



UPSC & STATE PCS CURRENT AFFAIRS · UJIYARI.COM

EDITORIAL ANALYSIS

Atmanirbhar Bharat in Defence — Reading the CQB Carbine and Torpedo Contracts

 **THE HINDU**

2 January 2026

SUBJECTS COVERED**SECURITY & DEFENCE****ECONOMY****GS PAPERS****GS3****CURATED & WRITTEN BY****Bharat Choudhary**

UPSC Educator & Content Creator •

[linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

Free UPSC & State PCS Resources

ujiyari.com

Atmanirbhar Bharat in Defence — Reading the CQB Carbine and Torpedo Contracts

The Hindu 2 January 2026

GS3

TH The Hindu

MAINS RELEVANCE: **GS Paper 3**



INTERVIEW ANGLE

"How do the Rs 4,666 crore defence contracts (CQB Carbines and HW Torpedoes) reflect India's progress and remaining gaps in defence indigenisation?"

WHY IN NEWS

The Ministry of Defence signed two contracts totalling Rs 4,666 crore in December 2025 — one for over 4.25 lakh Close Quarter Battle Carbines (Bharat Forge: 60%; PLR Systems/Adani-IWI JV: 40%) and another for 48 Heavy Weight Torpedoes for Kalvari-class submarines from Italy's WASS. The contracts illustrate the complexity of indigenisation: one is a domestic procurement with structured offset; the other remains a foreign buy.

THE TWO CONTRACTS, TWO STORIES

The December 2025 defence contracts are a Rorschach test for the Atmanirbhar Bharat defence indigenisation programme:

CQB Carbine (Rs 2,770 crore): This is a qualified success for domestic production. The contract — over 4.25 lakh carbines for the Indian Army and Indian Navy — is split 60:40 between Bharat Forge Limited and PLR Systems Pvt. Ltd. (a joint venture between Adani Defence and Israel Weapon Industries). The majority supplier is an Indian conglomerate; the design draws on Israeli expertise through a JV structure that retains Indian production and some IP sharing.

Heavy Weight Torpedoes (Rs 1,896 crore): This is an outright foreign procurement. WASS Submarine Systems S.R.L. (Italy) will supply 48 HWTs for Kalvari-class submarines with delivery starting April 2028. India does not yet have an indigenous torpedo in the HWT class; the DRDO-developed Advanced Torpedo Decoy System (ATDS) is a defensive system, not an offensive torpedo. The HWT contract reflects the gap between India's indigenisation ambition and its underwater weapons capability.

The contrast is instructive: where India has built an industrial base (small arms, artillery, military vehicles), indigenisation is progressing. Where it hasn't (advanced sensors, underwater weapons, aircraft engines), foreign procurement remains the default.

THE INDIGENISATION ARCHITECTURE

India's defence indigenisation policy rests on several interlocking instruments:

1. Defence Acquisition Procedure (DAP) 2020 Categories:

| Category | Description | Indigenisation |
|-----------------------|---|---------------------------|
| Buy (IDDM) | Indian Indigenously Designed, Developed, Manufactured | Highest — minimum 50% IC |
| Buy (Indian) | Design need not be Indian; manufacturing in India | 50% IC minimum |
| Buy and Make (Indian) | Foreign design, TOT, Indian production | IC ramps up over contract |
| Buy and Make | Foreign buy with offset; some Indian manufacture | Lower IC |
| Buy (Global) | Pure foreign buy | Offset obligations only |

The CQB Carbine contract is closest to “Buy (Indian)” — Indian firms manufacture, with foreign IP (Israeli) licensed through the JV. The HWT contract is “Buy (Global)” — a pure foreign purchase from Italy.

Target evolution: DAP 2020 mandated that 64% of the defence capital budget be spent on domestic procurement (raised from 58% in DAP 2016). Budget 2022-23 further raised this to 68%. The FY 2025-26 total capital contracts of Rs 1,82,492 crore — a record — reflects the scale of procurement, though the domestic vs. foreign split remains a work in progress.

2. Defence Industrial Corridors:

India established two dedicated Defence Industrial Corridors (DICs) to anchor manufacturing:

Uttar Pradesh DIC (Lucknow–Agra–Kanpur–Chitrakoot–Jhansi–Aligarh): Target Rs 50,000 crore investment; focus on small arms, drones, electronics

Tamil Nadu DIC (Chennai–Coimbatore–Salem–Tiruchirappalli): Target Rs 50,000 crore; focus on aerospace, naval equipment, ammunition

Total DIC investment (FY25 target): Rs 25,000 crore; actual (as reported): ~Rs 35,000 crore in investment commitments.

3. Positive Indigenisation Lists (PILs):

DRDO and MoD have published four Positive Indigenisation Lists (PIL I through IV) covering 310+ defence items that can only be procured from Indian manufacturers after a notified date. These include artillery ammunition, radars, helicopters, corvettes, and small arms.

CQB Carbines likely qualify under PIL provisions for small arms. HWTs may be on future PIL lists once domestic capability is established.

BHARAT FORGE IN DEFENCE — THE CONGLOMERATE MODEL

Bharat Forge Limited (Pune; Kalyani Group) is a case study in how Indian industrial conglomerates are pivoting to defence:

Core business: Auto components, forgings — 2nd largest forgings company globally; supplies to Daimler, Volkswagen, PACCAR

Defence expansion (since 2015): Artillery systems (ATAGS 155mm howitzer developed with DRDO), armoured vehicles, combat vehicles, ammunition, electronic warfare systems

Government contracts: Artillery shells, Pinaka rocket system components, armoured vehicles for CISF

JV strategy: Bharat Forge partnered with Israeli ELBIT Systems for electronic warfare, and with Lockheed Martin for F-16 wing components (export)

The 60% Bharat Forge share in the CQB Carbine contract is significant — it builds on the company's defence manufacturing credibility and demonstrates that large-scale small arms production can be done domestically, with foreign IP as a bridge.

THE UNDERWATER GAP — WHY INDIA CANNOT INDIGENISE TORPEDOES YET

Heavy Weight Torpedoes are among the most complex munitions in existence. An HWT must:

Navigate autonomously to a target at speeds of 50–60 knots over 50+ km

Home on sonar signatures of submarines (active and passive modes)

Survive deep water pressure (operational depths 300–600 metres)

Carry a shaped explosive warhead that can penetrate submarine pressure hulls

Be reliably ignited after years in storage aboard a submarine

This requires:

Precision propulsion: Thermal (OTTO fuel) or electric motors; torpedo propulsion is a niche engineering capability

Advanced sonar homing: Miniaturised active/passive sonar with signal processing

Inertial navigation: For initial run before sonar acquisition

Explosive design: UNDEX (underwater explosion) physics

India's DRDO has been developing the **Varunastra** torpedo (domestically) since the late 1990s — the first indigenously developed HWT. Varunastra has been commissioned by the Indian Navy, but in limited numbers and for surface ship launch. Submarine launch adaptations and second-generation capability development are ongoing.

The WASS contract (48 HWTs for Kalvari class) suggests that Varunastra is not yet certified for Kalvari's vertical launch tubes, or that there is a capability gap in range, homing, or reliability. This is a gap that DRDO needs to close for Project-75I (the next 6 submarines) to be truly Atmanirbhar.

THE DEFENCE INDUSTRIAL BASE — SCALE, SKILL, AND SPEED

India's defence procurement hit Rs 1,82,492 crore in FY 2025-26 — a scale that can potentially sustain a large domestic industrial base. But converting budget into indigenisation requires three things:

- 1. Scale:** Domestic firms need minimum order quantities to justify investment in production lines. A 4.25 lakh carbine order is scale-generating; a 48-torpedo order is not (barely enough to justify a production run).
- 2. Skill:** Advanced defence manufacturing requires specialised metallurgy, precision machining, electronics integration, and software. India's defence PSUs (HAL, BEL, MDL, BDL) have skills but move slowly. Private sector entrants (Bharat Forge, Adani Defence, L&T, Tata Advanced Systems) move faster but need to build depth.
- 3. Speed:** India's defence procurement cycles are notoriously slow. The CQB Carbine RFP was floated years before the contract was signed. Speed-to-field matters in a rapidly evolving security environment; procurement delays have operational consequences.

The iDEX (Innovations for Defence Excellence) catalyst: iDEX (launched 2018; under DDP) provides grants to startups and MSMEs for defence technology development. Over 300 challenges have been launched; 80+ contracts signed. This pipeline is building the small-firm innovation layer that large PSUs cannot provide.

UPSC RELEVANCE

Prelims: CQB Carbine contract (Rs 2,770 crore; 4.25 lakh; Bharat Forge 60%; PLR Systems — Adani Defence + IWI JV — 40%; Army + Navy); HWT contract (Rs 1,896 crore; 48 torpedoes; WASS Italy; Kalvari class Project-75; delivery Apr 2028–early 2030); Kalvari class (6 submarines; Scorpene design; French Naval Group; MDL Mumbai); Positive Indigenisation Lists (PIL I–IV; 310+ items; ban on foreign procurement); Defence Industrial Corridors (UP DIC; TN DIC; Rs 50,000 crore each); iDEX (2018; DDP; grants for startups/MSMEs); Varunastra HWT (DRDO; first indigenous HWT; surface ship launch).

Mains GS-3: Atmanirbhar Bharat in defence — progress, gaps, and structural challenges | DAP 2020
indigenisation categories — Buy IDDM vs. Buy Global | Defence Industrial Corridors and private sector entry |
Submarine warfare capability — the underwater gap and Varunastra indigenisation.

★ FACTS CORNER — KNOWLEDGEPEDIA

DECEMBER 2025 MOD CONTRACTS:

CQB Carbine: Rs 2,770 crore; 4.25+ lakh units; Bharat Forge (60%) + PLR Systems/Adani-IWI (40%); for Army + Navy

HWT: Rs 1,896 crore; 48 units; WASS Italy; Kalvari class submarines; delivery Apr 2028–early 2030

Total MoD capital procurement FY2025-26: Rs 1,82,492 crore (record)

KALVARI CLASS SUBMARINES (PROJECT-75):

Design: Scorpene (French DCNS/Naval Group)

Builder: Mazagon Dock Shipbuilders (MDL), Mumbai

Units: 6 (Kalvari, Khanderi, Karanj, Vela, Vagir, Vagsheer)

Propulsion: Diesel-electric; 4 MTU diesel generators + 1 electric motor

Displacement: ~1,550 tonnes surfaced; ~1,775 tonnes submerged

Armament: 6 x 533 mm torpedo tubes; Exocet SM-39 anti-ship missiles (tube-launched)

BHARAT FORGE LIMITED:

Group: Kalyani Group (Baba Kalyani, Chairman)

HQ: Pune, Maharashtra

Core business: Auto components/forgings; 2nd largest forgings company globally

Defence: ATAGS 155 mm howitzer (with DRDO), armoured vehicles, ammunition, EW systems

Listing: BSE, NSE

POSITIVE INDIGENISATION LISTS (PILS):

PIL-I (2020): 101 items

PIL-II (2021): 108 items

PIL-III (2022): 101 items (revised)

PIL-IV (in progress): Additional items

Total: 310+ defence items; ban on foreign import after notified dates

VARUNASTRA TORPEDO:

Type: Heavy Weight Torpedo (HWT); 533 mm diameter

Developer: NSTL (Naval Science and Technological Laboratory), DRDO, Visakhapatnam

Range: ~40 km (standard); maximum speed ~50 knots

Guidance: Active/passive sonar homing + wire guidance

Status: Inducted by IN; primarily for surface ship torpedo tubes; submarine launch qualification ongoing

OTHER RELEVANT FACTS:

iDEX (Innovations for Defence Excellence): Under DDP (Department of Defence Production); launched 2018; DIO (Defence India Startup Challenge); 300+ challenges; 80+ contracts; focus on AI, drones, quantum, underwater sensors

Defence Corridors: UP DIC (Nov 2018; Rs 50,000 crore; node cities: Aligarh, Agra, Jhansi, Kanpur, Lucknow, Chitrakoot); TN DIC (2019; Rs 50,000 crore; node: Chennai-Coimbatore)

DAP 2020: Defence Acquisition Procedure replaces DPP 2016; Key category: Buy (IDDM) — Indigenous Design, Development, Manufacture; 50% Indigenous Content minimum

Sources: PIB, MoD, The Hindu

CURATED & WRITTEN BY

Bharat Choudhary

UPSC Educator & Content Creator

 [linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

Published on ujjari.com · Free UPSC & State PCS Current Affairs