia.indiatimes.com/india/japan-spain-opt-out-of-mega-submarine-project-four-left-in-fray/articleshow/61168250.cms>

⁵¹ Embassy of Japan in India. "Japan & India Initiate a Cooperative Research on Unmanned Ground Vehicles /Robotics." Emb-japan.go.jp, August 1, 2018. https://www.in.emb-japan.go.jp/itpr_en/00_000647.html

⁵² Ministry of Defence, The Government of India. "Memorandum of Implementation Signed with Government of Japan for Co-Development of Unicorn Masts for The Indian Navy." Pib.gov.in, November 16, 2024. <https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2073843>

⁵³ UK Parliament. "Defence Committee: GCAP Timescale Is Ambitious and Gov't Must Keep Pace - Committees - UK Parliament." Parliament.uk, January 14, 2025. <https://committees.parliament.uk/committee/24/defence-committee/news/204656/defence-committee-gcap-timescale-is-ambitious-and-govt-must-keep-pace/>

foundational technologies, and build domestic capabilities. Participation in the later stage will limit India's role to that of an end-user with restricted access to defence technologies and minimal domestic production capabilities, thereby undermining its bargaining power.

That is to say, for India to gain a genuine strategic and technological advantage in the aero-defence manufacturing sector, what it needs is a substantive and early entry in the technology development stage of the programme. However, there have already been some issues within the existing partnership, around access to technology, which surfaced after Italian Defence Minister Guido Crosetto's criticism of the UK in an interview for restricting certain technologies under the GCAP joint venture.⁵⁴

In addition to the abovementioned limitations associated with India's late entry into the programme, the parallel pursuit of its indigenous advanced fighter jet programme, AMCA, poses another critical challenge to the prospect for a India-GCAP partnership. India's allocation of adequate strategic attention and resources in terms of capital and manpower to AMCA and GCAP simultaneously is not feasible, particularly as India's defence R&D budget is already limited. Any involvement in domestic as well as foreign jet fighter development programmes might delay India's indigenisation effort, even as there is uncertainty about sourcing of defence systems and technologies from GCAP. This would significantly jeopardise India's strategic objective of achieving defence self-reliance, especially as any technologies acquired through GCAP are likely to be IP protected, restricting their usage beyond the scope of the GCAP framework.

Conclusion

In the emerging multipolar world order, global power dynamics are in flux. The dispersal of power has spurred major states to transition from an outward-looking foreign policy to an inward-focused national development strategy, guided by the realist school of international relations. This has pushed states to reduce reliance on external actors for their security and strategic needs, making diversification of strategic partnerships the most fitting strategy for states to navigate geopolitical uncertainty and advance national interests.

⁵⁴ TOI Tech Desk. "Bring down 'Barriers of Selfishness': Italy Defence Minister Slams UK for Holding Back 'Technology Transfer'." Times of India, April 16, 2025.
<https://timesofindia.indiatimes.com/technology/tech-news/bring-down-barriers-of-selfishness-italy-defence-minister-slams-uk-for-holding-back-technology-transfer/articleshow/120340666.cms>

The Global Combat Air Programme (GCAP), a joint initiative of the UK, Italy, and Japan, exemplifies the strategic imperative to achieve greater self-reliance in defence aerospace. India, guided by similar strategic priorities, shares a natural alignment with the programme. There are strong synergies between the existing GCAP members and India, with the former possessing experience of mature and technologically advanced aerospace defence ecosystems and the latter contributing complementary assets, including added capital investment, a large and growing market, cost-effective skilled labour, robust manufacturing capabilities, and a rapidly expanding defence industry. Therefore, India's participation in the development of the GCAP's sixth-generation fighter jet, which not only promises to bolster national defence capabilities but also holds the potential to project geopolitical influence through exports, could be strategically and economically beneficial for all involved.

However, to ensure equitable benefits from this multinational partnership and achieve its own strategic goals of self-reliance, India needs to become a co-creator, rather than a downstream co-producer of technologically advanced defence platforms. At this juncture, India's early-stage involvement seems highly improbable due to numerous bureaucratic, political, and technical complexities, undermining the potential of a meaningful collaboration under GCAP. Moreover, with India undertaking its own advanced fighter jet development programme, AMCA, its active participation in both AMCA and GCAP concurrently appears to be an unlikely prospect. It is for these reasons that the viability and strategic value of any India-GCAP partnership for shared growth and technological advancement in aerospace defence is both limited and constrained.



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