

5.India – France to Jointly Manufacture Hammer -IR

Bharat Electronics Limited (BEL) and France's Safran Electronics & Defence (SED) have signed a joint venture agreement to manufacture the HAMMER precision-guided air-to-ground weapon system in India

India–France HAMMER Joint Venture

Origin of the Agreement

MoU Signed at Aero India 2025 – The accord builds upon an MoU signed during Aero India 2025, reflecting growing India–France defence industrial cooperation. Focuses on co-production, localisation, and lifecycle support for advanced precision-guided munitions.

Structure of the Joint Venture

Equal Partnership (50 – 50 JV) – A new joint venture company will be incorporated in India with equal shareholding between the French OEM and the Indian partner. Enhances Make in India and defence self-reliance objectives.

Scope of the JV – Local manufacturing, assembly, integration, repair, maintenance, and long-term support of HAMMER weapon systems. Potential to become a hub for exports to friendly nations.

Indigenisation Roadmap – Initial dependence on imported systems will gradually shift to 60% indigenous content. Includes local production of sub-assemblies, electronic systems, guidance kits, mechanical structures, and testing equipment.

HAMMER Weapon System – Strategic Importance



Nature and Characteristics

HAMMER – Highly Agile Modular Munition Extended Range – A next-generation precision-guided, stand-off, glide munition. Modular design allows fitting different guidance and propulsion kits to standard bombs.

Operational Advantages– Performs effectively in mountainous terrain like Ladakh where high-altitude winds and topographic complexity affect targeting. Offers high agility and penetration capability even against hardened targets.

Range and Compatibility

Stand-off Range of ~70 km – Allows aircraft to strike targets outside enemy air defence coverage, boosting survivability. multi-mode guidance (INS/GPS/laser) enhances accuracy in contested environments.

Platform Compatibility – Fully compatible with Rafale fighter jets. Being integrated with the LCA Tejas, enhancing indigenous combat capability.

Warhead Variants – Can be attached to standard bombs of 250 kg, 500 kg, and 1,000 kg weights. Suitable for bunker-busting, anti-infrastructure, and precision strike roles.



India–France Strategic Partnership – Foundations and Vision

Historical Context

Strategic Partnership launched in 1998 – India's first-ever Strategic Partnership with any nation. Reflects deep mutual trust and independent foreign policy traditions.

Core Vision – Enhance strategic autonomy, multipolarity, and rules-based global order. Maintain independent decision-making free from bloc politics.

Key Strategic Pillars

1. Defence and Security
2. Space Cooperation
3. Civil Nuclear Collaboration
4. Indo-Pacific & Maritime Security
5. Digital and Cybersecurity Collaboration
6. Climate Action & Sustainable Development
7. Advanced Technology Partnerships
8. Counter-terrorism Coordination

Defence Cooperation – The Backbone of Bilateral Ties

Dialogue Mechanisms

1. Annual Defence Dialogue (Minister-level)

2. High Committee on Defence Cooperation (HCDC) (Secretary-level)
3. Regular staff talks, industrial interactions, and joint R&D consultations.

Major Platforms & Projects

1. Rafale Fighter Jets – Procurement of 36 Rafale aircraft from Dassault → Transformative addition to IAF's combat strength. Equipped with advanced avionics, Meteor missiles, and HAMMER munitions.

2. Rafale-M for the Indian Navy – Inter-Governmental Agreement finalised for Rafale-M for INS Vikrant. Enhances India's naval aviation combat capability.

3. Scorpaena Submarines (P-75)

1. Collaboration with Naval Group (France).
2. Six submarines built at Mazagaon Dock – INS Kalvari → INS Vaghsheer.
3. Strong indigenisation and transfer of technology.

4. Co-Development of Aircraft Engines – HAL + Safran partnership under IMRH programme. Future plans include co-developing next-generation fighter jet engines.

5. Joint Military Exercises

1. Shakti (Army)
2. Varuna (Navy) – Among the longest-running naval exercises.
3. Garuda (Air Force)
4. FRINJEX-23 – First-ever joint Army exercise on forest management.



Economic & Technological Cooperation

Economic Ties

1. France is India's 5th largest EU trading partner.
2. Bilateral trade crossed USD 15.11 billion in 2023–24.

3. French companies operate in sectors like defence, energy, mobility, luxury goods, and urban transport.

Technology Integration & Digital Cooperation

UPI Expansion – UPI now enabled at select points in France (including the Eiffel Tower). Strengthens digital payments and citizen connectivity.

Sustainable Technologies – France supports India in renewable energy, circular economy, green hydrogen, smart cities, waste management, and modern urban infrastructure.

Space Cooperation – A 60+ Year Partnership

Major Areas of Collaboration – Space science, launch services, satellite development, ground systems, and climate monitoring. France is a major provider of space components and launch vehicles (Arianespace).

Joint Missions

TRISHNA – High-resolution thermal infrared imaging satellite for climate applications.

MDA support, maritime surveillance, and navigation systems.

Energy Cooperation – Solar, Nuclear & Renewables

International Solar Alliance (ISA) – Launched in 2015 as a joint India–France initiative. Aims to mobilise global clean energy adoption → especially in the tropics.

Civil Nuclear Cooperation – Regular meetings under Indo–French Strategic Dialogue. Cooperation on Small Modular Reactors (SMR) and Advanced Modular Reactors (AMR). Jaitapur project remains under consideration, pending liability and cost issues.

Diaspora and Cultural Links – Around 1,19,000 Indian-origin people reside in France. Cultural exchanges continue through cinema, literature, tourism, and education (Campus France).

Areas of Concern / Challenges

1. Trade Imbalance – Bilateral trade is still below potential, especially compared to Germany or Netherlands.

2. Technology Transfer – Concerns persist over depth of ToT in high-value defence platforms like Rafale or submarine AIP modules.

3. Nuclear Liability – India's Civil Liability for Nuclear Damage Act (2010) places supplier liability → discourages French firms (EDF) from Jaitapur participation.

4. Geopolitical Divergences – France's strong commercial ties with China create occasional mismatches in Indo–Pacific strategic outlook. Approaches to Middle East (Iran, Israel–Palestine) differ slightly.





Conclusion – The Road Ahead under Horizon 2047

India–France defence cooperation is the central axis of their strategic partnership.

The Horizon 2047 agenda emphasise –

1. Co-development and co-production of advanced technologies.
2. Supply-chain resilience and defence industrial collaboration.
3. Indo-Pacific coordination for maritime domain awareness and regional security.
4. Expansion of renewable, nuclear, and space partnerships.

The new HAMMER joint venture reflects a shift from procurement to joint manufacturing and innovation, signalling that the partnership is becoming more self-reliant, future-ready, and export-oriented.

Source - [https - //www.business-standard.com/external-affairs-defence-security/news/bel-safran-hammer-strike-system-explained-india-defence-125112500428_1.html](https://www.business-standard.com/external-affairs-defence-security/news/bel-safran-hammer-strike-system-explained-india-defence-125112500428_1.html)