

 **Indian Radio Software Architecture (IRSA) 1.0 – DRDO** **Event**

**Released on:** 06 Oct 2025 (National Workshop, DRDO Bhawan, New Delhi).

**Released by:** DRDO in collaboration with **Integrated Defence Staff (IDS) & Tri-Services.**

**Chief Guest:** Dr Samir V Kamat (Secy DDR&D & Chairman, DRDO).

**Guests of Honour:** Air Marshal Ashutosh Dixit (CIDS), Dr Rajat Moona (Director, IIT Gandhinagar).

**Guidance:** Dr B.K. Das, DG (ECS).

# **Indian Radio Software Architecture (IRSA) 1.0 – DRDO**

## **About IRSA 1.0**

**Type:** Software standard for **Software Defined Radios (SDRs)**.

**Scope:** Defines standardized **interfaces, APIs, execution environments & waveform portability.**

### **Purpose:**

Waveform portability.

SDR interoperability across Services.

Certification & conformance.

 **Indian Radio Software Architecture (IRSA) 1.0 – DRDO**

**Vision:** *Designed in India, for India, and ready for the world.*

 **Development Journey**

**2021** → Need identified: SDR = backbone of modern military communication.

**2022** → DRDO began work with IDS & Services to capture operational requirements.

**2025** → High-Level Advisory Committee (HLAC) approved IRSA v1.0.

**2025 (Oct)** → Formal release at National Workshop.

# **Indian Radio Software Architecture (IRSA) 1.0 – DRDO**

## **Significance**

First-ever **national specification** for SDR software architecture.

Strengthens **Atmanirbhar Bharat** in military communication.

Foundation for **future-ready, interoperable defence comms**.

Enables India to **export IRSA-compliant SDR solutions** → positioning IRSA as a **global benchmark**.

## **Stakeholder Involvement**

Indian Armed Forces.

Dept of Defence Production (DDP).

Defence PSUs.

Industry & Academia (IITs, R&D orgs).

**Q1.** The Indian Radio Software Architecture (IRSA) 1.0 was released in which year?

- (a) 2021
- (b) 2022
- (c) 2024
- (d) 2025 ✓

**Q2.** Which organisation led the development of IRSA?

- (a) Indian Army Corps of Signals
- (b) Defence Research & Development Organisation (DRDO) ✓
- (c) Bharat Electronics Limited (BEL)
- (d) Indian Space Research Organisation (ISRO)

**Q3.** IRSA is primarily related to which of the following?

- (a) Missile guidance systems
- (b) Software Defined Radios (SDRs) ✓
- (c) Electronic Warfare Radars
- (d) Satellite communication

**Q4.** What is the main aim of IRSA?

- (a) To develop stealth coating for aircraft
- (b) To ensure SDR interoperability & waveform portability ✓
- (c) To standardize nuclear command systems
- (d) To enhance radar cross-section detection



**Q5.** The IRSA initiative traces its origin to which year?

- (a) 2019
- (b) 2020
- (c) 2021 ✓
- (d) 2023

**Q6.** Who was the Chief Guest at the IRSA 1.0 release workshop?

- (a) Gen Anil Chauhan
- (b) Air Marshal Ashutosh Dixit
- (c) Dr Samir V Kamat ✓
- (d) Dr Rajat Moona



**Q7.** Which committee approved IRSA Version 1.0 in 2025?

- (a) Defence Acquisition Council
- (b) High-Level Advisory Committee (HLAC) ✓
- (c) Chiefs of Staff Committee
- (d) Cabinet Committee on Security

# 🛡️ National Conference on Defence Manufacturing

## 📌 Event

**Theme:** *Opportunities of Defence Manufacturing in the Country.*

**Venue:** Vigyan Bhawan, New Delhi.

**Chief Guest:** Raksha Mantri **Rajnath Singh.**

**Organised by:** Dept. of Defence Production (DDP), MoD.

## 🔑 Key Highlights from RM's Address

**Defence = Collective Responsibility** → not just Govt, but all citizens, States & UTs.

**Self-reliance in Defence = Strategic Autonomy + Sovereignty**, not just economics.

Called upon **States & UTs** to actively partner in building defence manufacturing ecosystem.

Cited **Operation Sindoor** as proof of collective coordination.

# National Conference on Defence Manufacturing

## Defence Industry Growth

Defence Production: ₹46,000 cr (2014) → ₹1.5 lakh cr (2025).

Private sector share: ₹33,000 cr.

Defence Exports: < ₹1,000 cr (2014) → ₹23,500 cr (2025).

### Ambitious Targets (2029):

Defence Production: ₹3 lakh cr.

Exports: ₹50,000 cr.

## Major Announcements / Reforms

Compendium of State Policies (Defence & Aerospace Manufacturing) released.

Covers all 28 States & 8 UTs.

Aligns national objectives with state policies.

Encourages competition + collaboration to attract defence investments.

# **National Conference on Defence Manufacturing**

## **Framework Reforms:**

- Defence Acquisition Procedure (DAP) 2020.
- Defence Procurement Manual (DPM) 2025.
- Defence Offsets Policy.
- Defence Investor Cell.

## **Ease of Doing Business in Defence:**

- Centralised Defence Testing Portal.
- Defence Testing Infrastructure Scheme (DTIS).
- Simplified QA timelines (self-certification).

# National Conference on Defence Manufacturing

## Technology & Innovation:

Emphasis on AI, ML, Robotics, Quantum, Cyber, Space.

Allocation of **25% Defence R&D budget** to industry, MSMEs, start-ups, academia.

## Digital Transformation:

**SRIJAN-DEEP Portal:** Digital repository of Indian defence industries.

**Defence Exim Portal:** Streamlined authorisations for exports/imports.

## Support to MSMEs/Startups:

Automated cash management tools.

Simplified bill processing & payments.



# National Conference on Defence Manufacturing

## Inclusive Initiatives:

**Nari Shakti:** More women in Armed Forces.

Expansion of BRO budget (border infra).

**100 new Sainik Schools** (partnership model).

## Defence Land Management:

1.8 million acres defence land across States.

New online portal for defence land exchanges for public utility projects.



## Significance

Pushes India from **importer to global exporter** of defence.

Strengthens *Atmanirbhar Bharat & Viksit Bharat 2047*.

Encourages **Centre–State synergy + private sector role**.

Blends **military capability with social, digital & infrastructural reforms.**



**Q1.** The National Conference on Defence Manufacturing (2025) was held at:

- (a) Hyderabad
- (b) Vigyan Bhawan, New Delhi ✓
- (c) Bengaluru
- (d) Pune

**Q2.** India's defence production in 2025 has reached its highest ever at:

- (a) ₹50,000 crore
- (b) ₹1 lakh crore
- (c) ₹1.5 lakh crore ✓
- (d) ₹2 lakh crore

**Q3.** What is India's defence export target for 2029?

- (a) ₹25,000 crore
- (b) ₹30,000 crore
- (c) ₹50,000 crore ✓
- (d) ₹75,000 crore

**Q4.** Which document consolidating state-level defence & aerospace policies was released by Raksha Mantri at the event?

- (a) Defence Procurement Manual 2025
- (b) Compendium of State Policies ✓
- (c) Defence Offset Guidelines 2025
- (d) iDEX Coffee Table Book

**Q5. The SRIJAN-DEEP Portal** launched by MoD serves as:

- (a) Defence personnel training portal
- (b) Digital repository of defence industries & products ✓
- (c) Defence R&D database for academia only
- (d) Portal for veterans' welfare schemes

**Q6. Which new manual** is being introduced by MoD to refine defence procurement?

- (a) DPM 2023
- (b) DPM 2025 ✓
- (c) DPM 2027
- (d) DAP 2025



**Q7.** How much of the Defence R&D budget is reserved for industry, MSMEs, start-ups & academia?

- (a) 15%
- (b) 20%
- (c) 25% ✓
- (d) 30%

**Q8.** As of 2025, approx. how much defence land is spread across Indian States?

- (a) 1 million acres
- (b) 1.2 million acres
- (c) 1.5 million acres
- (d) 1.8 million acres ✓

# ⚓ The Indian Navy Quiz – **THINQ 2025**

## 📌 **Event Overview**

**Name:** *The Indian Navy Quiz – THINQ 2025.*

**Organiser:** Headquarters **Southern Naval Command (HQSNC).**

**Format:** National-level school quiz (Classes 9–12).

### **Purpose:**

Foster curiosity, reasoning & GK.

Inculcate **maritime consciousness.**

Youth outreach & leadership/innovation motivation.

# ⚓ The Indian Navy Quiz – **THINQ 2025**

## 📅 **Timeline**

**Elimination Round–I (ER–I):** 08 Sep 2025.

**Elimination Rounds:** Spanned over 3 weeks.

**Zonal Selections:** 13–14 Oct 2025 (proctored online).

**Semi-Finals & Grand Finale:** Early Nov 2025, at Indian Naval Academy (INA), Ezhimala.

## 🔑 **Participation**

**Students:** Classes 9–12.

**Qualified Teams:** 166 schools → moving to zonal stage.

**Themes:** Awareness, reasoning, GK, maritime heritage.

## 🌐 **Significance**

Flagship outreach initiative of the Indian Navy.

Promotes teamwork, competitive spirit, & maritime heritage awareness.

Inspires future leaders & innovators.



**Q1.** THINQ 2025 is an initiative of which Indian Armed Force?

- (a) Indian Army
- (b) Indian Navy ✓
- (c) Indian Air Force
- (d) Indian Coast Guard

**Q2.** The Semi-Finals and Grand Finale of THINQ 2025 will be hosted at:

- (a) Naval Dockyard, Mumbai
- (b) Defence Services Staff College, Wellington
- (c) Indian Naval Academy, Ezhimala ✓
- (d) INS Hansa, Goa

**Q3.** How many school teams have advanced to the Zonal Selections of THINQ 2025?

- (a) 100
- (b) 120
- (c) 166 ✓
- (d) 200

**Q4.** Students from which classes are eligible to participate in THINQ 2025?

- (a) Classes 6–8
- (b) Classes 9–12 ✓
- (c) Classes 11–12 only
- (d) College students

**Q5.** When was Elimination Round–I of THINQ 2025 conducted?

- (a) 01 Aug 2025
- (b) 08 Sep 2025 ✓
- (c) 15 Sep 2025
- (d) 25 Sep 2025

# ⚓ INS Abhay & INFAC T-82 – **Decommissioned**

## 📌 **Event**

**Date:** 06 Oct 2025.

**Location:** Naval Dockyard, Mumbai.

**Presiding Officer:** Vice Admiral Krishna Swaminathan, FOC-in-C, Western Naval Command.

**Ceremony:** National Flag, Naval Ensign & Decommissioning Pennants lowered at sunset → end of commissioned service.

# ⚓ **INS Abhay & INFAC T-82 – Decommissioned**

## 🔑 **INS Abhay**

**Type:** Anti-Submarine Warfare (ASW) Corvette.

**Class:** Soviet Pauk II class.

**Commissioned:** 10 Mar 1989, at Poti, Georgia (erstwhile USSR).

### **Service Highlights:**

ASW surveillance & patrols.

Coastal defence ops.

Operational deployments with ASW sensor + weapon suite.

# ⚓ INS Abhay & INFAC T-82 – Decommissioned

## 🔑 INFAC T-82

**Type:** Indian Naval Fast Attack Craft (INFAC).

**Class:** Israeli Super Dvora Mk II.

**Commissioned:** 09 Oct 2003, at Naval Dockyard, Mumbai.

**Motto:** *“Stealth and Strike”*.

### Roles:

First responder in **Search & Rescue (SAR)**.

Submarine escort duties.

Coastal interdiction missions.

# ⚓ **INS Abhay & INFAC T-82 – Decommissioned**

## 🌐 **Significance**

Both ships rendered **3+ decades of service** (Abhay – 36 yrs, T-82 – 22 yrs).

Demonstrated **India's maritime vigilance & coastal defence**.

Decommissioning ceremony followed **age-old naval traditions**.

Commanding Officers at pay-off:

**Cdr Abhay Kumar Singh (INS Abhay).**

**Lt Cdr Adishesh Mishra (INFAC T-82).**

**Q1.** INS Abhay, recently decommissioned, belonged to which class of corvettes?

- (a) Kora-class
- (b) Pauk II-class ✓
- (c) Kamorta-class
- (d) Veer-class

**Q2.** Where was INS Abhay commissioned in 1989?

- (a) Sevastopol, USSR
- (b) Poti, Georgia ✓
- (c) Riga, Latvia
- (d) Vladivostok, USSR



**Q3.** INFAC T-82, decommissioned in 2025, was of which class?

- (a) Veer-class
- (b) Super Dvora Mk II-class ✓
- (c) Sukanya-class
- (d) Abhay-class

**Q4.** What was the motto of INFAC T-82?

- (a) Always Vigilant
- (b) Courage and Honour
- (c) Stealth and Strike ✓
- (d) Speed and Strength



**Q5.** The decommissioning of INS Abhay and INFAC T-82 took place at:

- (a) Karwar Naval Base
- (b) Kochi Naval Dockyard
- (c) Mumbai Naval Dockyard ✓
- (d) Visakhapatnam Naval Base

**Q6.** Who presided over the decommissioning ceremony of INS Abhay and INFAC T-82?

- (a) Admiral Dinesh Tripathi
- (b) Vice Admiral Krishna Swaminathan ✓
- (c) Admiral Sunil Lanba
- (d) Vice Admiral V Srinivas