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Issue Brief

The Rafale Marine Deal: Adding Strategic Depth to India-France Ties

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Summary

The procurement of 26 Rafale Marine aircraft enhances India's naval aviation capabilities, strengthens India-France defence ties, and supports India's maritime security posture. The deal builds on prior collaborations, such as the IAF Rafale acquisition and the Scorpene submarine programme. Despite its benefits, the agreement faces challenges related to integration with aircraft carriers and limited technology transfer.

Introduction

On 28 April 2025, India and France signed an Intergovernmental Agreement (IGA) to procure 26 Dassault Rafale fighter jets for the Indian Navy, valued at around Rs 63,000 crores.¹ The Cabinet Committee on Security (CCS) approved the agreement on 9 April 2025 under the chairmanship of Prime Minister Narendra Modi.² Raksha Mantri Rajnath Singh and the French Minister of the Armed Forces, Sebastien Lecornu, formally signed the agreement on 28 April 2025.³ India is procuring 22 single-seat Rafale M jets and four twin-seat Rafale D variants, as part of a comprehensive package covering training, simulators, associated weaponry, and a five-year Performance-Based Logistics (PBL) support arrangement.

The naval variant of the multirole Rafale fighter jet is an advanced 4.5-generation carrier-based platform and is expected to boost maritime operations significantly. This development underscores the deepening defence partnership between the two countries. The acquisition of this Multi-Role Carrier-Borne Fighter (MRCBF) supports India’s naval modernisation, strengthens maritime security, and enhances its blue-water capabilities. The deal reflects India’s operational priorities and the growing strategic alignment between New Delhi and Paris.

India–France Defence Cooperation

The India–France strategic partnership was established in 1998, founded on common principles of multilateralism, respect for international law, strategic autonomy and a rules-based international order. This partnership has accelerated over the past two decades. India and France, as strategically located resident powers in the Indo-Pacific, have developed a dynamic partnership rooted in a shared commitment to a free, open and rules-based regional order, with their collaboration in the Indian Ocean emerging as a key pillar of bilateral ties under India’s Security and Growth for All in the Region (SAGAR) doctrine and France’s sustained regional presence in the region. Both countries adopted the Joint Strategic Vision for the Indian Ocean Region in 2018.⁴

The Rafale Marine deal builds on the expanding air and maritime defence cooperation between the two countries and follows the Defence Industrial Roadmap finalised in

¹ [“Rafale-Marine: Enhancing India's Naval Strength”](#), Press Information Bureau, Ministry of Defence, Government of India, 29 April 2025.

² [“Cabinet Committee on Security Approves \\$7-billion Deal to Procure 26 Rafale Marine Jets from France”](#), *The Hindu*, 9 April 2025.

³ [“Inter-Governmental Agreement Inked with France for 26 Rafale-Marine Aircraft for Indian Navy”](#), Press Information Bureau, Ministry of Defence, Government of India, 28 April 2025.

⁴ [“Joint Strategic Vision of India-France Cooperation in the Indian Ocean Region”](#), Press Information Bureau, Ministry of External Affairs, Government of India, 10 March 2018.

2024.⁵ Dassault Aviation and Tata Advanced Systems signed agreements to manufacture the Rafale Marine fighter jet fuselages in India, enhancing local aerospace production and contributing to global supply chains.⁶ France is India’s second-largest defence supplier, contributing to 28 per cent of its total arms imports, reflecting the robust and expanding military cooperation between the two countries.⁷ A significant milestone in India–France defence cooperation was the acquisition of 36 Rafale fighter jets in 2016, followed by key advancements under the Project 75 Scorpene-class submarine programme.

Due to the critical operational need for multirole combat aircraft, the Government of India opted to acquire the Rafale fighter jets for the Indian Air Force (IAF) through a Government-to-Government (G2G) agreement signed on 23 September 2016.⁸ This included weapons, simulators, long-term maintenance support and a ten-year annual maintenance package. Under the 2016 agreement, all 36 Rafale fighter aircraft for the IAF were delivered in fly-away condition. Subsequently, on 13 July 2023, the Defence Acquisition Council (DAC) approved the Acceptance of Necessity (AoN) for procuring 26 Rafale Marine aircraft for the Indian Navy, including associated equipment, weapons, simulators, spares, documentation, crew training and logistical support, once again through an agreement with the French Government.⁹

India placed an order in 2005 to build six Scorpene submarines under Project 75, with construction taking place at the state-owned Mazagon Dock Shipbuilders Limited (MDL) in Mumbai, which saw a certain degree of technology transfer. Beyond acquiring submarines, the programme aimed to strengthen domestic shipbuilding and promote indigenisation in defence production. India, as a key member of the Scorpene Club, along with Indonesia, the Philippines, Brazil, Malaysia and Chile, has played a significant role in the indigenous production of these French-origin submarines, having built the largest number among partner nations.¹⁰

⁵ [“India - France Joint Statement on the State Visit of H.E. Mr. Emmanuel Macron, President of French Republic, to India”](#), Government of France, Embassy of France in India, 26 January 2024.

⁶ Snehash Alex Philip, [“France’s Dassault Aviation Ties Up with Tata for Rafale Fuselage Manufacturing in India”](#), *The Print*, 5 June 2025.

⁷ Mathew George, Katarina Djokic, Zain Hussain, Pieter D. Wezeman and Siemon T. Wezeman, [“Trends in International Arms Transfers, 2024”](#), Stockholm International Peace Research Institute (SIPRI), Fact Sheet, March 2025.

⁸ [“Agreement with France for Supply of Rafale Fighter Jets”](#), Press Information Bureau, Ministry of External Affairs, Government of India, 18 December 2017.

⁹ [“DAC Approves Proposals for Procurement of 26 Rafale Marine Aircraft from France to Boost Indian Navy’s Operational Capabilities”](#), Press Information Bureau, Ministry of External Affairs, Government of India, 13 July 2023.

¹⁰ R. Vignesh and Abhay Kumar Singh, [“India and the Scorpene Club”](#), Issue Brief, Manohar Parrikar Institute for Defence Studies and Analyses (MP-IDSA), 24 April 2024.

The bilateral naval collaboration is expected to deepen further, with the Indian Navy approving a proposal to build three more advanced Scorpene-class submarines at MDL, incorporating 60 per cent indigenous content. This proposal is awaiting final clearance from the CCS. In addition, France’s Safran has partnered with Hindustan Aeronautics Limited (HAL) for Shakti/Ardiden 1H1 helicopter engine production.¹¹

While Russia remains India’s largest supplier of military equipment, India also maintains strong defence cooperation with France, reflecting its broader strategy to diversify defence imports by prioritising advanced technology and reliability. Bharat Electronics Limited (BEL) and France’s Safran Electronics & Defence joint venture produce the Highly Agile Modular Munition Extended Range (HAMMER), a precision-guided air-to-ground weapon. Known for its accuracy, HAMMER is compatible with platforms such as the Rafale and LCA Tejas. French OEM joint ventures with Indian private sector companies also produce components for the Rafale aircraft and Dassault Aviation’s Falcon jets.¹² The Indian Ministry of Defence (MoD) has also suggested partnering with Safran (as against Rolls-Royce) for co-developing a 120 kN fighter jet engine under a Rs 61,000 crore project, due to the assurance of complete technology transfer.¹³ The engine will power future IAF platforms like the Advanced Medium Combat Aircraft (AMCA).

Regular joint military exercises such as Exercise Varuna (navy), Garuda (air force) and Shakti (army) have enhanced interoperability between the two armed forces. Furthermore, India and France actively participate in several major multilateral military exercises, boosting their interoperability and regional security cooperation. Key examples include the French-led naval exercise, Exercise La Pérouse, the multinational air exercise Orion in France, and India’s Tarang Shakti and Milan exercises. These activities unite like-minded nations across the Indo-Pacific, reinforcing the India–France strategic partnership in maritime and aerial spheres.

The Rafale-M Advantage

India’s pursuit of modern naval fighter aircraft is driven by the operational shortcomings of its MiG-29K fleet, particularly in terms of reliability and serviceability. With the induction of newer indigenous aircraft carrier capabilities, the Indian Navy required a more advanced multirole fighter compatible with its short take-off but arrested recovery (STOBAR) configuration.¹⁴ This need became more

¹¹ “[Ardiden 1H1 Shakti, the Engine of the Indian Dhruv Helicopter](#)”, Safran Group.

¹² See “[Event Report](#)”, MP-IDSA Fellows Seminar on “Private Sector Defence Joint Ventures: Exports and Role of Offsets”, 20 May 2025.

¹³ Boris Pradhan, “[India, France to Collaborate on ₹61,000 cr Deal for Fighter Engines](#)”, *Business Standard*, 18 July 2025.

¹⁴ Dinakar Peri, “[The Significance of Carrier Aviation](#)”, *The Hindu*, 28 April 2024.

urgent as India recalibrated its maritime strategy to enhance power projection and secure its interests in the Indian Ocean Region (IOR). The focus shifted to acquiring a technologically advanced platform that could integrate effectively with the expanding naval fleet, support interoperability, and meet the demands of blue-water operations. India evaluated contenders such as the French Rafale M and the American F/A-18 Super Hornet.¹⁵

In 2017, the Indian Navy issued a Request for Information (RFI) for 57 multirole carrier-based fighter aircraft, with the French Rafale M and the US F/A-18 Super Hornet emerging as primary contenders.¹⁶ In 2022, the French Navy conducted ski-jump trials of the Rafale M in Goa to assess its compatibility with India’s STOBAR carriers. This was followed by similar tests of the F/A-18 Super Hornet by the US Navy, both aimed at evaluating operational performance, maintenance needs and logistical suitability. By December 2022, the Indian Navy recommended Rafale M to the Ministry of Defence, citing its superior performance, logistical advantages due to the existing IAF Rafale fleet, and greater interoperability.¹⁷

The announcement of India’s intention to procure 26 Rafale M jets during Prime Minister Modi’s visit to France in July 2023 marked a significant milestone, with follow-up diplomatic exchanges culminating in the DAC approval in July 2023.¹⁸ Additionally, the deal offers long-term advantages by preparing India’s carrier aviation for future platforms. This aligns with the Navy’s MRCBF RFI, which required vendors to confirm compatibility with STOBAR and Catapult Assisted Take-Off But Arrested Recovery (CATOBAR) modes, including the Electromagnetic Aircraft Launch System (EMALS).¹⁹

The Rafale-M is expected to replace the currently operating Russian-origin Mikoyan MiG-29K on at least one of the Indian Navy’s two aircraft carriers. Deliveries are scheduled to begin in 2028 and conclude by 2030. Unlike conventional land-based fighters, the Rafale-M is engineered explicitly for aircraft carrier deployment, featuring reinforced landing gear, a tail hook for arrested landings, and the ability to launch from short runways on moving ships under challenging maritime conditions. Already in service with the French Navy, it offers advanced combat capabilities through its Thales RBE2 AESA radar and Self-Protection Equipment to Counter

¹⁵ Snehash Alex Philip, [“Rafale or Super Hornets are ‘Interim Arrangement’ Only, Says Navy on Mega Fighter Deal”](#), *The Print*, 25 August 2022.

¹⁶ Neelam Mathews, [“Indian Navy Releases RFI for New Carrier-borne Fighter”](#), *ANI*, 31 January 2017.

¹⁷ Mukul Asthana, [“Expert Explains: Why Induction of 26 New Rafale M Aircraft Matters for the Indian Navy”](#), *The Indian Express*, 30 April 2025.

¹⁸ [“DAC Approves Proposals for Procurement of 26 Rafale Marine Aircraft from France to Boost Indian Navy’s Operational Capabilities”](#), no. 9.

¹⁹ Rahul Bedi, [“Indian Navy Begins Evaluating Rafale’s Compatibility with Vikrant”](#), *The Wire*, 11 January 2022.

Threats for Rafale Aircraft (SPECTRA) electronic warfare suite, enabling superior situational awareness and survivability in contested environments.²⁰ These fighters are intended to perform a range of missions, including air defence, maritime strike, reconnaissance and precision shore attacks.

The induction of Rafale-M jets will significantly enhance India’s Maritime Domain Awareness (MDA) by combining advanced reconnaissance capabilities with air superiority and long-range strike potential. With extended operational reach from aircraft carriers, Rafale-Ms will expand the Navy’s surveillance envelope across key sea lanes, ensuring strategic advantage in contested waters. The platform is expected to deliver a speed of up to Mach 1.8 and support a versatile payload of air-to-air, air-to-ground and anti-ship missiles, serving as a significant force multiplier for the naval aviation fleet. India is also discussing procuring the Multi-Role Fighter Aircraft (MRFA) programme with France, which aims to increase the IAF’s dwindling strength.²¹

The newly inducted fighter jet is expected to be an “interim arrangement” until the indigenous Twin Engine Deck Based Fighter (TEDBF) induction.²² The TEDBF is being developed by the Aeronautical Development Agency (ADA) to meet this need. Designed for carrier operations, the 26-ton, multi-role aircraft is in the Preliminary Design Review phase and expected to complete its primary design by June 2025.²³ It will feature indigenous technologies, a range of 800–900 km, mid-air refuelling and 12 hard points for advanced weapons like BrahMos and BVR missiles.

Challenges

While the Rafale-M deal marks a significant step in India’s naval modernisation and growing strategic ties with France, Dassault’s refusal to share the Rafale source code with the IAF is a key concern. While this is often justified as protecting intellectual property (IP), India argues that such access is essential for independent maintenance of avionics, mission systems and weapons integration.²⁴ The Rafale-M deal includes plans to integrate indigenous weapons like the Astra missile and DRDO’s Naval Anti-Ship Missiles (NASMs).

²⁰ [“Rafale-Marine: Enhancing India’s Naval Strength”](#), no. 1.

²¹ Snehash Alex Philip, [“Talks with France to Begin for G2G Deal for Multirole Fighter Aircraft, Rafale M Pact This Month”](#), *The Print*, 9 April 2025.

²² Snehash Alex Philip, [“Rafale or Super Hornets are ‘Interim Arrangement’ Only, Says Navy on Mega Fighter Deal”](#), no. 15.

²³ Shivani Sharma, [“Amid China Concerns, India Ramps Up its 5th Gen Fighter Jet Programs”](#), *India Today*, 18 February 2025.

²⁴ Brandon J. Weichert, [“India and France Are At Each Other’s Throats Over the Dassault Rafale Fighter”](#), *National Interest*, 28 May 2025.

Defence analysts have also criticised the steep cost of acquiring Rafale Marine jets. While the 2016 IAF deal for 36 Rafales cost around Rs 59,000 crore, the current Rs 63,000 crore deal for 26 naval variants reflects a significantly higher per-unit price.²⁵ The purchase of 26 Rafale-M jets also falls significantly short of the Navy’s initial need for 57 fighters, with only 22 intended for carrier operations and the rest being land-based trainers.²⁶ As a result, the existing capability gap persists.

Although the Rafale M is a capable carrier-based fighter, integrating it with the INS Vikrant presents particular challenges. The aircraft lifts on Vikrant were explicitly designed for the Russian-origin MiG-29K, and the Rafale, with its larger wingspan, may face difficulties fitting within the available space.²⁷ As a result, minor modifications or workarounds could be necessary to enable smooth movement between the hangar and the flight deck. Indian aircraft carriers use a ski-jump launch and arrestor cable recovery system, which the Rafale M is compatible with. However, the physical dimensions of the jet still pose an issue.

Conclusion

The Rafale-M deal between India and France marks a significant milestone in India’s naval modernisation and deepening strategic ties with a key Indo-Pacific partner. By choosing a combat-proven platform with existing synergies across the Indian Air Force and Navy, India aims to enhance interoperability, maritime strike capabilities and blue-water reach. Geopolitically, the acquisition supports India’s deterrence posture in the Indian Ocean amid regional power shifts. The Rafale-M deal strengthens short-term maritime combat capability, while India continues to develop its indigenous TEDBF for long-term self-reliance and strategic autonomy in carrier aviation.

²⁵ [“Rafale-M and the Indo-Pacific Chessboard: How India’s Mega Jet Deal Targets Beijing’s Rise”](#), *The Economic Times*, 14 April 2025.

²⁶ [“RFP for 57 Multi-role Combat Fighter Jets Likely by mid-2018: Indian Navy”](#), *The Economic Times*, 14 July 2018.

²⁷ Yusuf T. Unjhwala, [“What the Rafale M Deal Means for Indian Navy — And What It Misses”](#), *The Indian Express*, 18 April 2025.

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