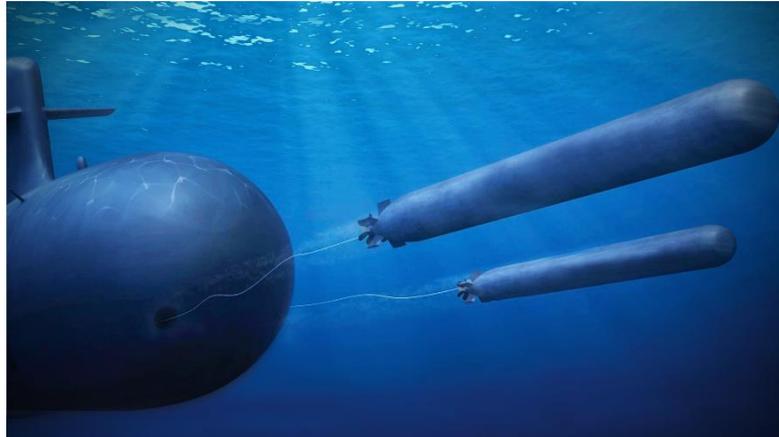


# Daily Defence Current Affairs

## 12 March 2025

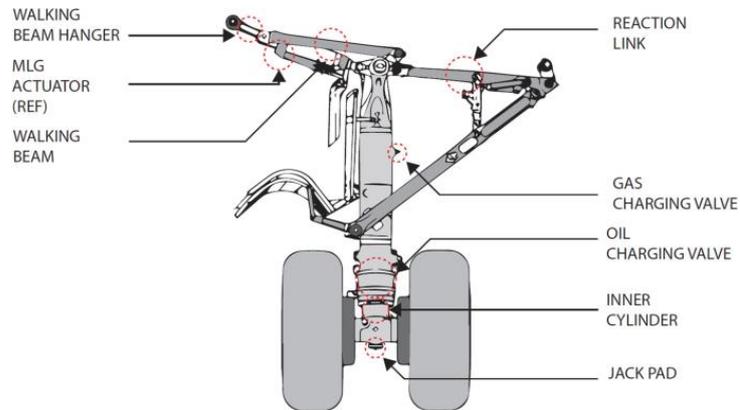
### Hyderabad Firm VEM Partners With TKMS To Manufacture Heavyweight Torpedoes

- ThyssenKrupp Marine Systems (TKMS), a leading German submarine and naval systems manufacturer, has signed a significant Teaming Agreement with VEM Technologies Pvt Ltd, a Hyderabad-based defence firm.
- This pact marks a pivotal step in bolstering India's indigenous defence production capabilities under the 'Make in India' initiative, announced TKMS.
- The agreement focuses initially on the production of a heavyweight torpedo tailored for the Indian Navy's existing submarine fleet. This collaboration aims to ensure timely upgrades and sustainment for platforms such as the Kalvari-class (Scorpene) submarines, which are already in service or nearing induction.
- VEM Technologies, known for its expertise in underwater systems and defence electronics, brings local manufacturing prowess to the table.
- Headquartered in Hyderabad, the firm has previously contributed to projects involving sonars, periscopes, and other submarine subsystems, making it a strategic partner for TKMS.
- TKMS, renowned for its advanced SeaHake heavyweight torpedoes, will transfer critical technology to enable joint production.
- The SeaHake series is celebrated for its long range, wire-guided precision, and multi-target capabilities, which could enhance the lethality of Indian submarines in the Indian Ocean region.
- This move aligns with India's push for self-reliance in defence, particularly in niche areas like underwater warfare. The Indian Navy operates a mix of ageing assets, including Sindhughosh and Shishumar classes, which stand to benefit from modernised armaments without full-scale foreign imports.



## Indo-French Aerospace Tie-Up For Landing Gear Systems

- Bharat Forge, a leading Indian engineering conglomerate, and France-based Liebherr-Aerospace & Transportation SAS have jointly inaugurated a state-of-the-art machining facility dedicated to landing gear components in Pune, reported ET News.
- This milestone development underscores India's growing prowess in aerospace manufacturing and aligns with the nation's push towards self-reliance in defence and aviation sectors.
- The facility, located in Pune's industrial hub, represents a strategic partnership aimed at producing high-precision components for aircraft landing gear systems.
- Bharat Forge, renowned for its expertise in forging and machining, brings decades of experience in heavy engineering, while Liebherr-Aerospace, a global leader in aerospace equipment, contributes advanced technological know-how from its extensive portfolio in landing gear and actuation systems.
- Inaugurated on a crisp March morning in 2026, the event drew key dignitaries from both companies, including executives from Bharat Forge's aerospace division and Liebherr's international leadership.
- Speeches highlighted the synergy between Indian manufacturing capabilities and European precision engineering, positioning the venture as a cornerstone of Indo-French industrial collaboration.



## Digantara Goes Global

- Digantara, the Bangalore-based pioneer in space situational awareness (SSA), has secured a significant contract from Thailand's Geo-Informatics and Space Technology Development Agency (GISTDA).
- This agreement marks a pivotal step in enhancing Thailand's capabilities to monitor satellites and space debris in orbit.
- The partnership underscores Digantara's accelerating footprint across the Asia-Pacific region. It follows closely on the heels of a contract awarded in February 2026 by Singapore's Defence Science and Technology Agency (DSTA), signalling the startup's rising prominence in regional space security.
- At its core, the collaboration aims to fortify Thailand's SSA framework. Digantara will deploy its advanced space- and ground-based sensing infrastructure, integrating data from its proprietary SCOT (Space Camera for Object Tracking) satellites with sophisticated AI-driven analytics.

- This technological infusion promises unprecedented visibility into orbital environments. By processing vast datasets in real time, the system will enable precise tracking of objects, mitigating collision risks and supporting sustainable space operations.
- Thailand's strategic objectives align seamlessly with this initiative. The contract bolsters the safety and longevity of its burgeoning space assets, amid growing congestion in low Earth orbit and escalating debris threats.
- GISTDA's National Space Data Center (NSDC) stands to benefit immensely. The enhanced surveillance will integrate into NSDC's operations, elevating Thailand's role in regional space governance and data-sharing consortia.
- On the ground, Digantara's sensor arrays complement satellite data, creating a multi-layered observational architecture. This fusion yields comprehensive threat assessments, vital for nations navigating the militarisation of space.
- For Thailand, the timing is opportune. As GISTDA ramps up its space programme, including Earth observation and communication satellites, robust SSA becomes indispensable to safeguard investments and comply with international norms.



## **Iraq Shuts Down Oil Ports After Attack On Marine Vessels In Its Waters**

- Iraq has temporarily shut down operations at its oil ports after two foreign oil tankers were attacked in its territorial waters, escalating tensions in the already volatile Middle East region. The incident has raised concerns about global energy security and the safety of maritime routes used for transporting crude oil.

- **Attack on Oil Tankers**

- According to Iraqi officials, two oil tankers—Safesea Vishnu (Marshall Islands-flagged) and Zefyros (Maltese-flagged)—were attacked near Iraq’s coast in the Persian Gulf. Explosive-laden boats reportedly struck the vessels, triggering large fires on both ships.
- The tankers were anchored while carrying Iraqi oil when the attack occurred. At least one crew member was killed, while dozens of crew members were rescued during emergency evacuation operations conducted by authorities.

- **Suspension of Oil Port Operations**

- Following the attack, Iraqi authorities suspended operations at all oil terminals to ensure safety and assess the security situation. However, commercial ports not related to oil exports are reportedly continuing normal operations.
- Officials described the attack as a “sabotage act” targeting Iraq’s energy infrastructure. Investigations are underway to determine the perpetrators and assess the extent of the damage.

- **Rising Tensions in the Region**

- The incident is linked to the wider Middle East crisis involving Iran, the United States, and Israel. In recent weeks, several ships in the Persian Gulf and the Strait of Hormuz have been attacked amid escalating military tensions.
- The Strait of Hormuz is a crucial global energy route through which about 20% of the world’s oil supply passes, making any disruption in the region a serious threat to international energy markets.

- **Impact on Global Oil Markets**

- The attacks and port closures have already begun affecting global energy markets. Oil prices have surged above \$100 per barrel, while several countries and energy organizations are considering releasing emergency reserves to stabilize supply.
- Experts warn that continued attacks on shipping routes could disrupt international trade and lead to further volatility in oil prices, especially for Asian countries that depend heavily on Middle Eastern oil exports.



## Indian Army and French Army Conduct Subject Matter Expert Exchange

- The Indian Army and the French Army recently conducted a Subject Matter Expert (SME) Exchange aimed at strengthening professional military cooperation and improving operational interoperability between the two forces. The exchange programme took place on 9–10 March 2026 and focused on enhancing mutual understanding of modern warfare strategies and advanced military technologies.
- **Objective of the Exchange**
- The primary aim of the SME Exchange was to deepen professional understanding and strengthen defence cooperation between India and France. Such interactions allow military experts from both countries to share operational experiences, doctrinal approaches, and technological developments relevant to contemporary battlefields.
- These exchanges are designed to help partner armies remain updated on evolving global military trends and improve interoperability, which refers to the ability of different armed forces to operate effectively together during joint missions or operations.
- **Focus on Modern Warfare Capabilities**
- During the interaction, experts from both sides discussed key operational themes related to modern warfare. The discussions mainly focused on:
  - Long-Range Vectors (LRVs) used for deep strike capabilities
  - Precision Guided Munitions (PGMs) used for accurate targeting
  - Operational employment of advanced strike systems in modern battlefields

- These technologies are increasingly important in modern conflicts as they allow armed forces to strike strategic targets with high precision while minimizing collateral damage.
- Exchange of Operational Knowledge
- Delegations from the two armies shared insights on:
  - Operational employment of precision strike systems
  - Emerging military doctrines
  - Technological innovations shaping modern warfare
  - Strategic thinking related to future combat scenarios
- Such discussions help military professionals from both countries learn from each other's experiences and improve their operational readiness.
- Significance for India–France Defence Relations
- The SME Exchange highlights the growing defence partnership between India and France. Over the years, both countries have strengthened military cooperation through joint exercises, defence agreements, and technological collaboration.
- Initiatives like these exchanges help build trust, enhance coordination, and prepare the armed forces for potential joint operations in the future.



## REVIEW QUESTIONS

**1. Which German defence company signed a teaming agreement with VEM Technologies to manufacture heavyweight torpedoes in India?**

- A. Rheinmetall
- B. ThyssenKrupp Marine Systems
- C. Airbus Defence
- D. BAE Systems

**Answer: B. ThyssenKrupp Marine Systems**

**Explanation: TKMS partnered with VEM Technologies Pvt Ltd to jointly manufacture heavyweight torpedoes for the Indian Navy under India's defence indigenisation efforts.**

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**2. VEM Technologies, which partnered with TKMS, is headquartered in which city?**

- A. Bengaluru
- B. Pune
- C. Hyderabad
- D. Chennai

**Answer: C. Hyderabad**

**Explanation: VEM Technologies is a defence electronics and underwater systems company based in Hyderabad.**

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**3. The torpedoes planned under the TKMS–VEM partnership are primarily intended for which submarine class?**

- A. Arihant-class
- B. Kalvari-class
- C. Akula-class
- D. Delta-class

**Answer: B. Kalvari-class submarine**

**Explanation: The Kalvari-class submarines (Scorpene design) are key conventional submarines of the Indian Navy.**

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**4. Which heavyweight torpedo series developed by TKMS may be produced under this collaboration?**

- A. Black Shark
- B. Spearfish
- C. SeaHake
- D. Varunastra

**Answer: C. SeaHake heavyweight torpedo**

**Explanation: The SeaHake torpedo is known for long-range capability, wire-guided precision, and multi-target engagement.**

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**5. The initiative to boost indigenous defence manufacturing in India is primarily associated with which programme?**

- A. Digital India
- B. Startup India
- C. Make in India
- D. Skill India

**Answer: C. Make in India**

**Explanation: The Make in India initiative promotes domestic manufacturing, including defence production.**

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**6. Bharat Forge collaborated with which French company to establish a landing gear manufacturing facility in India?**

- A. Dassault Aviation
- B. Thales
- C. Liebherr-Aerospace & Transportation SAS
- D. Safran

**Answer: C. Liebherr-Aerospace & Transportation SAS**

**Explanation: The partnership aims to manufacture high-precision landing gear components in India.**

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**7. The new aerospace machining facility established by Bharat Forge and Liebherr is located in which Indian city?**

- A. Bengaluru
- B. Hyderabad
- C. Pune
- D. Nagpur

**Answer: C. Pune**

**Explanation: The facility in Pune will produce aircraft landing gear components.**

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**8. Which Indian startup secured a contract with Thailand's space agency to enhance space situational awareness?**

- A. Skyroot Aerospace
- B. Agnikul Cosmos
- C. Digantara
- D. Bellatrix Aerospace

**Answer: C. Digantara**

**Explanation: Digantara specializes in space situational awareness (SSA) and satellite monitoring technologies.**

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**9. Digantara signed a contract with which Thai organization?**

- A. Thailand Space Agency
- B. Geo-Informatics and Space Technology Development Agency
- C. Royal Thai Space Council
- D. Thai Satellite Authority

**Answer: B. Geo-Informatics and Space Technology Development Agency (GISTDA)**

**Explanation: GISTDA manages Thailand's satellite and space data programs.**

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**10. Digantara uses which proprietary satellite system for tracking objects in space?**

- A. ASTRA
- B. SCOT
- C. INSAT
- D. NAVIC

**Answer: B. SCOT (Space Camera for Object Tracking) satellites**

**Explanation: SCOT satellites help track space debris and satellites in orbit.**

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**11. Iraq shut down its oil ports after attacks on tankers in which water body?**

- A. Red Sea
- B. Arabian Sea
- C. Persian Gulf
- D. Mediterranean Sea

**Answer: C. Persian Gulf**

**Explanation: The attacks occurred near Iraq's coast in the Persian Gulf.**

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**12. Which of the following oil tankers was attacked near Iraqi waters?**

- A. Ocean Pride
- B. Safesea Vishnu
- C. Blue Horizon
- D. Pacific Star

**Answer: B. Safesea Vishnu**

**Explanation: Safesea Vishnu and Zefyros were the two tankers attacked.**

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**13. Which strategic maritime chokepoint near Iraq carries nearly 20% of global oil trade?**

- A. Bab-el-Mandeb
- B. Strait of Malacca
- C. Strait of Hormuz
- D. Suez Canal

**Answer: C. Strait of Hormuz**

**Explanation: This narrow waterway connects the Persian Gulf to the Arabian Sea and is vital for global oil transport.**

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**14. The Subject Matter Expert (SME) exchange was conducted between the armies of which two countries?**

- A. India and Russia
- B. India and United States

- C. India and France
- D. India and Japan

**Answer: C. India and France**

**Explanation: The exchange was conducted between the Indian Army and the French Army.**

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**15. The SME exchange between India and France took place in which year?**

- A. 2024
- B. 2025
- C. 2026
- D. 2027

**Answer: C. 2026**

**Explanation: The programme was conducted in March 2026.**

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**16. What was the main objective of the SME exchange between India and France?**

- A. Missile testing
- B. Nuclear cooperation
- C. Professional military knowledge exchange
- D. Trade negotiations

**Answer: C. Professional military knowledge exchange**

**Explanation: The exchange focused on sharing operational knowledge and improving interoperability.**

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**17. Which type of weapons were a major focus during the India–France SME discussions?**

- A. Ballistic missiles
- B. Precision-guided munitions
- C. Nuclear warheads
- D. Anti-satellite weapons

**Answer: Precision-guided munitions**

**Explanation: Experts discussed the operational use of PGMs and long-range strike capabilities.**

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**18. The collaboration between Bharat Forge and Liebherr primarily relates to which sector?**

- A. Shipbuilding
- B. Aerospace manufacturing
- C. Nuclear energy
- D. Railways

**Answer: Aerospace manufacturing**

**Explanation: The partnership focuses on aircraft landing gear components.**

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**19. Space Situational Awareness (SSA) primarily deals with:**

- A. Monitoring climate change
- B. Tracking satellites and space debris
- C. Studying planetary atmospheres
- D. Launching rockets

**Answer: Tracking satellites and space debris**

**Explanation: SSA ensures safe satellite operations by monitoring objects in space.**

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**20. Modern torpedoes like SeaHake are usually guided using which method?**

- A. Laser guidance
- B. Wire-guided system
- C. Infrared guidance
- D. GPS guidance

**Answer: Wire-guided system**

**Explanation: Wire guidance allows operators to control torpedo trajectory after launch.**