



MINISTRY OF DEFENCE

Government of India



ANNUAL REPORT 2024-25





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TABLE OF

CONTENTS

	Page No.
Departments and Organisations of Ministry of Defence	1
Department of Defence	5
National Celebrations	7
National Cadet Corps	17
Border Roads Organisation	27
Indian Coast Guard	35
Armed Forces Medical Services	41
Modernization of Armed Forces	48
Other Organisations of Department of Defence	55
Defence Finance	80
Defence Cooperation with Foreign Countries	86
Key Initiatives	102
Department of Defence Production	103
Department of Military Affairs	125
Indian Army	129
Indian Navy	159
Indian Air Force	191
Headquarters Integrated Defence Staff	213
Defence Research and Development Organisation	221
Department of Ex-Servicemen Welfare	255
Empowerment and Welfare of Women	265

ANNUAL REPORT 2024-25

DEPARTMENTS AND ORGANISATIONS OF MINISTRY OF DEFENCE

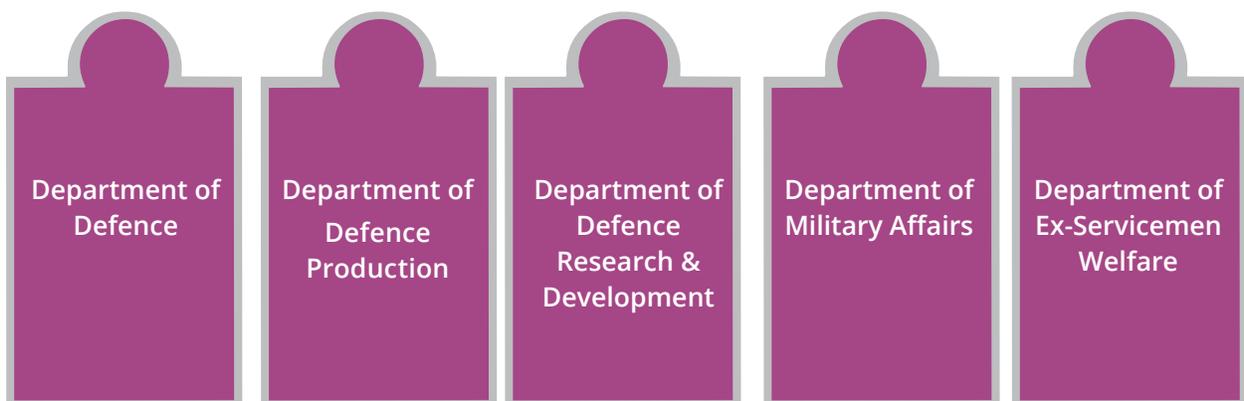
Ministry of Defence

After Independence, Ministry of Defence was created under the charge of a Cabinet Minister and each Service was placed under its own Commander-in-Chief. In 1955, the Commanders-in-Chief were renamed as the Chief of the Army Staff, the Chief of the Naval Staff and the Chief of the Air Staff. In November 1962, the Department of Defence Production was set up to deal with research, development and production of defence equipment.

In November, 1965, the Department of Defence Supplies was created for planning and execution of schemes for import substitution of defence requirements. These two Departments were later merged to form the Department of Defence Production and Supplies. In 2004, Department of Defence Production and Supplies was renamed as Department of Defence Production.

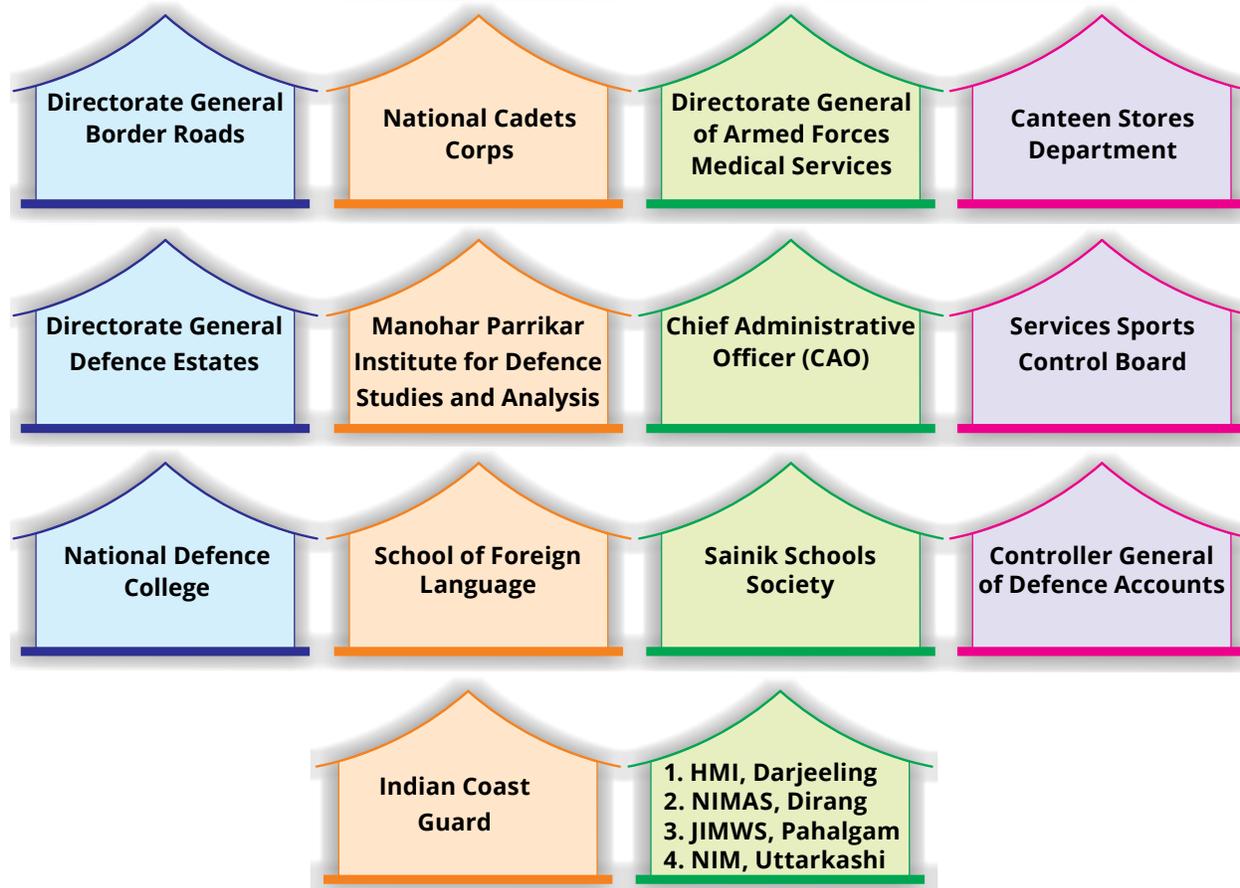
In 1980, the Department of Defence Research and Development was created. In 2004, the Department of Ex- Servicemen Welfare was setup. In 2019, a new department namely Department of Military Affairs was created with the aim to facilitate optimal utilization of resources and to promote jointness among the three services.

Defence Minister of India or Raksha Mantri is the head of Ministry of Defence, Government of India, which maintains India's defence and internal security. The defence minister additionally serves as President of the Institute for Defence Studies and Analysis, and as Chancellor of the Defence Institute of Advanced Technology and National Defence University. Raksha Mantri is assisted by a Minister of State for Defence (Raksha Rajya Mantri). The Defence Secretary functions as head of the Department of Defence and is additionally responsible for coordinating the activities of the five Departments in the Ministry.



Departments of Ministry

(i) **The Department of Defence (DOD)** headed by the Defence Secretary deals with Defence Budget, establishment matters, defence policy, matters relating to Parliament, defence co-operation with foreign countries and co-ordination of all defence related activities.



Attached offices / Inter-Services Organizations of Department of Defence

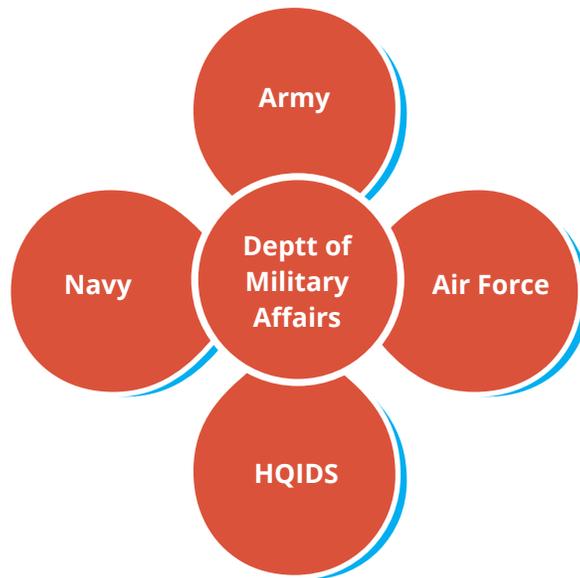
(ii) **Department of Defence Production** is headed by a Secretary and this department is involved in developing a comprehensive production infrastructure to provide the weapons/systems/platforms/equipments required by defence. Over the years, the department has established wide ranging production facilities for various defence equipments through DPSUs and also facilitated private industry.

Department of Defence Production	
DPSUs	Other Organizations
<ul style="list-style-type: none"> • Hindustan Aeronautics Limited (HAL) • Bharat Electronics Limited (BEL) • Bharat Earth Movers Limited (BEML) • Bharat Dynamics Limited (BDL) • Garden Reach Shipbuilders & Engineers Limited (GRSE) 	<ul style="list-style-type: none"> • Directorate General of Quality Assurance (DGQA) • Directorate General of Aeronautical Quality Assurance (DGAQA) • Directorate of Standardisation (DOS) • Directorate of Planning & Coordination (Dte. of P&C)

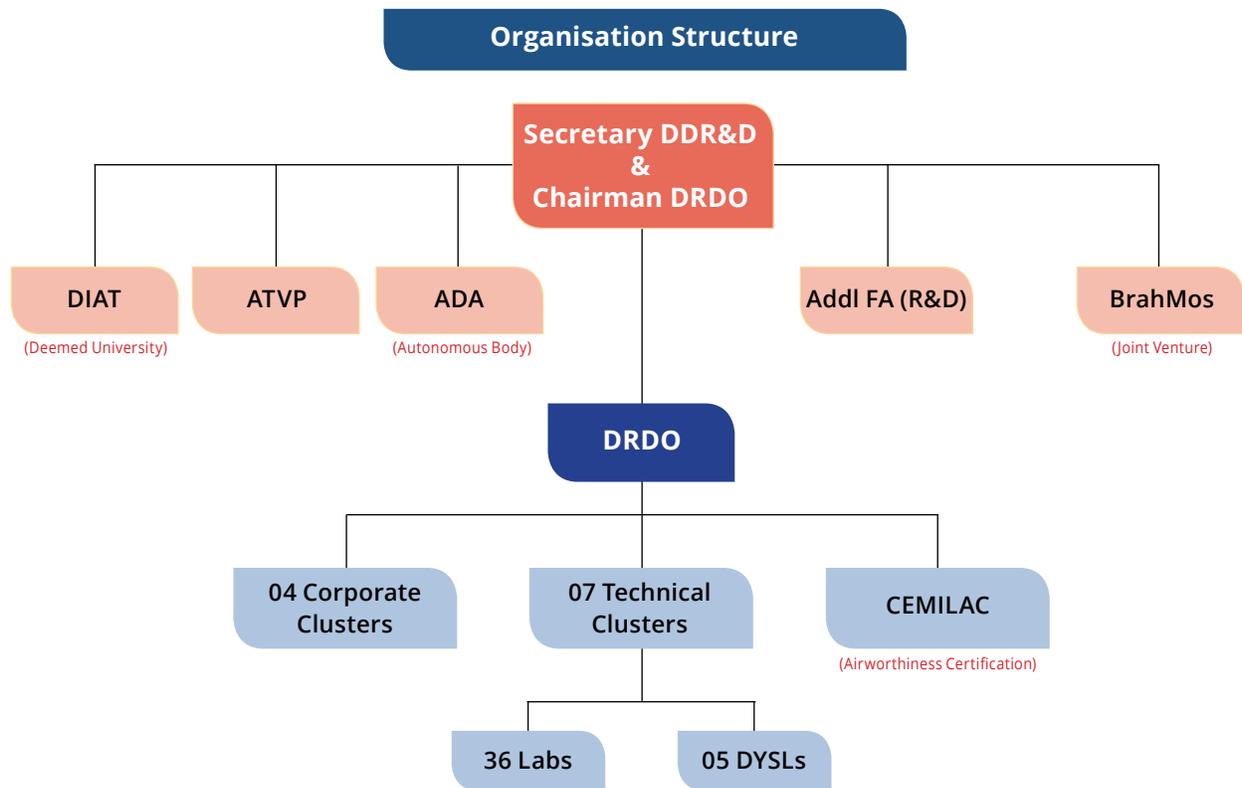
DPSUs	Other Organizations
<ul style="list-style-type: none"> • Goa Shipyard Limited (GSL) • Hindustan Shipyard Limited (HSL) • Mazagon Dock Shipbuilders Limited (MDL) • Mishra Dhatu Nigam Limited (MIDHANI) • Munitions India Limited (MIL) • Armoured Vehicles Nigam Limited (AVNL) • Advanced Weapons & Equipment India Limited (AWEIL) • Troop Comforts Limited (TCL) • Yantra India Limited (YIL) • India Optel Limited (IOL) • Gliders India Limited (GIL) 	<ul style="list-style-type: none"> • Defence Exhibition Organisation (DEO) • Directorate of Ordnance (Coordination & Services)

Organizations of Department of Defence Production

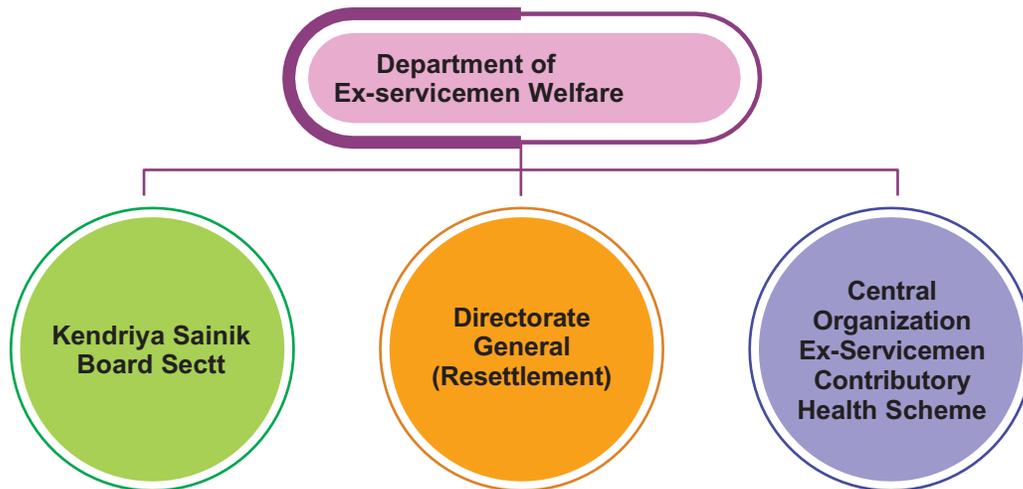
(iii) **The Department of Military Affairs (DMA)** headed by the Chief of Defence Staff as its Secretary deals with the promotion of jointness in procurement, training and staffing for the services. Facilitation of restructuring of Military commands for optimal utilization of resources and promotion of use of indigenous equipment is also the mandate of this department.



(iv) **The Department of Defence Research and Development (DDR&D)** is headed by a Secretary DDR&D & Chairman, DRDO and is responsible for all design and development of state-of-the-art sensors, weapon systems, platforms and allied equipment in defence and security domains of land, air, sea, space and cyber. DRDO consists of 36 Laboratories/Units



(v) **The Department of Ex-Servicemen Welfare (DESW)** is headed by a Secretary and deals with all resettlement, welfare and pensionary matters of Ex-Servicemen.



Organizations of Department of Ex-Servicemen Welfare

Department of Defence



MINISTRY OF DEFENCE
Government of India

NATIONAL CELEBRATIONS

INDEPENDENCE DAY CEREMONY - 2024

- The celebration of the Independence Day began with arrival of Hon'ble Prime Minister at the Red Fort. The three Services and Delhi Police presented the Guard of Honour to the Prime Minister. Following this, the Prime Minister unfurled the National Flag on the Rampart of the Red Fort to the accompaniment of the National Anthem played by the Services Band. Twenty one Gun Salute was presented on the occasion with indigenous guns. After the Prime Minister's address to the nation, the ceremony concluded with the singing of National Anthem by NCC cadets & NSS Volunteers and release of balloons.



- On the eve of the Independence Day-2024, following Gallantry Awards were announced:-

Name of the award	Total number of awards (including posthumous cases)	Posthumous cases
Kirti Chakra	04	03
Shaurya Chakra	18	04
Sena Medal (G) (including bar to Sena Medal)	64	02
Nao Sena Medal (G)	11	----
Vayu Sena Medal (G)	06	----
Total:	109	09

- After the conclusion of Independence Day Ceremony, 2024 at the Red Fort, Hon'ble President of India laid wreath at National War Memorial.

MY BHARAT LOGO AT GYANPATH

MY Bharat Logo was created at Gyanpath. Nearly 2000 NCC Cadets and 500 NSS Volunteers seated in MY Bharat formation.



SPECIAL GUESTS FOR INDEPENDENCE DAY, 2024

Approx. 6000 guests from following categories/ schemes/ initiatives etc. were invited to witness the Independence Day Ceremony, 2024 as Special Guests of the Government:-

Drone Didi	Guests from Child Welfare Committee
Lakhpatri Didi	Self Help Groups' Didis from MPSRLM
Workers of BRO	Tribal entrepreneurs funded by NSTFDS
ASHA/ANM workers	Tribal artisans/Van Dhan Vikas Members
Guests from Sakhi Kendra	Guests from District Child Protection Units
Women Workers of Anganwadi	Volunteers of NSS under Meri Maati Mera Desh
Students of PM SHRI scheme	Students from Eklavya Model Residential School
Students from Prerna Schools	Innovators/Students from Atal Innovation Mission
Women Elected Representatives	Beneficiaries of Pradhan Mantri Fasal Bima Yojana
Farmers Producing Organization	Guests from Sankalp: Hub for empowerment of Women
Players of Paris Olympic, 2024	Beneficiaries of Pradhan Mantri Kisan Samman Nidhi
Guests from PM Ujjawala Scheme	Achievers from various fields (from Ministry of Mines)
Beneficiaries of MY Bharat Scheme	One Guest from each block of Aspirational Block Programme (ABP)
75 couples in traditional attire from each State/UT	Gram Panchayat which received Saturation & Priority Sector Scheme

SEATING ARRANGEMENT FOR GENERAL PUBLIC

To increase the public participation in Independence Day Ceremony, 10000 seats were arranged for general public including the guests from States/UTs in traditional attire and winners of various quizzes/contests.

ONLINE QUIZ CONTESTS/COMPETITIONS

- To maximize the public participation and to awaken festive mood, a series of online quiz contests on subjects “Atmanirbhar Bharat” in Defence Production; Indian Freedom Struggle; Military Might of India; National Symbols and traditions were organized in collaboration with MyGov portal and All India Radio between July 20-31, 2024.
- In addition, following competitions were also organized between July 12-30, 2024:-
 - Essay writing competition on the topic ‘Ek Bharat Shrestha Bharat’.
 - Painting competition on the theme ‘Mission Life’.
 - Patriotic Dress competition.
 - Video Story competition on the theme ‘Viksit Bharat’.
 - Patriotic Song competition.
- Winners of all competitions/quizzes were invited to witness the Independence Day Ceremony, 2024 at the Red Fort.

DEFENCE INVESTITURE CEREMONY

The Defence Investiture Ceremony, 2024 was organised at Rashtrapati Bhawan in two phases i.e. first on July 05, 2024 and second on July 19, 2024 respectively in association with President’s Secretariat. On this occasion, Hon’ble President conferred the Gallantry as well as distinguished service awards. The ceremonies were graced by various dignitaries including Hon’ble Prime Minister.



KARGIL VIJAY DIWAS

- To commemorate the 25th Anniversary of Kargil Vijay Diwas, its Rajat Jayanti Mahotsav was celebrated on **July 26, 2024** at Kargil War Memorial, Ladakh by Indian Army. The ceremony was graced by Hon'ble Prime Minister.



- A wreath laying ceremony was also organized at National War Memorial, India Gate, New Delhi on this day to pay homage to the bravehearts. Hon'ble RM, Defence Secretary and other dignitaries from Armed Forces laid wreath on the occasion.

VIJAY DIWAS

- Vijay Diwas was celebrated on **December 16, 2024**. On this occasion, Hon'ble Raksha Mantri laid wreath at National War Memorial at India Gate. Hon'ble Raksha Rajya Mantri, Chief of Defence Staff, three Services Chiefs and Defence Secretary also graced the ceremony and laid the wreath.



REPUBLIC DAY PARADE, 2025

- The Prime Minister laid wreath at National War Memorial in the morning of January 26, 2025. Two minutes silence was observed for paying homage to those who laid down their lives in safeguarding the integrity of our nation.
- H.E. Mr. Prabowo Subianto, President of the Republic of Indonesia, was the Chief Guest for Republic Day Parade, 2025. Marching Contingent of the Indonesian National Armed Forces along with Military Band of Indonesia's Military Academy also participated in Republic Day Parade, 2025.



- Unfurling of the National Flag at Kartavya Path marked the beginning of the Republic Day Celebration. The President's Body Guards presented the National Salute followed by the National Anthem played by the Services Bands and a 21 gun salute.
- The Republic Day Parade commenced with showering of flower petals by Helicopters carrying the National Flag and the Services Flags. The parade was led by GOC Delhi area and included the following main components:-
 - Heralding of Parade by 300 cultural artists with musical instruments of different parts of the country
 - Showering of flower petals by Helicopters
 - Marching contingents & bands from Indonesia (Country of the Chief Guest), three services, Central Armed Police Forces, NCC, NSS etc.
 - Mounted Cavalry Column
 - Mechanised Column
 - Veteran tableau, Navy tableau, DMA tableau, DRDO tableau, Indian Coast Guard Tableau and 26 tableaux of various States/UTs and Central Ministries/Departments.
 - 'Jayati Jaya Mamah Bharatam' cultural pageant by a group of approx. 5000 artists on complete stretch of Kartavya Path
 - Motor Cycle display, Fly past and release of rubber balloons.



Few glimpses of Republic Day Celebration 2025

- The following gallantry and distinguished service awards were announced on the Republic Day 2025:-

Name of the award	Total number of awards (including posthumous cases)	Posthumous cases
Gallantry Award(s)		
Kirti Chakra	02	01
Shaurya Chakra	14	03
Sena Medal/Nao Sena Medal/ Vayu Sena Medal (Gallantry) (including Bar)	77	08
Distinguished Award(s)		
Param Vishisht Seva Medal	30	---
Uttam Yudh Seva Medal	05	---
Ati Vishisht Seva Medal	57	---
Yudh Seva Medal	10	---
Sena Medal/Nao Sena/Vayu Sena Medal (Devotion to duty)	67	---
Vishisht Seva Medal (including Bar)	136	---
Total:	398	12

BEATING RETREAT CEREMONY, 2025

- 'Beating Retreat' is a centuries old military tradition practised by the troops at the time of disengaging from battle at sunset. The Beating Retreat Ceremony denotes departure of the troops assembled at Delhi for participating in the Republic Day Celebrations. The Ceremony was organised at Vijay Chowk on January 29, 2025, which brought down the curtain on the Republic Day festivities.
- The Ceremony included the Bands of the three Services along with Central Armed Police Forces (CAPFs) Band. Only Indian tunes were played by all participating bands. The conclusion of the ceremony coincided with illumination of the Rashtrapati Bhawan, North Block, South Block, Parliament House and India Gate.



OTHER ACTIVITIES UNDERTAKEN DURING RDC-2025

Rashtraparv Portal. To facilitate citizens to have ease in information and getting access to witness the various events on Republic Day Celebrations – 2025 viz. booking tickets, getting location of the seating and parking arrangements etc., a comprehensive mobile App (on Apple play and MSewa) and “Rashtraparv Portal” has been developed to serve as a focus point for all details of events related to Republic Day Parade and Beating Retreat Ceremony.

Marching Component: Total 18 (17+1) Marching Contingents [09 from Services, 05 CAPFs, 02 NCC, 01 NSS and 01 Indonesian] and total 15 (14+ 1) bands [07 Army, 05 CAPF, 01 Coast Guard ,01 NCC and 01 Indonesian] participated in the RDC 2025

Cultural Performance. Ministry of Culture, through Sangeet Natak Academy, organized a 10 minute cultural performance across all seating enclosures at Kartavya Path with 5000 Artists in a title of ‘Jayati Jaya Mamah Bharatam’.



Special Activities for JANBHAGIDARI

Special Guests. In recent years, to encourage greater public participation in national events, beneficiaries, achievers, winners and workers from various government schemes, initiatives, contests, and events are invited to attend these functions as Special Guests. For RDC 2025, around 10,000 Special Guests (including spouse/parent/teacher etc.) were invited across 36 categories. Apart from witnessing the Parade local site visits and call on functions were also arranged. Further, Delhi-based 50 couples from each State/UT, dressed in traditional attire, were invited to witness the parade. Around 2000 such guests witnessed the Parade. In addition, around 2000 (1000x2) winners of different online competitions which were organized by Ministry of Defence in collaboration with MyGov and All India Radio were invited to witness the Parade.

Metro Services. Ministry of Defence ensured the commencement of Metro Services from 04:00 am sharp on January 26, 2025 at zero cost for the holders of any type of Invitation Card/ticket of RDP. Parking spaces of Delhi Metro at all Metro Stations were also opened.

Veer Gatha 4.0 The fourth edition of Project Veer Gatha was organized as a part of Republic Day Celebrations-2025 to inspire and spread awareness among children about the gallant deeds and sacrifices of the Armed Forces. The event was organised by Ministry of Defence in collaboration with

Ministry of Education during September 16 to October 31, 2024. A total of approx. 1.76 crore students have participated at pan India and a total of 100 school students have been declared winners of the Veer Gatha 4.0. They were also invited to witness the Republic Day Parade at Kartavya Path.

Bharat Parv. Reflecting the 'Jan Bhagidari' theme, 'Bharat Parv' was organised at the Red Fort, Delhi from January 26-31, 2025 by the Ministry of Tourism. It showcased all the tableaux along with Republic Day Parade tableaux, performances by the Military Bands (Static), cultural performances, Food Courts serving pan India cuisines and Crafts Bazaar.

PM's at Home Function. A meet with Hon'ble Prime Minister with Tableaux Artists, NCC Cadets, Tribal Artists, NSS Volunteers was arranged at PM's Home Function on January 24, 2025 at 1600 hrs to 1645 hrs (45 min).

School Band Competition. All India School band Competition was organized in collaboration with Ministry of Education. In a joint initiative between Ministry of Defence and Ministry of Education, training by Regimental Training Centers(RTCs) of the Indian Army for the school band teams was facilitated. A total of 697 School Bands (approx.12,857 students) participated in this event. Grand finale of this competition was held at Major Dhyan Chand National Stadium. Inauguration & Prize distribution was done jointly by Defence Secretary & Secretary, Ministry of Education and RRM & MoS (School Education) on January 24 and 25, 2025, respectively. One of the winning teams, the Girls' Band from Kasturba Gandhi Balika Vidyalaya, Patamda, East Singhbhum, Jharkhand, gave a band performance in front of the Presidential Dais, while two other winning teams performed band performance at Vijay Chowk.



75th Year of Constitution. To mark 75 years of enactment of Constitution of India, following activities were undertaken:-

- (a) Two Tableaux showcased 75 years of enactment of Indian Constitution.
- (b) View Cutters along North and South Side of Kartavya Path were installed behind the bleachers with official logo of 75 years of enactment of Indian Constitution.
- (c) Banners printed with official logo of 75 years of enactment of Indian Constitution were released with Rubber Balloons.
- (d) Floral Decoration at Rostrum was done with the official Logo of 75 years of enactment of Indian Constitution.

Various activities organized on My Gov and All India Radio. On the Occasion of RDC-2025 and 75th years of Enactment of Indian Constitution, following Competitions/Contests/activities were organized: -

- a) Invitation Card Design Competition
- b) Design a Tableau Contest on the theme “स्वर्णिम भारत: विरासत और विकास”
- c) Essay writing Competition on the topic “भारतीय गणराज्य की अजेय यात्रा:अतीत, वर्तमान, भविष्य”
- d) Painting Contest on the theme “रचनात्मक भारत”
- e) Series of online quiz contests
 - i. War Heroes of India
 - ii. 75 years of Indian Constitution
 - iii. Cultural Heritage & Traditions of India
- f) Quiz competition on BTR Tune on All India Radio
- g) Poll on Best Tableau and Best Marching Contingent.

MARTYRS' DAY CEREMONY, 2025

On 30.01.2025, the President laid wreath at Mahatma Gandhi's Samadhi at Rajghat. The Vice President, the Prime Minister, Raksha Mantri and other dignitaries also paid floral tributes. This was followed by observance of two minutes' silence to pay homage to those who sacrificed their lives in India's struggle for freedom.



New Initiatives for RDC 2025

As part of new initiatives during RDC 2025, the following measures were taken:-

Cloak Rooms. Installed at various points along Kartavya Path, these were widely appreciated and utilized by the attendees of the RDC 2025.

Divyangjan-Friendly Enclosures. All enclosures were made accessible with ramps for Divyangjans/ wheelchair users.

Wheelchair Support. For the first time, wheelchairs were provided, along with volunteers from NCC to assist Divyangjan attendees.

Volunteer Assistance. Volunteers from MY Bharat and NCC cadets were deployed to help attendees reach their respective enclosures.

Information Dissemination. A "Rashtraparv Portal" was launched to provide comprehensive information about RDC 2025.

NATIONAL CADET CORPS

The National Cadet Corps (NCC) was established by virtue of the NCC Act, 1948. The NCC strives to provide the youth of the country opportunities for all round development with a sense of commitment, dedication, self-discipline and moral values so that they become responsible citizens of tomorrow. The motto of NCC is "Unity and Discipline".

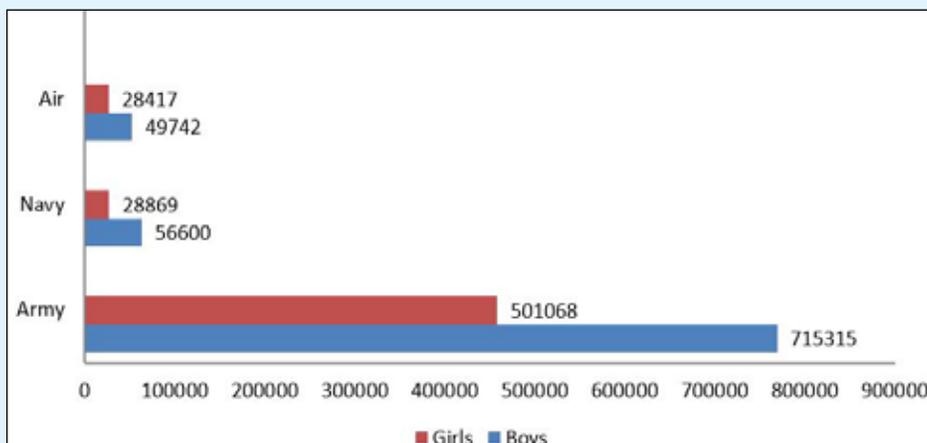
The sanctioned strength is 20 Lakh (Three lakh additional strength will be enrolled over three years) and the total number of NCC Units is 831.

NCC covers large number of educational institutions, across the country. Girl cadets make 39% of the total enrolment. There are a total of **21329** institutions, which includes **13165** schools, **1949** Inter Colleges and **6215** colleges.



*HON'BLE PRIME MINISTER OF INDIA,
SHRI NARENDRA MODI PRESENTING THE BEST
DIRECTORATE BANNER*

Wing-wise distribution of enrolled cadet strength as on 31 Dec 24



Camps and Training

NCC's Training KRA remains 'to empower cadets to become leaders & responsible citizens of our country'. Institutional Training & Camp Training form an integral part of the NCC curriculum.

Institutional Training

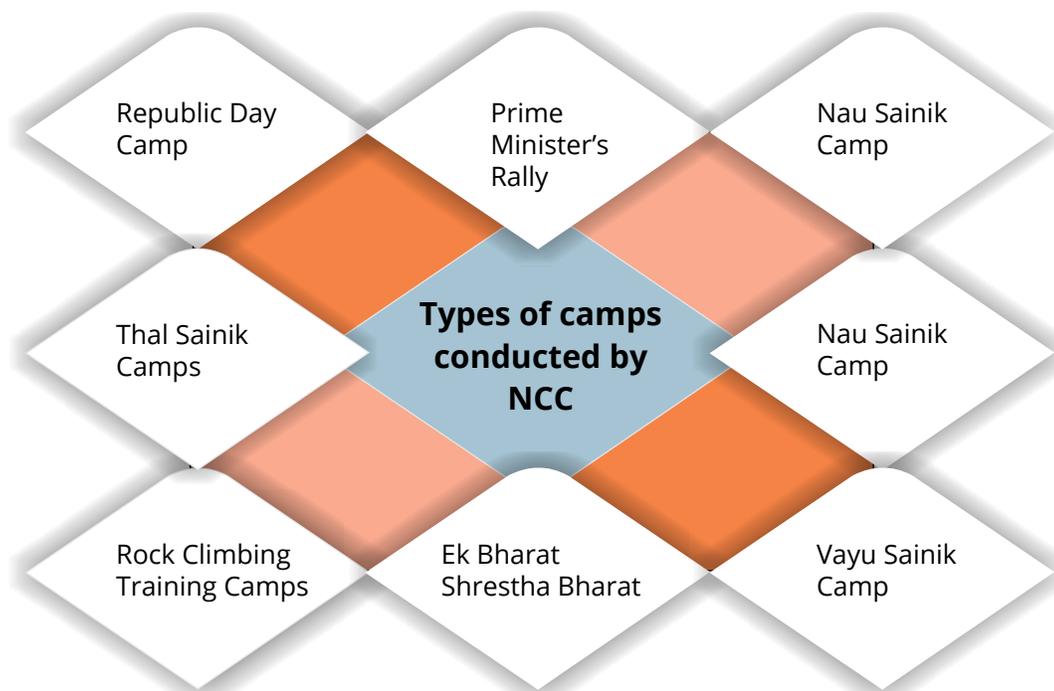
Institutional Training remains the primary focus for training of Cadets. ANOs & PI Staff impart training in both Common Subjects & Service Subjects to create a human resource of organised, trained & motivated youth for selfless service to the nation & empower them to be a useful member of the society.

Camp Training

The cadets are exposed to the excitement of camp life, where they apply the theoretical knowledge that they had gained in Institutional Training. It is mandatory for Junior Division/Junior Wing (JD/JW) cadets, to attend at least one camp and Senior Division/ Senior Wing (SD/SW) cadets, to attend a minimum of two camps, during the period of their enrolment.

Annual Training Camps (ATCs). During this year, 1,225 ATC/CATCs were conducted across all the NCC State Directorates in which approx six lakh cadets have participated.

Centrally Organised Camps (COCs). Types of COCs conducted and their respective participation stats are depicted as below-



Types of Centrally Organized Camps

Certificate Exams. Approx six lakh twenty thousand cadets appeared in NCC 'A', 'B' & 'C' certificate exams in the training year 2024-25.

Republic Day Camp.

The annual NCC Republic Day Camp is conducted at Cariappa Parade Ground, Delhi Cantt for duration of 30 days in the month of January every year which culminates in PM Rally. This year the cadets during the camp participated in many training and ceremonial related competitions. In addition, as part of Youth Exchange Programme (YEP) cadets/ youth from 24 friendly foreign countries also participated in the RD Camp.



*HON'BLE RM INTERACTING WITH CADETS
DURING RDC-24*



*HON'BLE RRM INTERACTING WITH CADETS
DURING RDC-24*

Training of Trainers & SSB Coaching - 2024-25

Training of Trainers. NCC operates two premier training academies that specialize in the Commissioning and Refresher training of Associate NCC Officer (Male & Lady), Girl Cadet Instructors and Permanent Instructional Staff. In 2024-25, a total of 3,479 ANOs and 606 GCIs successfully completed training at these academies. Additionally, an orientation cadre for newly posted officers and PI Staff (JCOs/NCOs) was conducted quarterly at the State Directorate level, ensuring regular updates and continued professional development.

SSB Coaching. In line with NCC's commitment to developing future leaders, 510 SD/SW cadets received targeted SSB Coaching, with 30 cadets trained per Directorate. Remarkably, 100% of vacancies for NCC Special Entry (Army) i.e. 110 positions were filled by NCC cadets in the training year 2024-25. Furthermore, 10,642 cadets joined as Agniveer in Armed Forces.

Adventure and Sports Activities

Adventure Activities. The aim of adventure activities is to inculcate a spirit of adventure, explorative inquisitiveness, develop stamina, endurance, self-confidence, Espirit-de-corps amongst the cadets. Adventure based activities enable cadets to hone leadership skills and enhance their character qualities. Potential cadets are given opportunities to participate in expeditions requiring higher degree of expertise and proficiency.



Types of adventure activities undertaken



MOUNTAINEERING TEAM TO MOUNT KANG YATSE

Special Sailing Expeditions.

In commemoration of the 76th year of the NCC, a momentous and pioneering sailing expedition was launched. For the first time in its history, over 500 cadets embarked on an inspiring journey down the sacred Ganges and Hooghly rivers, covering a vast 1200 km stretch through the heart of three states—Uttar Pradesh, Bihar, and West Bengal. Flagged off on 21 Oct 2024 from Kanpur, the NCC expedition, themed ‘Bhartiya Nadiya – Sanskritiyon ki Janani,’ celebrates India’s rivers as the heart of its cultural and maritime legacy.



TARANGINI

The expedition progressed through six phases over two months, concluding in Kolkata. Throughout the journey, cadets navigated the waters and engaged with local communities, promoting environmental responsibility through riverbank clean-ups as part of the Swachh Bharat campaign, while fostering national pride and highlighting India's maritime heritage. Similarly, for the coastal leg of the expedition, 180 NCC cadets sailed on 30 Nov 2024 onboard INSV Tarangini, travelling from Mumbai to Visakhapatnam, passing through, Goa, New Mangalore, Kochi, and Chennai.

Sports Activities.

NCC Cadets from all NCC Directorates actively participated in various sports activities at the National level. Major sports events in which NCC cadets showcased their talent are as under:-

Inter Directorate Sports Shooting Championship (IDSSC) 2024. The championship is meant to foster the spirit of healthy competitiveness amongst NCC cadets & to select NCC Shooting Team for participation in All India GV Mavalankar Shooting Championship. IDSSC 2024 was conducted from 02 to 15 Jul 24. 295 cadets from all 17 Directorates (@ max 20 Cadets/Directorate) participated in the championship. The tournament was won by NCC Directorate Karnataka & Goa.

Pre Mavalankar Coaching Camp & 33rd All India GV Mavalankar Shooting Championship (AIGVMSC). Coaching cum participation in 33rd AIGVMSC (under the aegis of National Rifle Association of India) was organized at Thiruvananthapuram, Kerala wef 03 Nov 24. Cadets won 12 Gold, 08 Silver & 06 Bronze medals in the championship



*ALL WINNER CADETS OF SHOOTING
CHAMPIONSHIP 2024*

Jawahar Lal Nehru (JLN) Hockey Tournament. The JLNH tournament 2024 was held from 15 Oct to 06 Nov 24 with NCC teams participating in the Junior Boys category (Red & Blue) and the Junior Girls category.

The Junior Girls team delivered an outstanding performance, finishing as Runners-Up in the finals. Notably the team captain was adjudged the Best Player of the Tournament highlighting the team's exceptional talent and sportsmanship. DGNCC teams were imparted dedicated coaching under reputed coaches prior to the tournament.

Subroto Cup International Football Tournament. NCC teams participated in the Subroto Cup football tournament across three categories i.e. Junior girls, Sub Junior Boys and Junior Boys. These teams showcased their skills and sportsmanship.

Equestrian Competition. R&V NCC cadets participated in Army Equestrian Championship and Regional Horse Shows and won 02 Gold, 06 Silver and 13 Bronze medals.

Youth Exchange Programme (YEP)

Outgoing YEP. YEP is conducted from Apr - Mar (Academic Year). A total of 16 Officers and 98 Cadets visited UK, Kazakhstan, Vietnam, Singapore, Bhutan, Maldives, Nepal, Kyrgyz Republic, Maldives and Nepal.



NCC CDTS ON YEP, IN SINGAPORE VISITED THE FORT CANNING

Social Service and Community Development (SSCD) Programmes

Nation-building is a cornerstone of NCC training, focusing on instilling values of civic duty, responsibility, and national pride. Building upon its legacy, NCC Cadets participated in various social service and development activities as enumerated in succeeding paras. The SSCD activities are now also included in the revised syllabus for NCC cadets.

As part of SSCD Action Plan for the year, following guidelines have also been disseminated:



Guidelines for SSCD Action Plan

The following activities have been carried out to sensitise not only the cadets but also the environment:-

Independence Day / 'Har Ghar Tiranga' Campaign. The campaign aimed to inspire the citizens to hoist the national flag at their homes during the Independence day week from 13-15 Aug 2024. A total of 2,72,397 NCC Cadets across India showcased their unwavering commitment and enthusiasm nationwide during the campaign. In addition, 2,000 cadets of Delhi Dte participated at Red Fort, exemplifying their dedication and pride in national heritage.

World Environment Day. On occasion of World Environment Day dated **05 Jun 2024**, NCC cadets have participated in various activities pan-India on theme of the event i.e **Land Restoration, Desertification and Drought Resilience'**. Awareness campaigns on Increasing Desertification, Tide Turners Plastic Challenge and save Environment, Mission LiFE, Drought resilience Techniques, Land restoration mechanisms & Go Green, Breathe Clean were held at 1500 locations involving 6,50,000 cadets.

International Day of Yoga. NCC on the eve of International Day of Yoga **21 Jun 2024** organized various event and activities related to Yoga across units Pan-India on Theme of Yoga - **Yoga for Vasudhaiv Kutumbkam**. The event included Yoga Session, demonstrations and awareness campaign about the benefit of Yoga for overall health & fitness at 5535 locations involving 7,80,226 cadets.



YOGA DAY

Rajat Jayanti Mahotsav Kargil Vijay Diwas marked 25 years of Kargil War on 26 Jul 2024 through film screenings, wreath laying, motivational lectures, and competitions with war heroes.

Swachh Bharat Diwas was celebrated on 02 Oct with the tagline 'Swabhav Swachhata-Sanskar Swachhata'. Activities included tree plantation under 'Ek Ped Maa Ke Naam', food street sensitization, and waste innovation programs. 4,19,600 cadets identified 2,341 Swachhata targets and participated in awareness programs on government schemes including sanitation, electricity, banking, gas, health, and insurance initiatives.

Unity Day celebrations on 31 Oct featured 47 cadets participating in drill contingents at Kevadiya, Gujarat, with cultural programs themed 'Iss desh ki mitti mein kuch khaas hai' and 'Nation First'.

Ek Ped Maa ke Naam initiative saw 5.5 lakh cadets plant over 9,38,714 trees nationwide. Indore, MP achieved a Guinness World Record by planting over 1,00,000 trees in one day.

Dandi Pad Yatra commemorated Gandhi's Salt March with 40 cadets (20 boys, 20 girls) walking from Ahmedabad to Dandi from 10-24 Dec 2024, inaugurated by Gujarat Governor.

1857-Pratham Swatantrata Sangram cycling expedition commemorated the first war of independence, traveling from Meerut to New Delhi.

Vibrant Village Program is being implemented in 662 villages for training year 2025-26 as part of MHA's initiative, with pilot programs conducted in 15 villages.

Meri LiFE Mission engaged 8 lakh cadets in environmental campaigns with the motto 'Prakriti Rakshati Rakshita', including mountaineering expeditions to Mt. Kang Yatse promoting plastic-free India.

Blood Donation drives collected 40,000 units of blood, demonstrating the tradition of seva and sahyog.

Puneet Sagar Abhiyan cleaned seashores through dedicated campaigns on special environmental days. 5.6 lakh cadets collected 501 tonnes of plastic waste, recycled 304 tonnes, and impacted 6.9 crore people while supporting the Matsya Sampada Yojana for marine conservation.

Key Initiatives

Three Lakh NCC Expansion Plan. In line with on-going efforts to expand NCC and to meet the aspiration of the youth, the government has approved the 'Three Lakh Cadet Expansion Plan', **which will increase the NCC's strength to 20 lakh cadets**, making it the largest volunteer uniformed force in the world. The NCC Expansion plan is progressing steadily, with 30,000 Cadets enrolled under a pilot project and recruitment of 345 ex-servicemen already underway in the current year. Besides, three Army NCC units and one Air wing have also been operationalised in J&K and Ladakh. Enrolment of the remaining 2.7 Lakh cadets and hiring of 1,943 ex-servicemen will commence from 01 Apr 2025 onwards.



NCC CADETS AT ISRO

Adopting Contemporary Training. NCC is equipping the Amrit Peedhi with skills to realise the vision of Viksit Bharat @ 2047. Contemporary subjects like Cyber Awareness, Disaster Management, and Drone Training have been incorporated, alongside simulator training to address modern challenges. Collaborations with organisations such as DRDO, ISRO, and NPCIL provide cadets with valuable insights into advanced research and the peaceful uses of technology. Initiatives like Skill Manthan, Idea and Innovation Camps and Kaushal Camps are being organised to align cadets' capabilities with industry requirements.

Idea / Innovation & Start Up. In the current training year idea / innovation and startup awareness to NCC Cadets was emphasized. The Idea / Innovation competitions were conducted Pan India to engage cadets thereby providing an opportunity to think outside the box, develop their concepts and contribute meaningfully to the NCC's mission of nation-building.

Kaushal Training. Skill Manthan Workshop during all India Triservices Competition Camps involving 3,000 selected cadets of all NCC State Dtes. In addition to this, EBSB Skill (Kaushal Camps) were organised at Ujjain (MP) on **Digital 101 Course** offered by Information & technology Sector skill council and at Law Garden (Gujarat) New Avenues on **Energy Transition** offered by Hydrocarbons Sector Skill Council. This skill trg facilitated govt accreditation to NCC cadets approved by NCVT and NSQF level certification to 5,000 cadets.

MoU with Nuclear Power Corporation of India Ltd (NPCIL). As a progressive step to open new horizons for cadets to sensitize towards the efforts of NPCIL, a Memorandum of Understanding (MoU) between NCC and NPCIL was signed on 21 Mar 24. The initiative will impart awareness on peaceful use on nuclear energy to NCC cadets at various levels.

Electronic Transfer of Dress Allowance to Entitled Cadets. NCC has embraced technology to streamline digital payments, ensuring efficient and transparent outreach to cadets across India. In alignment with the government's push for digital transactions, NCC has disbursed over 07 lakh cadets with Rs 298 crore digitally for uniform purchases to the entitled cadets. This initiative not only simplifies the process but also ensures timely transfers reinforcing NCC's commitment to modernization.

ADGs/DDGs Conference The NCC operates under the joint jurisdiction of both the central and state governments. To ensure consistent implementation of seamless integration, an annual conference '**Varshik NCC Niti Samvad Shivir**' was convened during 04-05 Jun 2024 at Delhi with Additional Director Generals (ADsG) and Deputy Director Generals (DDsG) of all 17 NCC state directorates. This conference focused on key aspects of the expansion plan and assessed the training processes and status of obtaining required approvals from respective states.

Special JSR & A/D Conference. To further streamline the modalities of expansion Plan with states, a special Joint State Representatives (JSR) and Additional Director/Deputy Director (A/D) Conference, **chaired by the Hon'ble Raksha Rajya Mantri, Shri Sanjay Seth**, was organised on 23 Sep 2024 at Manekshaw Centre, Delhi Cantt. The conference was attended by Ministers from nine states, senior representatives from various states, officials from the Ministry of Defence, members of the three Armed Services, and all State ADGs and DDGs. Various aspects pertaining to the impending NCC expansion were deliberated with state representatives and positive commitments of the states were arrived.

Inaugural Executive Committee Meeting of the NCC Alumni Association (NCCAA). The NCCAA, launched by the Hon'ble Prime Minister on 19 Nov 21 as part of his vision of 'Youth Power : A Vision

of New India', has rapidly grown into a vibrant platform for nation-building. Over 2.7 lakh alumni, including distinguished leaders, public figures and professionals from various fields, have joined its ranks. At its inaugural executive committee meeting chaired by DGNCC, the Association outlined its mission to enhance NCC training standards, promote skill development and engage in social initiatives like Swachh Bharat Abhiyaan. It also aims to support underprivileged alumni and facilitate meaningful participation in NCC-related events, reinforcing its role in shaping a stronger and more inclusive Bharat.

76 Years of NCC. Celebrating 76 years of the NCC, the organisation received congratulatory messages from the Hon'ble President, Prime Minister, Vice President, Chief of Defence Staff, the Service Chiefs, and Defence Secretary who praised the cadets' spirit and contributions to nation-building. Cadets across India organised a nationwide blood donation campaign, exemplifying selfless service. The Defence Secretary also paid tribute by laying a wreath at the National War Memorial honouring the sacrifices of the Armed Forces. The celebrations reflected the NCC's core values of discipline, patriotism and unit.



PRESIDENT AT HOME FUNCTION

BORDER ROADS ORGANISATION

Border Roads Organisation (BRO) is a modern and transnational construction organisation that is committed to meeting the strategic requirements of the Indian armed forces. The organisation plays a vital role in infrastructural development on behalf of following Ministries: -

- a) Ministry of Defence.
- b) Ministry of Road Transport & Highway.
- c) Ministry of Home Affairs.
- d) Ministry of External Affairs.
- e) Ministry of Rural Development.
- f) DoNER
- g) PSU/other Agencies as Deposit Works.

Organizational Structure

As per the current structure, BRO has 17 Projects headed by an officer of the rank of Brigadier / Chief Engineer (Civ). Each Project consists of two/three Border Road Task Forces (BRTFs) headed by an officer of the rank of Colonel/Superintendent Engineer (Civ). Each BRTF consists of two/three Road Construction Companies (RCCs)/ Bridge Construction Companies (BCCs). RCC/BCC is headed by an officer of the rank of Lt Colonel / Major /Executive Engineer (Civ). Further RCC/BCC consists of several platoons headed by an officer of the rank of Captain/Assistant Executive Engineer (Civ) / Assistant Engineer (Civ).

For quality assurance, there are 03 Regional Technical Examiners located at Guwahati, Dimapur and Jammu functioning under MoD (BR).

At present, BRO has one training centre, GREF School & Centre at Pune and one R&D establishment at Shillong.

Director General Border Roads

The Director General of Border Roads is the executive head of Border Roads Organisation. The Director General Border Roads is responsible for:-

- a) Planning and execution of projects entrusted to the BRO and coordination of all technical matters.
- b) Technical soundness of designed specifications adopted in the construction of projects.
- c) Preparation and submission of periodical budget estimates and obtaining funds from Government.
- d) Administration, planning and control of man-power, resources etc. of BRO.



Additional Director Generals Border Roads

Additional Director Generals Border Roads assist the DGBR in the discharge of his duties. The ADGBR (HQ), based at HQ DGBR, coordinates organisation-wide policies, plans, and directives, oversees designated functional branches, and provides guidance to Chief Engineers and projects across all sectors as directed by the DGBR. The ADGBR (North West) and ADGBR (East) look after the planning, execution, and monitoring of projects in their respective sectors, ensuring adherence to approved designs, specifications, and timelines. They coordinate with Chief Engineers as well as local Army and civil authorities to ensure smooth progress of works, while maintaining technical soundness, quality, and timely completion of all assigned projects, and sustaining close liaison with stakeholders in their regions.

Chief Engineers

The Director General of Border Roads exercises control over the BRO through Chief Engineers, functioning in specified areas. Chief Engineer is responsible for:-

- a) The detailed planning of projects and sanction of estimates within their financial power ensuring that the project estimates sanctioned are in accordance with the specifications prescribed from time to time and the designs are sound and economical.
- b) Proper and expeditious execution of sanctioned projects according to technical sanctions and for carrying out periodical inspections. He is also responsible for ensuring that no departure from Regulations, approved specifications or orders of superior authority is permitted without the approval of the competent authority.
- c) Economical utilization of resources in manpower and equipments.
- d) Using funds placed at his disposal in the best interest of Government.
- e) The Chief Engineer may issue appropriate technical and administrative instructions to subordinate formations under his control. He will keep in close touch with the local army and civil authorities.

Task Force Commanders

Task Forces consisting of various type of units are placed at the disposal of Chief Engineers. Apart from the execution of works and maintenance services entrusted to them, Commanders Task Forces, are responsible for the due observance of rules and regulations, efficient and economical administration of funds allotted to them and for the proper and up-to-date maintenance of documents and records prescribed in the different procedures.

Ceremonial, Academic, Achievements and Adventure Activities

BRO has been rendering yeoman service to the Nation for more than six decades. After making a humble beginning with two Projects viz. TUSKER (now Vartak) in the East and Beacon in the West, BRO has grown to be vibrant Organisation with 17 Projects spread across the country. Over a span of time, the Organisation has diversified into construction of permanent concrete and steel bridges, accommodation projects, border fencing, airfields and tunneling works and is recognized for its Speed, Quality and Cost Effectiveness. BRO has further strengthened the bond of friendship by executing works in Bhutan, Myanmar, Afghanistan and Tajikistan. As on date, BRO has its presence in 11 states and three union territories (including Andaman and Nicobar Islands) and Bhutan.

Record Budget Expenditure

BRO's budget has seen an exponential rise over the last few years, with a record expenditure of ₹16,690 crore in FY 2024-25 and a target of ₹18,700 crore set in the next financial year, reflecting the organization's enhanced capacity and commitment to executing critical infrastructure projects at an unprecedented pace.

Completion of Infrastructure Projects

On 12 Oct 2024, Hon'ble Raksha Mantri Shri Rajnath Singh virtually dedicated 75 BRO infrastructure projects worth ₹2,243 crore. These comprised 22 roads, 51 bridges and two miscellaneous works spread across 11 States/UTs, with major projects in J&K, Arunachal Pradesh, Ladakh, Uttarakhand, Sikkim and other border states, significantly boosting connectivity and operational preparedness in these strategic regions.



Hon'ble RM, Shri Rajnath Singh virtually inaugurated & dedicated 75 Infra Projects to the Nation

Among the 75 projects, the Kupuk-Sherathang Road in Sikkim stands out as a critical link. This strategic route connects the Jawahar Lal Nehru Marg with the Zuluk axis, providing an alternative pathway for the efficient movement of personnel and machinery. This road plays a pivotal role in ensuring uninterrupted connectivity in this high-altitude region.

Another noteworthy achievement is the North-South Road in Andaman & Nicobar Islands, which links to Indira Point, the southernmost tip of India. These projects not only signify developmental milestones but also assert the strategic importance of India's border and island regions.



Kupuk-Sherathang Road - Sikkim



North-South Rd - Andaman & Nicobar Island

Roads

Over the years, BRO has constructed more than 63,000 km of roads across some of the most challenging and remote terrains of the country, significantly improving connectivity in these challenging border regions. These roads have not only facilitated smooth transportation but have also strengthened regional accessibility and integration through reverse migration. Roads of strategic significance connecting remote and challenging locations, namely Tangtse-Lukung road in UT of Ladakh, Kharbara – Devsara road along the International Boundary, supporting training activities at Mahajan field firing ranges and Gunji-Kutti-Jolingkong road to facilitate Adi Kailash Yatra deserve a special mention.

BRO also successfully conducted trials for REJUPAVE technology by laying bituminous mixes under low-temperature conditions at high altitudes on the Drass-Umba La-Sankoo Road. The successful implementation of this technology has set a benchmark for future road construction projects with enhanced durability and resilience in similar high-altitude regions.



REJUPAVE on Drass-Umba La-Sankoo Road



Kharbara-Devasar road in Rajasthan

The Tangtse-Lukung Road significantly improves connectivity to Pangong Tso Lake in Eastern Ladakh. Built to international standards with modern safety features like reflective markings, crash barriers, guardrails, LED lighting and wide truck lay-byes, it has cut travel time from over 60 minutes to just 35 minutes. The road boosts tourism, improves local access to markets, healthcare and education and holds strategic importance.



Tangtse-Lukung road in Ladakh



Road Gunji – Kutti – Jolingkong

This 36 km road Gunti –Kutti – Jolingkong, completed in December 2024 enhances mobility between Dharma and Vyas valleys, offering critical lateral connectivity. Despite high-altitude challenges and avalanche prone areas as witnessed in 2018, connectivity was achieved through meticulous planning and optimal resource use which now facilitates smooth Adi Kailash Yatra.

Bridges

Till date, BRO has constructed 1,056 major permanent bridges, spanning a total length of 72,825 meters, in some of the most difficult and remote areas of the country. These bridges have greatly improved connectivity, facilitating socio-economic development of these regions. Out of the total 51 bridges constructed in the year, the Nengpuilui bridge of 125 m double span steel superstructure bridge over the Nengpuilui River on the Lawngtlai-Diltlang-Parva road and the 300 foot bailey suspension Bridge Indrani over the Teesta River deserve a mention. Nengpuilui Bridge provides crucial connectivity with a 70R load classification, enabling the movement of heavy vehicles and equipment. The Indrani Bridge in Sikkim was officially inaugurated by Mr. Prem Singh Tamang (Golay), the Hon'ble Chief Minister of Sikkim, on 12 August 2024 which provides a direct connection between Singtham (East Sikkim) and Namchi, delivering significant relief and improved connectivity for the local communities.



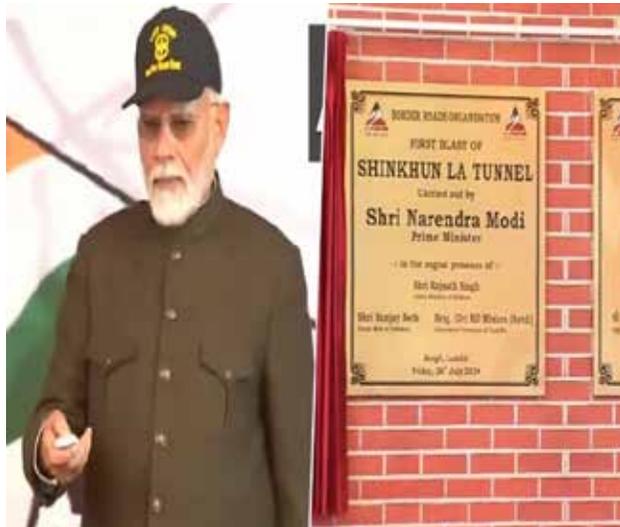
Indrani Bridge in Sikkim



Nengpuilui Bridge in Mizoram

Tunnels

BRO has already constructed six tunnels, significantly improving year-round connectivity to remote and strategic areas. These engineering marvels not only reduce travel time but also enhance operational efficiency along critical routes. They have strengthened access to previously winter cut-off regions, thereby facilitating all the year transportation of personnel and materials. The Hon'ble Prime Minister virtually carried out the first blast of Shinkhun La Tunnel Project from Drass on 26 Jul 2024. The 4.10 km long Shinkhun La Tunnel Project holds immense strategic and socio-economic importance. Upon completion, it will be the World's Highest Tunnel at 15800 feet. It will provide much needed all weather connectivity to Ladakh establishing a reliable third axis for access to Ladakh.



First Blast by Hon'ble PM at Shinkun La



Inaugural Blast of Bhimber Gali Tunnel

Also, critical breakthrough has been achieved on three under-construction tunnels Sungal, Naushera and Kandi on the Akhnoor–Poonch Road, with Kandi and Naushera tunnels in the final stages of completion. Work also commenced on the Bhimber Gali Tunnel, marked by its inaugural blast on 03 Mar 2025. Together spanning 4.85 km, these tunnels will significantly benefit security forces deployed in forward areas and the local population by reducing travel distance and time, while bypassing challenging hilly terrain.

Airfields

Till date BRO has constructed/rehabilitated 21 Airfields in the country. BRO is constructing an airfield at Mudh-Nyoma in Eastern Ladakh at an altitude of 13,710 ft. The 2.743 km long runway project is in its final stages of completion. The Mudh-Nyoma airfield will facilitate enhanced air mobility and rapid deployment of Armed Forces, serving as a forward staging area for various air operations.



Mudh-Nyoma Airfield

HADR Operations

In addition to enhancing connectivity, the BRO has been instrumental in disaster relief operations, especially in areas prone to natural calamities. Whether it is constructing temporary bridges in flood-affected areas or clearing snow-bound roads, our teams have consistently demonstrated resilience and dedication as first responders.

On 30 March 2025, BRO personnel swiftly rescued over 100 civilians and 50 vehicles stranded at 17,500 ft on the Changla Axis in Eastern Ladakh due to snow blizzards and slides.



Rescue Operations on the Changla Axis in Eastern Ladakh

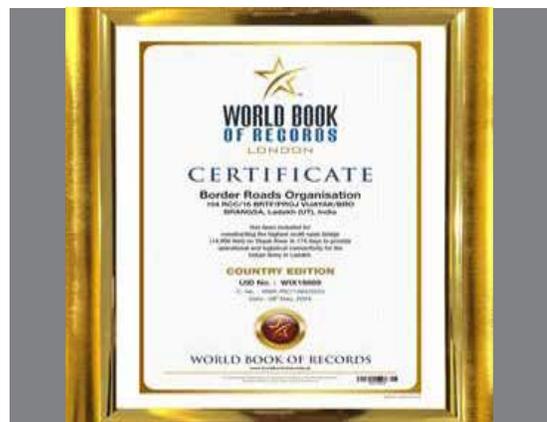
During flash floods in North Sikkim (May–Jun 2024), the Lachen axis experienced massive damage, washing away six bridges and 15 km of vital roads, cutting off locals and tourists. BRO undertook priority tasks including damage assessment, rescue of over 800 tourists, and logistic sustenance. Restoration works on Gangtok–Chungthang Road, including alternate alignment construction (km 90–90.780), vented causeways, sausage retaining structures, and a 190-ft Bailey bridge at Chungthang, were completed to restore connectivity.

Honours , Awards & Miscellaneous

ASSOCHAM Achievers Award. BRO has been awarded the Associated Chambers of Commerce and Industry (ASSOCHAM) Achievers Award under the category Strategically Important Project for Sela Tunnel Project on 17th Dec 2024.



BRO awarded with ASSOCHAM Achiever's Award for Sela Tunnel Project



Recognition of Brangsa Bridge as world's highest multi-span bridge by World Book of Records, London.

Certificate of Excellence. On 24 Feb 2025, Hon'ble Minister of State for Road Transportation & Highways and Corporate Affairs, Shri Harsh Malhotra presented the Build India Infra Award for 'Impact Category in Roads and Highways' to BRO for Sela Tunnel Project.

World Book of Records, London. On 08 May 2024, the Brangsa Bridge on the Shyok River was recognised by the World Book of Records, London, as the world's highest multi-span bridge. Constructed by BRO at an altitude of 14,900 ft in just 174 days, it offers crucial strategic connectivity in Ladakh.

Academic Activities:-

Administrative/Technical Courses. Various Administrative/ Technical/ Management courses at several Civil/Govt institutions, BRO School & Centre and Faculty of Highway Engineering have been successfully conducted during training year 2024-25 in which approx 1260 Nos of BRO officials have attended.

Course on Land Acquisition at ASCI, Hyderabad. A training on Land Acquisition – Avoiding Costly Mistakes was conducted at the Administrative Staff College of India (ASCI), Hyderabad from 27 Jan 2025 to 31 Jan 2025. Forty-three BRO officers attended, enhancing their understanding of effective land acquisition processes and strategies to prevent costly errors in infrastructure projects.

Conclusion

The initiatives and quality of works executed by BRO reflect its strong organizational ethos and dedicated working culture. BRO remains steadfast in striving for excellence, meeting technical requirements and true to its motto "**Shramen Sarvam Sadhyam**". Poised to meet emerging and diverse challenges along our Northern Borders, BRO is continuously enhancing its capabilities to promote inclusive regional growth, reaffirming its position as the nation's preferred **Agency of Choice** for strategic infrastructure development.

INDIAN COAST GUARD

In 1977, Union Cabinet approved the setting up of 'Coast Guard' with a fleet strength of 02 Ships ex-Indian Navy and 05 Patrol Boats ex-Customs. Consequently, the Indian Coast Guard (ICG) was formally established as an Armed Force of the Union on August 18, 1978 by the Coast Guard Act, 1978, passed by the Parliament. The Indian Coast Guard functions under the Ministry of Defence.

The Coast Guard organisation is headed by the Director General Indian Coast Guard (DGICG) exercising his overall command and superintendence from Coast Guard Headquarters (CGHQ) located at New Delhi. For effective command and control, the Maritime Zones of India have been divided into five Coast Guard Regions with a Regional Headquarters at Gandhinagar, Mumbai, Chennai, Kolkata and Srivijayapuram.

The Regions have been further sub-divided into 16 Coast Guard Districts covering the coastline and maritime zones associated with 09 Coastal States and 02 Union Territories on the main land, 02 Union Territories in Andaman & Nicobar Islands and Lakshadweep. In addition, 42 Coast Guard Stations are functioning under Coast Guard District Headquarters. There are 11 Coast Guard Air Stations and Air Enclaves which are responsible for air borne operations of the Coast Guard.

Duties and Functions

The duties and functions of Coast Guard, broadly mentioned in the Coast Guard Act, 1978, are to protect the maritime and other national interests of India in the Maritime Zones of India. Indian Coast Guard has also been entrusted with additional responsibilities such as Coastal Security in Territorial Waters, Enforcement, Monitoring and Surveillance of Deep-Sea Fishing, Maritime Search and Rescue, Marine oil-spill response measures. It is also the Lead Intelligence Agency for coastal and sea borders.

Operational Highlights (Since 2009)

- 288 Coastal Security Exercises conducted with Indian Navy and Marine Police for ensuring effective coordinated patrolling and validating Standard Operating Procedure.
- 593 Coastal Security Operations executed in coordination with stakeholders
- 472 'Sajag' operations completed (monthly special operations in each region) to check documents of fishing boats including ID cards of fishermen.
- 359,466 Boarding Operations conducted (including 27,520 in 2024)
- 15,326 Community Interaction Programmes (including 2,085 in 2024) conducted by ICG to sensitise fishermen on safety and security issues.
- Joint Coastal Patrol (JCP) Programme: Launched in August 2020, the JCP initiative with Coastal Police achieved 1,283 sorties in 2024. Overall program statistics include 3,645 sea sorties, 2,579 training sessions, and 8,666 personnel embarked since inception.

Significant Milestones and Achievements

Grounding of Passenger Ferry Swasthya Sathi off Sagar Island, West Bengal. On Jan 16 2024, ICG Air Cushion Vehicles (ACVs) H-182, H-186 & H-188 were launched from Sagar Island & Haldia to provide assistance to the grounded ferry MV Swasthya Sathi with approx 400 pilgrims onboard in position 12 NM North-east of Sagar Island, West Bengal.

Relief and Rescue Operations during Land Slide at Wayanad, Kerala. On July 30, 2024, ICG launched operation '**Op Sahayata 02/24**' to provide assistance during major landslide at Meppadi Village, Wayanad District, Kerala. ICG Advanced Light Helicopter Make-III and Disaster Relief Teams (DRTs) assisted in search and evacuation of stranded persons/ recovery of deceased bodies. Additionally, ICG teams also distributed lifesaving equipment, relief stores/ material, medicines and freshwater in the affected areas.

Inauguration of Regional Marine Pollution Response Centre (RMPRC). RMPRC was inaugurated at Chennai by Hon'ble Raksha Mantri Shri Rajnath Singh on August 18, 2024. The centre is envisaged to be a "Centre of Excellence" in terms of PR training, repository of data and case studies related to Pollution Response and nodal point of contact akin to Maritime Rescue Coordination Centre (MRCC).



International Coastal Cleanup Day - 2024. In line with Government of India efforts '**Swachh Bharat Abhiyan**' and Hon'ble Prime Minister's appeal for mass cleanliness and sanitation campaign, through "**Swachhta Hi Seva**", the Indian Coast Guard conducted International Coastal Cleanup Day - 2024 (ICC-2024) in all Coastal States/ Union Territories on September 21, 2024. A total of **27,563 volunteers** participated in the ICC-2024 nationwide campaign and collected **61,248 Kilograms** of plastics and garbage.



Coast Guard Commanders' Conference. The 41st Indian Coast Guard Commanders' Conference was conducted between September 24, 2024 and September 26, 2024 at Coast Guard Headquarters, New Delhi. The Hon'ble Raksha Mantri Shri Rajnath Singh inaugurated the conference. The conference focused on strategic objectives, operational readiness and addressing emerging maritime challenges.

Maritime Search & Rescue Achievements. 169 lives were saved by ICG in the year 2024, while undertaking 199 missions. 29 medical evacuations were conducted by providing timely medical assistance to fishermen and mariners in emergencies. In addition, regular Maritime Search and Rescue workshop (15 in 2024) and Community Interaction Programmes with fishermen, highlighting Search And Rescue (SAR) and safety- related issues were conducted.

Search And Rescue Exercise (SAREX)-24. On November 29, 2024, Sea Exercise under SAREX-24 was conducted off Kochi. The exercise included a Mass Rescue Operation at sea. SAREX serves as a platform to highlight India's partnerships with National and inter National counterparts, emphasizing collective commitment to global maritime safety.

Transfer of Spares to Sri Lanka Coast Guard. 891 Spare ex-Vikram Class Offshore Patrol Vessel amounting to Rs. 9.26 Crore have been transferred to Sri Lanka Government on "**GRATIS BASIS**" in June, 2024

Enhanced Flying Efforts towards Maritime Surveillance. The Indian Coast Guard has enhanced its flying efforts with greater focus on airborne maritime surveillance by induction of new state-of-the-art aircraft, in addition to optimal planning of aircrew, air assets and other resources. During the year 2024, a total of **27271 hrs**, have been flown by Indian Coast Guard aircraft.

Commissioning of CGAE Puducherry. Coast Guard Air Enclave (CGAE) Puducherry was inaugurated on August 18, 2024 by Hon'ble Raksha Mantri. 848 Sqn (CG) has been shifted from Chennai to Puducherry w.e.f December 30, 2024.

Obsolescence Management. In order to address obsolescence and enhance flight safety, systems/equipment are being upgraded with latest state of the art systems/equipment by way of modification under other Capital Procurement Procedure (OCPP). Upgradation of a total of 13 systems onboard ICG Dornier and 05 systems onboard ICG Chetak is underway.

Major Policy Decisions

Induction of Ex Agniveers. In alignment with the Government of India's visionary Agnipath scheme, the Indian Coast Guard is diligently preparing to induct Agniveers into its ranks from the year 2027 onwards. This will mark a new era for our service, as we embrace young, dynamic talent with vigour and enthusiasm. ICG is committed to ensure a seamless integration of Agniveers into our workforce through meticulously planned training modules and robust career progression framework.

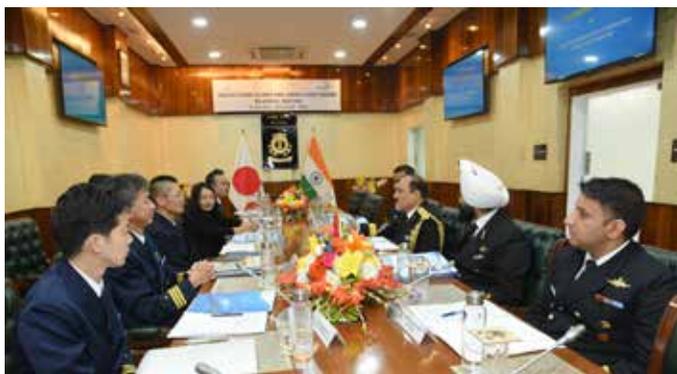
Greater Participation of Indian Private Industry. A total of 264 imported spares have been uploaded on Srijan Defence Portal for visibility to the industry. Majority of the spares are of proprietary nature presently being imported. ICG has pursued with FOEMs and encouraged for localisation/indigenisation of the spares/parts under Make-in-India with participation of competent Indian industries. With diligent deliberations and regular review on planning of localisation by FOEMS, a roadmap for 101 spares/parts has been worked out jointly with the FOEMS indigenisation.

ICG in the year 2024 has been successful in indigenisation of sacrificial anodes that are used onboard FPVs (Kamewa Waterjets) through NMRL. Indigenisation of RO plant membranes which are presently being imported has also been achieved in participation with DMSRDE/DRDO and prototypes testing has been satisfactory. Full scale indigenous production will commence after award of ToT by DRDO. Further, indigenisation proposals wrt ACV skirt components (specialised rubber) and X-band Radar (solid state) are in advanced stage finalisation of technical specifications jointly with GIL, Kanpur (DPSU) and LRDE, Bangalore respectively.

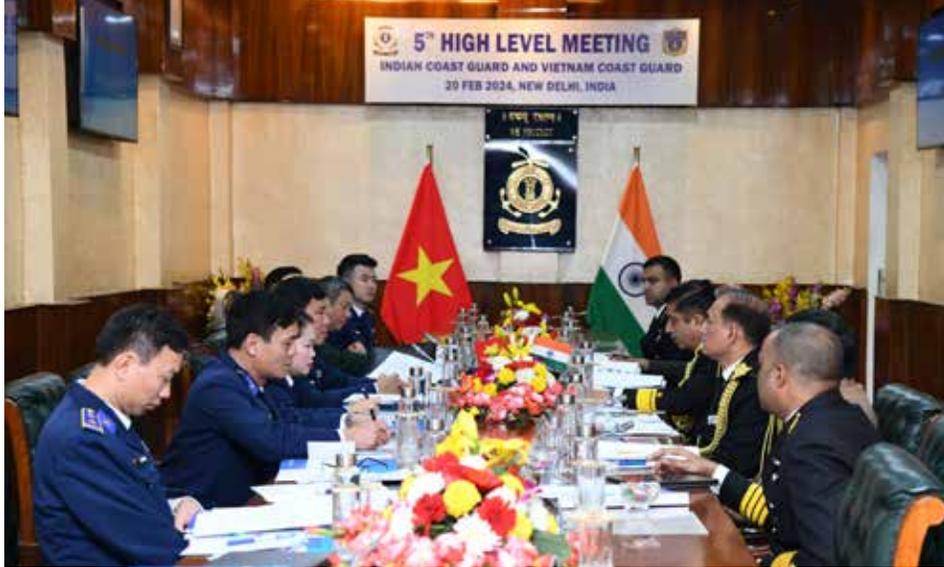
HLMs & Bilateral Meetings

Currently ICG has Memorandum of Understanding(MoU)/ Memorandum of Cooperation (MoC) with 09 Countries and under the ambit of these MoUs/ MoCs High Level Meetings and Bilateral Meetings are held annually. Details of HLMs and Bilateral Meeting for the said period are as follows: -

ICG-Japan Coast Guard (JCG) Bilateral Meeting. A four member Japan Coast Guard delegation from JCG side participated in the bilateral meeting on January 10, 2024 at CGHQ, New Delhi (where maritime safety and security issues were discussed in accordance with the provisions of the Memorandum of Cooperation (MoC) between Indian Coast Guard and Japan Coast Guard).



5th ICG-Vietnam Coast Guard (VCG) High-Level Meetings (HLM). A Six member VCG delegation visited Coast Guard Headquarters, New Delhi for 5th ICG-VCG High level meeting on Feb 20 2024. During the meeting, both sides agreed to strengthen the mutual cooperation in accordance with the provisions of the Memorandum of Understanding and also agreed to further the cooperative engagements through impetus on continuum on regular High-Level Meetings and ship visits.



5th ICG- ROPCG HLM. A four member high level Royal Oman Police Coast Guard delegation (ROPCG) visited India from 22-26 April, 2024 and participated in the 5th ICG- ROPCG HLM under the provisions of the Memorandum of Understanding. During the visit, ROPCG delegation interacted with Indian Defence Public Sector Undertakings (DPSUs) viz; Goa Shipyard Limited (GSL), Mazagon Dock Shipbuilders Limited (MDL) and Larsen & Turbo (L&T) shipbuilding on April 25, 2024 at New Delhi highlighting India's Defence industry capabilities under 'Atmanirbhar Bharat'.



12th ICG-Korea Coast Guard (KCG) HLM. ICG-KCG 12th High Level Meeting (HLM) was conducted at Incheon, South Korea on September 04, 2024 on the sidelines of 20th HACGAM.



7th ICG-SLCG HLM. 7th edition of ICG-SLCG HLM as per the provision of Memorandum of Understanding was held at Colombo, Sri Lanka from 11-12 November, 2024.

ICG-PCG Bilateral Meeting. A four member high level Philippines Coast Guard delegation visited India from 08-12 November, 2024 and participated in the ICG-PCG bilateral meeting under the provisions of the MoU.

Joint Bilateral/Multilateral Exercise/Events

Exercise Sahyog Kaijin. Japan Coast Guard Ship Yashima visited India from January 10-14, 2024 and participated in a joint exercise "Sahyog Kaijin" between ICG-JCG on January 12, 2024 off Chennai.



Exercise Sea Defender-2024. USCG Cutter Bertholf made a port call at Srivijayapuram, from March 07-10, 2024 for professional interaction with ICG.

11th Search & Rescue Exercise (SAREX). ICG conducted the 11th SAREX with participation from 38 observers from 28 FFCs and two international organizations (BIMSTEC & IORA) at Kochi, Kerala from November 27-30, 2024.

Exercise Sahyog Hop Tac-24. Vietnam Coast Guard Ship CSB 8005 visited Kochi from December 16-20, 2024. Professional interaction including lectures/ training on MPR and M-SAR, guided tours onboard ships, sport fixtures and community support activities were undertaken for first two days.

ARMED FORCES MEDICAL SERVICES

Armed Forces Medical Services (AFMS) provides dedicated, dependable and comprehensive health care to Defence Personnel and their dependents. Medical Services are also provided to personnel of para-military organizations, while posted in field and other Central Police/ Intelligence Organizations and General Reserve Engineering Force (GREF) Units operating in the disturbed and forward areas of country. The medical care is also provided to ex-servicemen and their dependents within the country. During natural calamities, disasters and in operational areas, it also serves the civilian population.

The AFMS consists of the Medical Services of the Army, Navy and Air Force under the Director General, Armed Forces Medical Services (DGAFMS). The DGAFMS is directly responsible to the Ministry of Defence for overall medical policy matters related to the Armed Forces. The heads of medical services of Army, Navy and Air Force are responsible for functioning of these services under the respective Service Chiefs, in accordance with any general policy directions given by the DGAFMS and are the Medical advisors to their respective Services. In addition, the DGAFMS is responsible for maintaining liaison with the Director General of Hospital Services (DGHS), National Academy of Medical Sciences (NAMS), Indian Council of Medical Research (ICMR) and other bodies outside the Defence Services, as well as research institutions in India and abroad. The Armed Forces Medical Services consists of Army Medical Corps (AMC) including AMC (NT), Army Dental Corps (AD Corps) and Military Nursing Service (MNS).

Armed Forces Medical College (AFMC), Pune

Inauguration of a Digital Mammography Centre at Department of Radiology. Inauguration of a Digital mammography centre at Department of Radiology was done by Surg VAdm Arti Sarin, AVSM, VSM, DGAFMS on International Day of Radiology on November 08, 2024 marking a significant leap in diagnostic imaging capabilities. This centre has been equipped with state-of-the-art Digital mammography machine.



New Departments.

Health Technology Assessment (HTA) Resource Centre. HTA Resource Centre has been inaugurated at AFMC, Pune. As a technical partner of the Health Technology Assessment in India (HTAI) under the Department of Health Research, M/o Health & Family Welfare, this centre will evaluate the appropriateness and cost-effectiveness of health technologies, supporting informed health policy decisions.

Genome Sequencing Lab. The new Genome Sequencing Lab at AFMC was inaugurated on **June 27, 2024**. The state-of-the-art Next Generation Sequencing (NGS) facilities in the new lab include sophisticated "Nextseq 2000" and "Miniseq" analysers. Numerous healthcare fields, including genetic illnesses, oncology, transplant medicine, and reproductive medicine, have found extensive usage for NGS technology.



Innovations & Integrated Startups.

Robot Assisted Total Knee Replacement. The department of Orthopaedics successfully conducted Robot Assisted Total Knee Replacement on **June 12, 2024**. Robot-assisted TKR represents a significant advancement in orthopaedic surgery, blending the precision of robotics with the expertise of skilled surgeons to redefine the standard of care for knee joint replacement.

AI Models in Diagnosis at Pathology Lab. Lt Col Parikshit Sanyal has developed AI models for the Photomicrography device for screening Tuberculosis Bacilli from sputum smears, malaria parasite screening, cytology screening modules, Higher dimensional flow cytometry analyser and Cytogenetics analysis.

Achievements.

Unit Citation. The Chief of Defence Staff awarded Unit Citation to Armed Forces Medical College, Pune for the year 2022 - 23 on March 18, 2024.



Artificial Limb Centre (ALC), Pune

Providing state-of-the-art prosthesis for amputee soldiers competing in Paralympics and Para Asian Games. ALC is in the forefront of providing state-of-the-art sports prosthetic equipments for amputee soldiers. Eighty serving personnel have been provided sports prosthesis and components in the last 10 years. These soldiers have participated in various national and international sports events including Paralympic sports and won various medals and kept the Indian flag flying high. The sports prostheses are provided out of Army Sports Development Fund (ASDF) exclusively allotted for the very purpose. In Para Olympics 2024 at Paris, soldiers and dependents equipped by ALC won 03 medals in 03 disciplines.

Innovations Phoenix : Higher Activity Level Dynamic Foot. “Phoenix Foot” an advanced prosthetic foot offering improved ankle mobility to amputees, developed by Lt Col GP Reddy, (Prosthetic Surgeon, ALC). Mr Gurvinder [son of ALC patient H/Lt Gurbachan (Retd)] and ALC team was displayed at the annual innovation competition “Inno-Yodha 2024-25” and “Ideas & Innovation Seminar” on December 05, 2024 at Manekshaw Centre, Delhi Cantt and received higher appreciation from the dignitaries. Mr Gurvinder was awarded “COAS Commendation Card”.

Artificial Limb Fitment Camp Myanmar. A seven-member Indian team conducted a two-week Artificial Limb Camp at Defence Services Rehabilitation Hospital, Yangon, Myanmar, aiming to provide 50 amputees with K2/K3 level prosthetics. Despite limited local infrastructure, 50 prostheses were fabricated in 10 days. Interactions with Paralympian’s highlighted the need for K4 sports prostheses.

Training and Courses

Training of Foreign Officers & Paramedics: Our country is supporting Army personnel of Friendly Foreign Countries (FFC), providing medical training for various medical courses i.e. PG, UG and Para Medical Courses & Short Term Courses at Armed Forces Medical Service (AFMS) Institutions. For the training year 2024-25, 13 PG (MD/MS/MDS), 05 MBBS, 71 Paramedic and 24 Observership seats have been allotted to FFCs.

Joint HADR Exercise with NDMA. HQ IDS (Medical) co-ordinates with NDMA to conduct Joint Exercises with NDRF/ SDRF/ UTDRF for HADR. Medical Officers from various medical establishments have been part of joint HADR Exercises conducted by NDMA.

Procurement

To further enhance medical service delivery, AFMS has procured the following medical equipments for deployments across military hospitals and training centres:-

S.No	Item	Purpose/Location
a	01 x 512 Slice CT Scan Machine	For Army Hospital (R&R)
b	01 x Hyperbaric Chamber (Capacity of six)	For managing deep sea diving injuries at INHS Asvini
c	01 x LASIK LASER System	Assisting in corneal surgeries at Army Hospital (R&R)
d	Simulators for enhancing training	
	i. 01 x Cataract Vitreo-retinal Surgical Simulator	For Retinal surgeries at Command Hospital (Air Force), Bengaluru
	ii. 01 x Arthroscopic Simulator	For Arthroscopic surgeries at AFMS Pune
	iii. 01 x High Fidelity Birthing Simulator	For Obstetrics & Gynecology at AFMS Pune
e	Mobile Blood Transportation Van (14 nos.)	For transportation of blood and Fresh Frozen Plasma at -20 to +20 degree.
f	Air-Conditioned Blood Collection Van	For collection and transportation of blood units to processing unit.
g	Ejection Procedure Simulator (EPS)	At 1 Aero Medical Training Centre (AMTC), Hindon for safe and realistic training of aircrew in aircraft ejection procedures to reduce injury risk.

Defence Cooperation

Annual Defence Cooperation plan (DCP). As part of the Annual DCP between India and Uzbekistan for 2023–24, a two-member Indian Armed Forces medical team comprising Col Gaurav Mittal, Senior Adviser (Orthopaedics), and Col Subir Dey, Commanding Officer of 302 Field Hospital, visited Tashkent, Uzbekistan, from January 8 to January 22, 2024. The purpose of the visit was to conduct master classes and joint surgical operations at the Central Clinical Military Hospital in Tashkent.

Force Commander’s Unit Citation in UN Mission. IFH Level-III, MONUSCO (DR Congo) has been awarded a Force Commander’s Unit Citation on January 31, 2024.



Automation/ Digitization in AFMS

Operationalisation of e-Aushadi. To improve supply chain and inventory management systems for drugs and consumables, a software application e-Aushadi has been developed in collaboration with CDAC, Noida. The application is internet based and all medical units of AFMS are presently using these modules for procurement and demand of consumables in medical stores. Service of Data Centre are also being provided by C-DAC Noida through their Tier-III Data Centre.

Operationalisation of e-Upkaran. e-Upkaran is an online inventory management application for non-expendable medical stores. The application facilitates indenting, inventory management of medical equipment from the most peripheral unit till the largest tertiary care hospital. The application has been operationalized wef Jun 2024.

Ni-KSHAY Portal. Sharing the aim of Government of India to achieve the vision for Tuberculosis Mukt Bharat, Military Hospitals of Indian Army have onboarded on Ni-KSHAY portal which is a web-based patient management system for Tuberculosis control under the National Tuberculosis Elimination. The portal helps health functionaries to register Tuberculosis cases for testing, treatment and follow up.

ECHS module for SeHAT. An ECHS module of SeHAT has been rolled out since July 2024. The module has been developed by Central Org ECHS and has been hosted alongwith the SeHAT application by HQ IDS (Med). With this facility, ECHS members can have tele-consultations online without visiting the hospital/ health care facility. The service can be accessed by visiting the website or by using the mobile app available on Android and Apple stores.

Modernization/ Infrastructure in AFMS

Inauguration of Command Hospital (Northern Command). Command Hospital (Northern Command) is a 650 bedded multispecialty hospital located in Udampur, Jammu & Kashmir. The construction of modern state-of-the-art multi-storied hospital building has been done at a cost for Rs 273.42 Crores. It was inaugurated in Apr 2024 by COAS.

HADR Operations 2024

Aid to Civil Authority for Flood Relief Operations 2024. In response to flood-like situations and landslides across various states during 2024, medical teams were deployed under Aid to Civil Authority for Flood Relief Operations to provide essential medical care to affected populations. A total of 11 medical detachments from various military hospitals and field hospitals were activated across Maharashtra, Kerala, Himachal Pradesh, and Gujarat between late July and August 2024. These teams operated in affected districts including Sangli, Wayanad, Jhakri, Dwarka, Vadodara, Mandvi, and Nalia Airport, treating a cumulative total of 1,699 patients during their deployment. Below are few glimpses of the relief activities carried out:-





Bharat Health Initiative for Sahyog Hita & Maitri (BHISHMA). BHISHMA is a modern disaster management cube developed by an inter-ministerial task force established under the Hon'ble Prime Minister's Arogya Maitri Initiative. The cube has been developed by Medical Experts from the IAF along with leading packaging experts from India. The cube encompasses the major initiative of Made in India, Digital India and Start Up India. The highly mobile, versatile and rapidly deployable cube which has undergone para-drop testing was gifted by the Hon'ble Prime Minister of India to the people of Ukraine during his visit in Aug 2024. The BHISHMA cube was also deployed during the recently concluded international exercise Ex-Tiger Triumph at Vishakhapatnam.



Air drop at agra



Deployment at vishakhapatnam and Interaction with foreign delegation

Emergency Medical Response System (EMRS) in Indian Air Force.

The EMRS, launched by the IAF, provides a centralized helpline (155226) for immediate medical assistance. Located at CHAF, Bengaluru, it allows IAF personnel and their families to quickly reach medical help without wasting time on contact details. Since May 21, 2024, a trained team from EMRI Hyderabad has been offering real-time guidance and coordinating with nearby IAF healthcare facilities for fast ambulance response, ensuring critical care during the golden hour.



Deployment of Rapid Action Medical Team (RAMT) for HADR. RAMTs of the Indian Air Force have been deployed to cater for medical contingencies during various international exercises viz. Ex-Tarang Shakti-2024, the first ever multi-national air combat exercise hosted by the IAF at Sulur and Jodhpur in Aug 2024 and Sep 2024, Ex Vayushakti 2024 and Ex Gagan Shakti-2024 exercises.

ARMED FORCES TRANSFUSION CENTRE

Over the past decade, the AFTC Blood Centre has undergone a transformative journey, evolving into a beacon of excellence renowned for its adept management of workloads. AFTC has kept pace with technological advancements, acquiring state-of-the-art equipment to bolster its capabilities. Notably, the AFTC boasts the nation's only licensed facility for frozen RBC storage. This pioneering venture revolutionizes blood transfusion by extending the shelf life of red cells up to 5 years from a mere 35 to 42 days, ensuring greater accessibility, and reducing wastage. This Frozen RBC facility enables the long-term preservation of rare group RBCs and can also help build stock inventory during emergencies.

MODERNIZATION OF ARMED FORCES

Government of India is committed to equip the Indian Armed Forces with niche technology equipment and platforms, without any delay to meet the entire spectrum of security challenges. Since operations are becoming more and more net centric, the need of the hour is to make our forces ready for fighting next generation wars. With this view, earnest efforts are being made for tapping the potential of advanced technologies and keep the Armed Forces future ready.

Major Policy Initiatives

Defence Acquisition Procedure (DAP) 2020 was introduced on 30.09.2020 to reform and streamline defence procurement, with a focus on industry growth and security needs. The policy aims to support the 'Make in India' initiative and the 'Atmanirbhar Bharat Abhiyan' to boost self-reliance in defence. Key aspects of DAP 2020:

Priority to Indigenous Procurement. Highest priority to procurement is given to Buy (Indian-IDDM). A new category i.e. Buy (Global-Manufacture in India) has been introduced to give push to 'Make in India' initiative of the Government. Make-I (Govt Funded) and Make-II (Industry-Funded) projects were introduced to promote prototype development of niche technology items, in collaboration with development Agencies including private entities. Indigenisation of imported spares through Make-III process (mainly through ToT) has been introduced with the aim of enhancing self-reliance through import substitution.

Increased Indigenous Content (IC). Minimum 50% IC required for all procurement categories, including material, components, and software manufactured in India.

Foreign Sourcing. Foreign sourcing allowed only in exceptional cases with prior approval from Defence Acquisition Council (DAC), irrespective of procurement value.

Indigenisation of Defence Items. Department of Military Affairs (DMA) has notified 5 positive Indigenisation list, covering 509 items which are weapons or platforms to be indigenised based on specified timelines. Nearly 50% of them have already been indigenised.

Encouraging MSMEs & Start-ups. MSMEs and Start-ups are encouraged to create a robust defence ecosystem. Procurement cases up to Rs 300 Cr consider MSMEs/Start-ups without financial parameter requirements.

Technology Development Fund (TDF) by DRDO. Provides grant-in-aid to industries, including MSMEs, Start-ups, and academic institutions for developing defence technologies.

Relaxations for MSMEs and Start-ups. iDEX/TDF policies provide relaxation on performance guarantees, warranty clauses, payment schedules, etc., to support MSMEs and Start-ups.

Acceptance of Necessity (AoN) accorded by DAC/ DPB

During the FY 2024-25, Defence Acquisition Council (DAC) under the Chairmanship of Hon'ble RM accorded AoN for 20 capital acquisition proposal of Indian Armed Forces amounting to Rs.1.71 Lakh Crore (approx.) out of which 19 proposals are for procurement from indigenous sources. In addition

to these, Defence Procurement Board (DPB) accorded AoN for 04 capital acquisition proposals of Indian Armed Forces amounting to Rs. 1457.19 Crore (approx.). The major proposals for which AoNs have been accorded are:

INVAR (3UBK 20) Missile for Tank T-90. T-90 Tanks are the mainstay of the Mechanised Forces. The T-90 Tanks, during operations and missions need to defeat enemy tanks at longer ranges, both during day and night. INVAR missile being a laser guided 2nd Gen plus missile is highly accurate upto 5000 metres enabling T-90 tanks a large stand-off engagement advantage. Currently, it is the only tank ammunition capable of defeating the frontal 60° armour of contemporary PLA & Pak AFVs.



P-17B Frigates. Project 17B will represent the continuation and evolution of Nilgiri-class frigates currently under construction as Project 17A. The new frigates will feature advanced capabilities including indigenous weapons, fire control systems and state-of-art electronic warfare systems.



New Water Jet Fast Attack Crafts (NWJFACs). The NWJFAC vessels are capable to perform the task of Low Intensity Maritime Operations (LIMO), Surveillance, Patrols, Search and Rescue (SAR) operations. In addition, these vessels would play an effective role in Anti-Piracy missions, especially in and around our island territories. Aligned with the ‘Make in India’ initiative of GoI, the NWJFACs shall be indigenously designed and constructed by Indian Shipyards.



Fast interceptor Craft-Indigenous (FIC-I). The FIC-I vessels are capable of performing multiple roles for coastal defence, including escorting of frontline warships and submarines of the Indian Navy. In line with the 'Make in India' initiative of GoI, the FIC-I shall be indigenously designed and constructed by the Indian Shipyards. The indigenous construction of these vessels shall also boost the export potential of the Indian Shipbuilding Industry.

Bird detection and Monitoring radar. Bird Detection and Monitoring Radar (BDMR) is required for detecting all kinds of birds thereby providing real-time information to concerned agencies to prevent bird strikes. Bird strike is a significant threat to flight safety. BDMR will boost the overall operational effectiveness of IAF by enhancing flight safety. A total of 25 (23 for IAF and 02 for Navy) systems are sought for procurement.



Interceptor Boats (IB). Interceptor Boats (IBs) are high speed surface platforms capable of day/night coastal patrol and surveillance particularly for interception in shallow waters. They are capable of undertaking law enforcement duties, safety & environment protection from threats/ anti-terrorist/ anti-smuggling/ LIMO scenarios, anti-drug trafficking surveillance and interdiction including coordinated operations with sea-air units.



Next Generation Offshore Patrol Vessels (NGOPVs). NGOPVs are the leading surface platforms of Indian Coast Guard capable of operating helicopter from deck and carrying out Long range operations with enhanced capability and sustainability at sea. They are planned for Patrolling and Policing the Maritime Zones of India and the Island territories including Interdiction Operations and Search and Rescue in Indian Search and Rescue Region.



Dornier Aircraft (Do-228). Dornier 228 aircrafts are versatile platforms which can undertake wide range of operations. AoN for procurement of 08 additional Dornier aircrafts was accorded to increase surveillance coverage area besides catering Air operations for training, Unforeseen/ Special Operations Viz. anti-piracy, pollution response etc. in Exclusive Economic Zone (EEZ). Additionally, contract has been signed with HAL in Nov 2024 for the upgrade which includes Cockpit Instrumentation, Autopilot, Navigation systems, Intercom, Solid State Flt Data Recorder (SSFDR)/ Cockpit Voice Recorder (CVR), SEL-CAL and Radio Altimeter.



Advanced Light Helicopter (ALH Mk-III). The Indigenously developed Advanced Light Helicopter is a testament to Indian Design, Development and Manufacturing capabilities. AoN for 6 ALH MK-III was accorded to further strengthen coastal security and surveillance in the internal waters of the coastal states and union territories.



Contracts Signed during FY 2024-25

MQ-9B HALE RPAS. The Contract for MQ-9B HALE RPAS was concluded on 15 Oct 24 at a cost of Rs. 8593.15 Cr. These drone will serve as a force multiplier, allowing the Indian Armed Forces to operate with enhanced situational awareness and precision across diverse and challenging operational environments. The acquisition will also bring Maintenance, Repair and Operations facilities to India, thereby enhancing impetus on **'Atmanirbharta'**, while including offsets for Indian Industry aligning with **'Make in India'** initiative by Gol.



155mm/ 52 Cal SP (Tracked) K-9 Vajra-T Gun System. The Contract for 155mm/ 52 Cal SP (Tracked) K-9 Vajra-T Gun System was concluded on 20 Dec 24 at a cost of Rs. 7628.70 Cr. Firepower resources affiliated with the mechanized formations need matching mobility to enable optimum application of

combat potential at the point of decision. The requirement is more pronounced in desert/semi-desert terrain along Western Borders and High Altitude Plains/ Plateau terrain along Northern Borders, where the tracked mechanized forces can maneuver much faster to greater depth than towed and wheeled gun system. K-9 Vajra T Gun System will augment the reach & firepower of mechanized formations substantially.



Medium Range Surface to Air Missile (MRSAM). The contract for MRSAMs was concluded on 16 Jan 25 at a cost of Rs. 2959.63 Cr. Under the contract, the missile and associated equipment would be manufactured and supplied by M/s BDL with more than 50% Indigenous Content. The acquisition of these missile strengthens India's maritime defence with emphasis on '**Make in India**' initiative of GoI.

Area Denial Munition (ADM) Type-1. The Contract for 214 mm PINAKA was concluded on 06 Feb 25 at a cost of Rs. 4474.33 Cr. The 214 mm Pinaka MLRS, designed and developed by DRDO (ARDE), is an all-weather rocket system having a range of 37.5 km. ADM Type-1 Dual Purpose Improved Conventional Munition (DPICM) Rocket Ammunition contains dual purpose sub munitions capable of neutralizing both tanks and armoured personnel carriers as well as B-Category vehicles and entrenched troops. Induction of Area Denial Munition Type-1 will enhance the lethality & destruction power of Indian Army rocket systems.

Ashwini Radars. A total of 18 Ashwini radars are being procured vide contract signed on 12 Mar 2025 with value of Rs 2906.57 Cr. The delivery of these systems will commence from May 2027. Ashwini will be used for providing early warning on the airborne objects and communication systems for sending sensor information to Command and Control Centers for decision making. These decisions are then conveyed to weapon systems for intercepting and destroying the intruders.



Advanced Towed Artillery Gun System & HMV 6x6 Gun Towing Vehicle. The Contract for 307 Advanced Towed Artillery Gun System and 327 HMV 6x6 Gun Towing Vehicle was concluded on 26 Mar 25 at a cost of Rs. 6895.45 Cr. It was adopted as standard gun system of Indian Army in 2001 post Kargil operations. The system will exponentially enhance the capability of Indian Army to cause damage to the enemy by way of increased range and lethality of ammunition being delivered.



Nag Missile System (NAMIS) Tracked (Limited Series Production).

The Contract for NAMICA and Nag Missiles was concluded on 27 Mar 25 at a cost of Rs. 1801.34 Cr. The Reconnaissance & Support (R & Sp) (Tracked) battalions are the frontline fighting units of the Indian Army tasked to provide a strong effective anti-tank defense and cause maximum damage to ingressing enemy armour in plains/ desert terrain. Indigenous 3rd generation missile system based on NAMIS has become an operational necessity to maintain combat overmatch with our adversaries on our western frontiers. NAMIS along with NAMICA & Nag missiles will replace the existing Infantry Combat Vehicle (ICV) BMPs of the R & Sp (Tracked) battalions.



Light Combat Helicopter (LCH). MoD signed contract worth Rs 27,771.99 Cr with HAL on 28 Mar 2025 for procurement of 156 LCH. The indigenously built LCH are light, agile, highly maneuverable and are equipped with moderate armour protection, and have a variety of potent firepower as well as accurate targeting capability. These helicopters would bridge the gap and would help IAF and IA in meeting the emerging challenges by enhancing the overall employability in both offensive and defensive operations/ missions.

Indigenous LRLACM Tested

Long Range Land Attack Cruise Missile (LRLACM). First live firing trial of indigenously developed Long Range Land Attack Cruise Missile (LR-LACM) has been successfully carried out in 2024.



OTHER ORGANISATIONS OF DEPARTMENT OF DEFENCE

DIRECTORATE GENERAL DEFENCE ESTATES

The Directorate General Defence Estates (DGDE), New Delhi, has advisory and executive functions in matters relating to management of Defence lands and Civic Administration in 61 Cantonments. It presently functions through six Principal Directorates at Jammu, Chandigarh, Kolkata, Lucknow, Pune and Jaipur. The Principal Directorates in turn supervise a number of field offices, i.e. 43 Defence Estates Offices, 4 Assistant Defence Estates Offices and 61 Cantonment Boards.

The Ministry of Defence owns approximately 17.81 lakh acres of land throughout the country. The defence land inside the notified Cantonments is approximately 1.61 lakh acres and the remaining around 16.20 lakh lies outside the Cantonments.

Initiatives taken on management of Defence land

The Department has taken various new initiatives in the past few years for effective Land Management:-

Real-Time Record Management. Directorate General Defence Estates has developed an automated lease extension/renewal software module which has been made operational w.e.f. 02.01.2025. This module has been integrated with eChhawani and Raksha Bhoomi softwares for efficient management of Defence Land.

Land Use Analysis. CoE has developed a customized 'Land Use Analysis' AI & ML tool employing GIS and Remote Sensing technologies for analyzing Land Use pattern by using 'Open-Source Satellite Imagery' and 'Open-Source GIS Platforms'. It gives details as to Vacant Land, Built-up area, Vegetation/ Forest cover, Roads and Water bodies. It ensures effective scrutiny of various ongoing proposals for land acquisition for Defence forces, thus enabling land acquisition as cost effective, transparent and accountable decision-making process. In the year 2024-25, by using this tool, Defence land of more than 65,000 acres (approx.) of 300 pockets have been analyzed for various decision-making processes.

Building Footprint. The work on Module regarding building footprint is ongoing in the CoE. It will help the Cantonment Boards to assess the municipal taxes of properties in the cantonment area as also for management of building activities. This module is under testing/machine learning mode as on date. By leveraging building footprints in cantonment areas, tax authorities can enhance the accuracy of property assessments, improve tax compliance, and streamline the overall tax collection process.

Steps taken to prevent encroachments and removal

- a) Defence land record management system has been strengthened by way of digitization and computerization of defence land records.
- b) A Land Management System has been put in place wherein GIS layers of encroachments have been developed.

- c) A 'Change Detection GIS Tool' has also been developed which provides details of encroachments over a given span of time.
- d) "BhoomiRaksha" Module has been developed wherein eviction proceedings under the PPE Act 1971 can be initiated & progressed online.
- e) A methodology for evaluating "Threat of encroachment on defence lands" has been devised.
- f) Survey, demarcation and verification of all defence land has been undertaken. Survey of defence land is now a continuing process.
- g) The Defence Land Audit has been institutionalized from 2011-12 as a continuing process.

Acquisition of land/Hiring and Requisitioning of Buildings and Land

An amount of Rs.667.8382 Crores was allotted by Ministry of Defence for acquisition of land and Rs.451.9285 Crores towards payment of rental for hired/requisitioned buildings and lands during financial year (2024-25), out of which Rs.555.6614 Crores has been spent for acquisition of land and Rs.437.4858 Crores for payment of rentals for land and buildings upto 31.03.2025. In addition, payment of Rs.13.9691 crore towards enhanced compensation for land acquired for defence purpose under Charged Head has also been made upto 31.03.2025.

Administration of Cantonment Boards

- (a) There are 61 Cantonment Boards in the country located in 19 States/UTs. Cantonment Boards are urban local bodies, incorporated under the Cantonments Act, 2006 (earlier the Cantonments Act, 1924), to administer Cantonments.
- (b) Cantonment Boards are engaged in providing civic services including primary and secondary education, basic health services including specialist services through Dispensaries and Hospitals. In some cases, Boards have taken steps to upgrade their health services by providing facilities like labour room, minor surgery OTs, diagnostic services, X-Ray, ambulances, specialized services, etc.
- (c) At present, there are 28 "Centres for differently-abled children", 181 schools (ranging from Primary to Higher Secondary levels) in which approximately 60000 children are studying and 63 Skill Development Centres, 39 hospitals and 36 dispensaries in various Cantonments.
- (d) The Central Government provides financial assistance to Cantonment Boards in the form of ordinary Grant-in-Aid to balance their budgets. During 2024-25, 52 out of 61 Cantonment Boards received Grant-in-Aid amounting to Rs. 551.2765 Cr from the Central Government. Grant-in-Aid of Rs. 3 Cr to 06 Cantonment Boards was also allotted for Swachhta Action Plan (SAP) during 2024-25. Further, Grant-in-Aid of Rs. 3 Cr was allotted for creation of Capital Assets. The Cantonment Boards have also received Rs. 68.2791 Cr in FY 2024-25 as share of Grant from the State Governments.
- (e) Energy conservation measures like installation of LED street lights has been done. Necessary action for installation of roof top solar panels under PM Surya-Ghar Muft Bijli Yojana through CAPEX and RESCO mode is also being undertaken by Cantonment Boards.

- (g) 61 Cantonment Boards have framed Solid Waste Management Bye-Laws, 2024 which were laid before the Parliament. The Bye-Laws are instrumental in achieving solid waste management mandates and imposing penalties for wrongful garbage disposal/burning. 35 Cantonment Boards have installed Solid Waste Processing Plants (SWPPs) for scientific disposal of solid waste.
- (h) 6,40,042 trees were planted under the “Ek Ped Ma ke Nam campaign” by carrying out plantation drives in Cantonments in which civil residents of the Cantonments also participated.
- (i) Cantonment Boards have taken multiple steps to achieve the goal of “Digital India” and improve the quality of service delivery. E-tendering and e-procurement are implemented by all Cantonment Boards. All the Boards have registered themselves on the GeM portal for procurement of stores.

SAINIK SCHOOLS SOCIETY

Sainik Schools Society (SSS) is a registered society under Societies Registration Act XXI of 1860 and manages Sainik Schools located in various parts of the country. These schools are involved in imparting quality education and training to Cadets to be a good citizen and prepare them to excel in all works of life.

Major Achievements

Setting up of 100 New Sainik Schools. The Government of India has approved the initiative of setting up of 100 new Sainik Schools in partnership mode with NGOs/Trusts/Private Schools/State Government schools in a graded manner, starting from Class 6th onwards. Under this initiative, in addition to 44 new Sainik Schools, 42 more new Sainik Schools have been provisionally approved in April, 2025, subject to signing of Memorandum of Agreement by the concerned school with Sainik Schools Society, MoD, taking the tally of such schools to 86 new Sainik Schools under partnership mode.

Admission of Girl Cadets in Sainik Schools. Sainik Schools have now started offering admission to girls in all 33 Sainik schools. As of January, 2025, a total of 1612 Girl Cadets are studying in 33 Sainik Schools established on erstwhile pattern and 856 Girl Cadets are studying in New Sainik Schools on partnership mode.

Progressive use of Hindi in Sainik Schools. To promote and popularize Hindi as a language of pride and cultural significance, the schools have launched a number of projects. These initiatives include planning festivities for Hindi Diwas, Hindi Pakhwada, holding debates, contests for essay writing and poetry in Hindi, and motivating kids to speak the language.

National integration. Throughout the academic year 2024-25, a number of events were held in Sainik Schools to encourage national integration. Cadets demonstrated a strong interest in the flagship initiatives introduced by the Indian government, such as Azadi Ka Amrit Mahotasava, Ek Bharat Shrestha Bharat, Yoga Day, Chandrayan 3, Har Ghar Tiranga, Success Celebration, Veer Gatha project, and commemorations of significant occasions like National Flag Day and Kargil Vijay Diwas.

MANOHAR PARRIKAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES

The Manohar Parrikar Institute for Defence Studies and Analyses (MP-IDSA), is a non-partisan, autonomous body dedicated to objective research and policy relevant studies on all aspects of defence, security and international relations. Its mission is to promote national and international security through the generation and dissemination of knowledge on defence and security-related issues.

Major Activities of MP-IDSA during 2024-25

International Conferences

Delhi Defence Dialogue (DDD): The Institute hosted the inaugural edition of the Delhi Defence Dialogue on “Adaptive Defence: Navigating the Changing Landscape of Modern Warfare” from 12-13 November 2024.



Hon'ble Raksha Mantri Shri Rajnath Singh delivering the Special Address during the Inaugural day of the Delhi Defence Dialogue.

India-Africa Strategic Dialogue (IASD): The fifth edition of the Dialogue, on the theme “India and Africa: Partnership in the Next Decade”, was held on 25-26 March 2025.



HE Amb Anil Sooklal, High Commissioner of Republic of South Africa to India, Shri Dammu Ravi, Secretary (ER), Ministry of External Affairs, Gol, with DG MP-IDSA, Amb Sujan R. Chinoy during the Inaugural session of 5th IASD on March 25, 2025.

National Conferences and Seminars

A seminar on “Current Challenges to India’s Internal Security” was convened on 20 August 2024. Another seminar, spread over 28–30 January 2025, explored “India’s Approach to AI in the Military Domain and Lethal Autonomous Weapons Systems (LAWS)”.

Knowledge Events and Engagements

Talks and Lectures: 17 talks/lectures by eminent speakers, 7 bilateral interactions, and 11 Roundtable/Book Discussions.

Special Interactions: Organized 22 special interactions with visiting delegations and eminent people from diverse fields and countries.

Training: Conducted 10 trainings/orientation programmes involving SSB (1) BSF (4), ITBP (2), HQ IDS (2) etc during the year 2024-25.

MILITARY ENGINEER SERVICES

MES executes strategic and operational projects in all parts of the country. The construction gambit of MES ranges from high rises, field accommodation, roads, bridges, hangars, runways, docks, harbours, power stations, water supply projects and also running of essential services even during disasters. MES has a yearly financial outlay of nearly ₹25,000 crore and has approximately 600 stations.

Important Achievements

In line with Government vision of improving effectiveness in the government machinery, ease of doing business, make in India, improving standards of living and transparency, a large number of regulatory/procedural documents have been revised. Some of the major improvements are as under:-

e Measurement Book (e MB). eMB application is being developed for digital recording of Bill of Quantities for works/ services, thereby forming basis of payment to contactors. Phase I of the application includes cert-in audit by vendor which has been completed and DCyA audit is in progress.

MES Integrated Monitoring and Management Software (MIMAMSA). MIMAMSA, a pioneering cloud-based arbitration management system is being developed to streamline the complete process of arbitration in MES from appointment of arbitrators, monitoring the arbitration proceedings till implementation/ challenge of award.

Implementation of IFA System in MES. IFA system has been implemented in tender stages of all contracts in MES wef 01 Apr 2023. A committee has been formed to review the IFA systems for addressing the concerns of E-in-C’s Branch & tri services.

Green Energy/ Energy Conservation Initiatives:

- **Solar Plants.** MES has completed construction of 135 MW of Solar plants at 123 stations pan India.

- **Roof Top Solar (RTS) Projects.** Under 'PM Suryaghar Muft Bijli Yojana', MES is expediting installation of 40 MW of RTS projects across Army, Navy, and Air Force stations. 54 stations have been identified and works are planned to be completed by Dec 2025.
- **GRIHA Ratings.** MES has mandated a minimum Three Star GRIHA ratings for all new infrastructure projects, ensuring a substantial reduction in electricity consumption. Min 10% of electricity load through Roof Top Solar projects is being planned for all new works.
- **Electricity Purchase as Deemed Licensee (DISCOM).** MES is functioning as DISCOM in Karnataka and Andhra Pradesh. Cases for obtaining DISCOM status is in advance stages at Odisha, Rajasthan, Telangana, Tamil Nadu and Uttar Pradesh.
- **Purchase of Electricity in Open Access through Indian Energy Exchange (IEX).** MES has started implementing power purchase in Open Access through IEX at Delhi, Chandimandir, Meerut, Bareilly, Ambala and Jaipur, resulting in substantial savings.
- **Construction of Geothermal HVAC Building for CWE office at Military Station, Jhansi.**

A major initiative by MES towards carbon free environment has been taken wherein a Geothermal HVAC building has been recently completed at Jhansi Military Station for the Administrative Approval of ₹ 150 lakhs. In addition to being Carbon free, this type of construction is also cost effective, low maintenance, eco friendly & energy efficient.



Important Projects Completed

Provision of Deficient Accommodation for Offices of all Arms at MCTE, Mhow. The Administrative Approval of the work amounts to ₹ 4.12 crores. The subject work has been completed.



Provision of OPD Complex at MH Danapur Cantt. The Administrative Approval of the work amounts to ₹9.27 crores. The subject work has been completed.



Deficient Married Accommodation for Officers at INS Dronacharya. The Administrative Approval of the work amounts to ₹ 32.98 crores. The subject work has been completed.

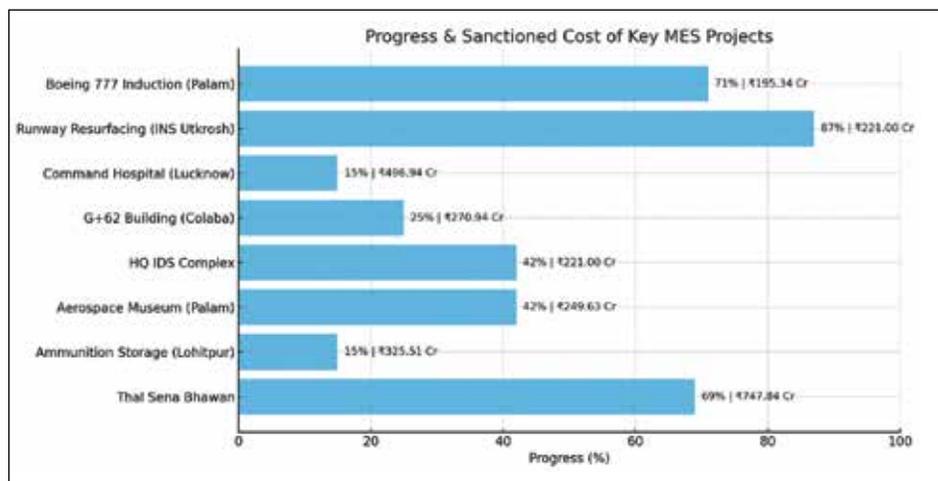


Provision of Sports infrastructure for Indian Navy Gymnastics & Boxing team at INS Hamla. The Administrative Approval of the work amounts to ₹ 20.78 crores. The subject work has been completed.



Projects Under Progress

Numerous iconic and prestigious projects of strategic importance have been planned and are under various stages of sanction/ execution by MES. Progress and Sanctioned cost of these projects are as follows:-



SERVICES SPORTS CONTROL BOARD

The Services Sports Control Board (SSCB) is an Inter Services organization which administers, promotes and controls sports for the Services personnel in all the three Services i.e. Army, Navy and Air Force. The Board has the distinction of being the founder member of Indian Olympic Association (IOA) and most of the National Sports Federations (NSFs). The SSCB is the apex sports body of the Armed Forces established with an aim to conduct Inter-Services Sports Championships to select and train Services sportsperson to achieve excellence and produce medal winners at the National and International level.

Important Contributions

SSCB has made significant contributions to India's medal tally at various international sports events, including the Olympics, Asian Games, and Commonwealth Games by winning 20-25 % of total country medal. Over the last five years, SSCB has consistently finished at the top of the medal tally in Men's Category in the National Games.

38th National Games 2025. SSCB won the 38th National Games 2025 trophy with 68 Gold, 26 Silver, 27 Bronze with overall 121 medals, with Maharashtra and Haryana finishing at second and third position respectively in medal tally.

Paris Olympic Games 2024. A total of 24 Armed Forces athletes out of the total Indian contingent of 117 participated in Paris Olympic Games 2024. Sub Maj Neeraj Chopra has won silver medal with an improved throw of 89.45 m.

Participation in Conseil International du Sport Militaire (CISM) Events for the year 2024. SSCB participated in the following CISM 2024: -

Sl	Discipline	Dates	Venue	Result
1	Volleyball Championship	18-25 Sep 24	Tehran, Iran	2 nd Posn
2	Wrestling Championship	17-24 Nov 24	Yerevan, Armenia	Gold - 03 Silver - 01 Bronze - 03
3	Swimming Championship	09-14 Dec 24	Warendorf, Germany	Gold - 01 Bronze - 01

Photographs of Olympians



*Rank & Name - Lt Col Neeraj Chopra, VSM, PVSM
Discp, Event & Medal – Athletics/ Javelin Throw - Won Silver medal*



*Rank & Name - CPO Muhammed Anas Yahiya
Discp, Event & Medal – Athletics/ 4X400M Men's Relay*



Rank & Name - JWO Abdulla Aboobacker
Discp & Event - Athletics/ Triple Jump



RANK & NAME – PO VIKASH SINGH
DISCIPLINE - ATHLETICS / 20 KM RACE WALK



Rank & Name - CPO Reetika Hooda
Discp & Event - Wrestling/ Women's
76 Kg Freestyle



RANK & NAME – HAV JAISMINE LAMBORIA
DISCIPLINE –BOXING / WOMEN'S
FEATHERWEIGHT

ELITE SSCB PLAYERS PHOTOGRAPHS



*RANK & NAME - GDSM GULVEER SINGH
DISCIPLINE - ATHLETICS / 10000 & 5000 MTR*



*RANK & NAME – PO HITESH GULIA
DISCIPLINE – BOXING/ 70KG*



*Rank & Name - PO Md Ajmal Variyathodi
Discp & Event – Athletics/ 4X400M Men's Relay
Paris Olympic 24 – Participated in
4X400M Men's Relay*

DIRECTORATE OF PUBLIC RELATIONS

Directorate of Public Relations (DPR) is the authorised channel of communication, tasked with disseminating information to the people through media about the key policy decisions, achievements and events of the Ministry of Defence (MoD), Armed Forces, Inter-Service Organisations, Defence Public Sector Undertakings (DPSUs) etc. It regularly facilitates media interaction with the leadership, senior officials of the Ministry and officers of the Armed Forces through interviews, press conferences and press tours.

DPR strives to promote the understanding of the policies/decisions of the Ministry and issues of national security. It is carried out pan India through its 25 Regional Offices spread across the country. The headquarters of the Directorate is situated at South Block in New Delhi. The publicity activities are carried out for all major events including Republic Day, Independence Day, Defence Investiture Ceremony, Aero India and DefExpo.

Activities Undertaken

Publications & Broadcast. Publishes fortnightly journal Sainik Samachar in 13 languages; produces radio programmes for troops in remote regions; provides photo coverage for MoD and Armed Forces events.

Digital Outreach. Active on X, Facebook, Instagram, YouTube, WhatsApp, LinkedIn.

Special Initiatives. Highlighted the followings:

- Success stories of self-reliance of DRDO, defence industry including DPSUs & Private Sector comprising startups & MSMEs.
- Veer Naris stories.
- Government's vision & contribution of all stake holders in achieving the goal of 'Aatmanirbharta' in Defence.

Media Outputs (Apr 2024–Mar 2025):

- 977 Press Releases, 3207 Photo Releases
- 1,725 X posts, 837 Facebook posts, 1167 Instagram posts, 42 Audio podcasts
- 1,229 YouTube posts, 1011 WhatsApp channel posts, 1165 LinkedIn posts
- Approximately 55 million cumulative impressions across platforms

Capacity Building. Conducted Defence Correspondents' Course (Aug–Sep 2024) with 34 journalists across the country.

OFFICE OF CHIEF ADMINISTRATIVE OFFICER

The Office of JS & CAO oversees diverse administrative functions for Service HQs and Inter-Service Organisations of the Ministry of Defence through its specialised divisions:

Divisions of CAO Office

Manpower Division:- Managed 821 civilian appointments. The Compassionate Appointment Board has considered 64 families of deceased employee and granted 22 compassionate appointments.

Quartering Division:- 51 bungalows and 1,222 flats were allotted to service officers posted at Integrated HQ of MoD/Inter Service Organisations in Delhi/New Delhi.

Administrative Division:- Handled pay and allowances, Leave, noting of property transactions, dealt with GPF/NPS/UPS cases, medical claims, NOCs for Passport/foreign visit/higher education etc. and related services for 6,780 AFHQ civilian employees.

Pension Cell:- Processed 158 cases of retirement on Superannuation, 24 death cases and 10 other cases such as compulsory retirement, VRS, absorption in other organisations etc. Additionally, 36 cases of revision of pension were also processed during the period.

Finance & Materials Division:- Oversaw budget, procurement, stores, security equipment, and delegation support, managing and expenditure of Rs. 29.85 Cr.

Personnel & Legal Division:- Conducted 65 DPCs, promoting 1,098 officers and granting 220 ad-hoc promotions. Made 871 new appointments under Mission Niyukti. Represented CAO's office in courts, with 10 review DPCs affecting 2,855 officers.

Security Office:- Ensured security and fire safety across 18 DHQ buildings; issued approx., 80,000 access passes with zero major lapses. Security Office is fully functional online with Service HQs on intranet for issuance of SLAC, DAC and permissions. Pass issuing capability enhanced multifold with introduction of Raksha Mantralaya Access Management Software (RAMS) for Service HQs.

Spl Project & Works Division:-

- (i) **National School Band Competition 2024-25 as part of RDC 2025:-** National School Band Competition 2024-25 as part of Republic Day Celebrations-2025 was held third time as a joint collaboration of Ministry of Defence and Ministry of Education. The Competition was organized at three levels viz. State Level, Zonal Level, & National Level (final) in four categories (Boys Brass Band, Girls Brass Band, Boys Pipe Band and Girls Pipe Band). 568 teams (13999 Children) participated at State Level. At the Zonal level, 84 teams (2337 students) participated. The finalists in each category were given Certificates, Trophies as well as Cash Prizes. Out of the 16 finalist teams, 3 school teams performed at Rostrum as Vijay Chowk during the Republic Day Parade on 26 Jan 2025.
- (ii) **Inclusion of national War Memorial in NCERT curriculum:-** Concerted efforts made by MoD and NCERT have resulted in inclusion/publication of the following chapters/poem in NCERT textbooks:-

Sr No	Subject /Language	Class	Chapter / Poem	Year of Publication
(a)	English	VI	National War Memorial (Poem)	2024-25
(b)	Urdu	VI	Veer Abdul Hameed	2024-25

Defence Headquarters Training Institute (DHTI):-

- (i) The Defence Headquarters Training Institute (DHTI), a National Standards for Civil Service Training Institutions (NSCSTI) Certified Institute under the administrative control of the O/o JS & CAO, continues to play a pivotal role in capacity building and professional programmes and workshops for various cadres and grades of AFHQ officers and officials, as well as for service officers of different ranks. In addition, the Institute has regularly imparted training to the civilian components of the Indian Army, Indian Air Force, Indian Navy, Indian Coast Guard and other organisations. Orientation courses and workshops were also organised for officers of the Ministry of Defence.
- (ii) During the Financial year 2024-25, the Institute successfully conducted 36 Training Programmes, 67 Workshops/Special Courses, and imparted training to more than 1700 officials. In addition, the Institute facilitated trainings in 05 long-term courses in r/o officers of AFHQ. 07 courses, and 02 workshops for officers and staff of other organisations.
- (iii) In recognition of its sustained efforts towards excellence in training delivery and institutional development, the Institute was accorded "UTTAM" accreditation by NSCSTI.

National School Band Competition 2024-25 as part of RDC 2025

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Key Highlights**Inauguration of Nau Sena Bhawan**

Nau Sena Bhawan (NSB) was inaugurated by Hon'ble RM in Mar 2024. NSB has been fully occupied and an efficient security set up has been implemented.

DHQ Troops

- **Upgradation of Security Weapons & Equipment.** The weapon / equipment of DHQ Troops have been upgraded/deployed for ensuring full proof security cover to MoD installations falling within the ambit of DHQ Security Zone.
- **Scholarship for Meritorious Children of DHQ Troops.** Scholarship of Meritorious Children of DHQ Troops has been started. A sum of Rs. 15,000/- as scholarship per child is given for boosting moral of DHQ Troops and their families. A onetime grant of Rs. 11000/- was given to differently abled child of DSC Troops to facilitate them.

HISTORY DIVISION

The History Division, earlier known as Historical Section, was established on October 26, 1953 to compile the histories of the military operations conducted by the Indian Armed Forces since independence.

History Division functions as the record, research and reference office of the Ministry of Defence and the Indian Armed Forces. Till now, the Division has compiled and published 21 volumes including the History of Operation Polo, Operation Vijay (Goa), The India-Pakistan War of 1965: A History, The India-Pakistan War of 1971: A History, Saga of Valour and Parakram Gatha (Param Vir Chakra & Ashoka Chakra Winners). The histories of operations conducted by the Indian Armed Forces on UN Peace Keeping Missions have also been published. This division has also compiled a book on the Winners of Maha Vir Chakra which is under publication.

Further, the History Division has started digitization of declassified records and in the process, some 18 lakh pages have been digitized, so far. The Division has launched a portal named 'Samar Abhilekh' in collaboration with IIT Kanpur. The portal contains over 38,000 declassified records, books, reports and photos, etc., containing approx 50 Lakh pages related to Indian Armed Forces. The portal can be accessed on internet at 'samar.iit.ac.in'. The Division has also transferred over 31,000 declassified files to National Archives of India.

Heraldic Cell of the Division assisted three Services and Coast Guard with ceremonial matters including establishment naming, crest design, and motto creation. It also vets IAF unit histories for Presidential colours ceremonies. It further assisted MoD (Ceremonial) by providing questionnaires and assisting in organizing essay competition during commemoration of Republic Day and Independence Day.

The Division reviews regimental histories, coffee-table books, and military film scripts, provides assistance for filming movies and issues NOCs for movie releases.

The departmental library of this division contains over 8,000 titles with 150 additions annually. The fellowship scheme awards two fellowships every three years, benefiting 22 researchers to date.

MOUNTAINEERING INSTITUTES

The following four mountaineering institutes, (which are autonomous bodies, registered under Societies Registration Act, 1860) under the aegis of Ministry of Defence are governed by their Executive Councils which are headed by the Hon'ble Raksha Mantri:-

- 1) Himalayan Mountaineering Institute (HMI), Darjeeling
- 2) Nehru Institute of Mountaineering (NIM), Uttarkashi
- 3) Jawahar Institute of Mountaineering and Winter Sports (JIM&WS), Pahalgam
- 4) National Institute of Mountaineering & Adventure Sports (NIMAS), Dirang

These institutes conduct various short and long term courses in mountaineering and adventure sports throughout the year. They have fully functional websites and can be approached for admission in a particular course.

These Institutes were in the limelight for many achievements during the year 2024. Some of these achievements are showcased below:-

HMI, Darjeeling

The expedition to Mt. Kilimanjaro (Africa's highest peak) was undertaken by a team including a Divyangjan member Shri Uday Kumar (Tenzing Norgay National Adventure Awardee 2023) having a 91% above-knee amputation. The expedition team set a world record by displaying the largest national flag atop Mt. Kilimanjaro (19,341 ft). Subsequently, the team displayed the national flag underwater at a depth of 35 ft in the Indian Ocean off Dar es Salaam, Tanzania followed by first-ever tandem skydive by a Divyangjan team on the African continent.



Atop Mt. Kilimanjaro



Displayed Tricolor underwater at a depth of 35 ft in Indian Ocean



Tandem skydive by Divyang member and solo skydive by the leader

NIM, Uttarkashi

Deployment of NIM Search & Rescue team for Rescue of Tourists from Karnataka at Sahastra Tal Trek. The Institute promptly responded to a request from the State Government of Uttarakhand by deploying a skilled Search & Rescue team for tourists from Karnataka at the Sahastra Tal Trek.

Climb to Mt. Jogin. NIM successfully climbed Mt. Jogin-III (6116 m) and Mt. Jogin-I (6465m).



Mt. Jogin-III (6116 m)



Mt. Jogin-I (6465 m)

11 Peaks Expedition. NIM successfully summited eleven previously unclimbed peaks in the Mana region of Uttarakhand. This achievement is dedicated to the brave trainees who tragically lost their lives in 2022 avalanche. The expedition set two significant records - summitting 11 peaks in a single expedition within a span of 08 days and climbing 5 peaks above 6000 meters in 8 hrs.



JIM&WS, Pahalgam

The expeditions to Mt. Kang Yatse-I (6415 m), Mt. Kang Yatse-II (6250m), Mt. Chamser Kangri (6630 m), Mt. Lungser Kangri (6676 m), Mt. Dzo Jongu (West)-I (6307m) and Mt. Dzo Jongu (East)-II (6220 m) were successfully conducted.



NIMAS, Dirang

NIMAS summited Mt. Gorichen (6488 m) for the third time through an independent expedition. In an extraordinary display of speed, coordination and endurance, 25 climbers reached the summit within just 13 days — one of the fastest ascents of the peak ever recorded.



NATIONAL DEFENCE COLLEGE

The National Defence College (NDC) is a premier training institution of the Ministry of Defence which has established a name for itself as centre of excellence on matters pertaining to National Security and Strategic Studies, and is a crucible of strategic leadership. It is dedicated to the intellectual development and strategic enculturation of select senior officers of the armed forces and civil services of India as also of the participants from friendly foreign countries. The 64th NDC course during the year 2024 commenced with 120 officers comprising Army (42), Navy (07), Air Force (13), Civil Services (19) and Friendly Foreign Countries (39).

NATIONAL DEFENCE COLLEGE 64th COURSE 2024



Curriculum and Structure. Officers undergo an 11-month program focused on national security, covering domestic, regional, and international issues to prepare future policymakers. The curriculum includes study modules on socio-political, economic, international security, global and technology issues, strategic neighborhood, and national security structures. It features lectures, panel discussions, strategic exercises, field tours, research, and thesis writing. Upon successful completion, participants receive degrees from the affiliated Institute/University.

International Engagement. During the course, the course members have the benefit of face to face interaction with a number of foreign delegations and dignitaries of national and international repute, heads of state, ministers, ambassadors, academicians and think tanks. The Chief of Army Staff, Sri Lanka on February 29, 2024, Commandant of the National Defence University, Kazakhstan on August 08, 2024 and the Chief of Staff of the French Air and Space Force on August 12, 2024 addressed the course members at the College. The Vice President of India visited the NDC on November 21, 2024 and addressed the course members.



Presidential Address. During call on, the President addressed the course members on October 01, 2024 and lauded the role being played by the NDC in preparing strategic leaders to deal with the complex security environment of the future in a comprehensive manner.



Convocation Ceremony. The Convocation Ceremony to award M.Phil Degree to 62nd Course participants was held on October 19, 2024, graced by the Hon'ble Raksha Mantri.



New Programs and Initiatives. Owing to discontinuation of M.Phil programme under New Education Policy, 2020, the college in affiliation with the University of Madras commenced two year M.Sc in Defence & Strategic Studies programme from the academic year 2023-24 and Ph.D (Defence and Strategic Studies) (Part Time) programme from the academic year 2024. Further, one year Executive MBA Programme in 'Strategic Leadership & Public Policy' under the aegis of IIT, Madras for NDC course members, faculty & staff has been commenced from the academic year 2024.

Course Graduation and Next Intake. The 64th NDC Course members graduated on November 29, 2024 and the ensuing 65th NDC Course commenced on January 6, 2025 consisting of 124 course members comprising Army (41), Navy (07), Air Force (13), Civil Services (19) and Friendly Foreign Countries (44).

SCHOOL OF FOREIGN LANGUAGES

The School of Foreign Languages (SFL) is an eminent and unique foreign language institution under administrative and functional control of Department of Defence. It has been mandated for training in strategic foreign languages since 1949 and imparts training to personnel of Indian Armed Forces, CAPFs, Int. agencies and other Govt Deptt etc. It functions as a nodal agency in terms of foreign language training and examination for Ministry of External Affairs to conduct Compulsory Foreign Language (CFL) training and examination.

COURSES

The Institute offers a range of structured language training programmes, including the Certificate of Proficiency (COP) and Advanced Diploma of Proficiency (ADOP) (both running from July to May), the Interpretership Course (16½ to 23½ months), and various Short-Term Courses (from 120 hours onwards), catering to diverse service requirements.

TESTS/EXAM

The School of Foreign Languages provides assistance to the Government Agencies by conducting examination to test proficiency level and that for IFS (Probationers) on regular basis. Evaluation is done by language experts from outside agencies and internal lecturers/faculty. Pattern and syllabus are updated from time to time as per requirement.

STATISTICS (2024-25)

- During the year, a total of 199 personnel underwent training in various foreign language courses, including Interpretership, ADOP, COP, and Short-Term Courses. Training covered a wide spectrum of strategically important languages such as Russian, Chinese, Arabic, Spanish, French, Persian, Japanese, German, Sinhala, Hebrew, Indonesian, Burmese, and Urdu. The programmes catered to the needs of the Army, Navy, Air Force, and Coast Guard, thereby strengthening the linguistic capability of the services for operational, diplomatic, and intelligence requirements.
- During the year, a total of 734 candidates appeared in various language proficiency examinations, including Interpretership, COP, ADOP (for different agencies), and Special Proficiency Examinations. These examinations were conducted for a wide range of stakeholders such as the Cabinet Secretariat, Ministry of External Affairs, Service Headquarters, National Defence Academy, and other specialized agencies, thereby ensuring a continuous pool of qualified linguists to meet the operational and strategic requirements of the Services.

CANTEEN STORES DEPARTMENT

The present Canteen Stores Department was established on 01st January 1948 with a working capital of Rs. 48 lakhs assigned to it from assets of its predecessor war time organization, on an experimental basis for three years. This situation was reviewed in 1950 and the Department was accepted as a Government undertaking on a permanent basis and the concept of canteen facilities for Indian troops got its revival.

On 01 April 1977, this was converted from a Government undertaking to a full-fledged Government Department. This change is of historic importance, as thereafter, all the funds accumulated by the Department over the years were merged with the Consolidated Fund of India (CFI) and its personnel became regular Central Government employees.

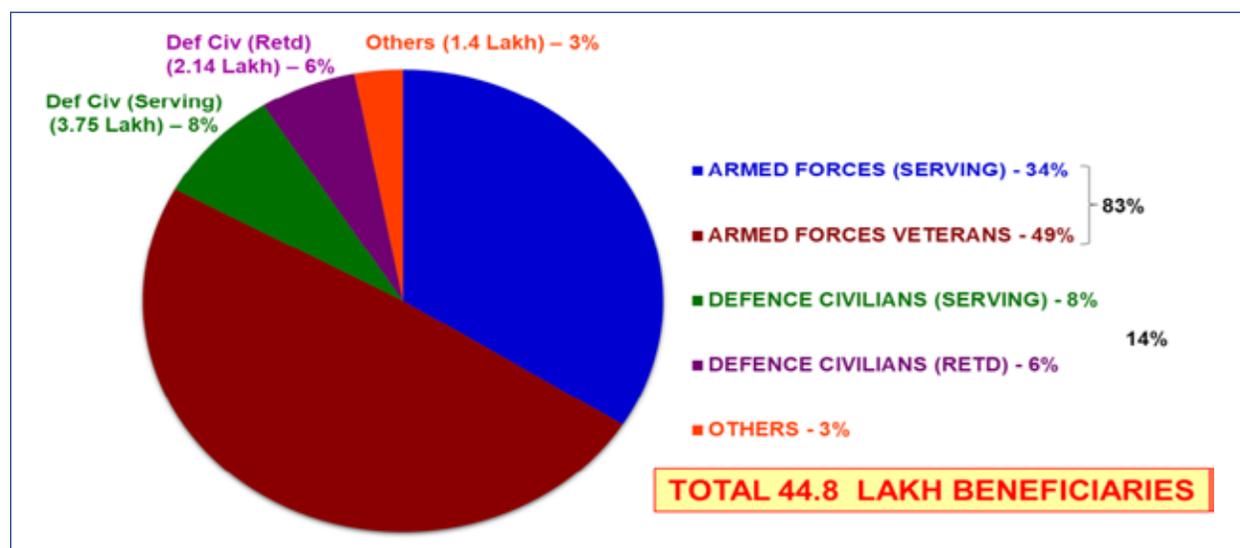
VISION. To achieve highest level of consumer satisfaction by adopting pragmatic and proactive strategies to optimally utilize and develop human, infrastructure, material and financial resources of the Canteen Stores Department to withstand the dynamics of emerging economic realities of modern India.

MISSION. To meet the aspirations of Armed Forces fraternity by making available latest and quality consumer products at a cheaper rate on All-India basis.

GEOGRAPHICAL COVERAGE. CSD operates with a total of 34 locations across the country, strategically distributed to ensure efficient service delivery. The department’s geographical coverage includes Eastern (7), Western (6), Northern (7), Southern (8), and Central (6) regions, allowing it to deliver essential services across all major regions of India.

SIGNIFICANT MILESTONES AND ACHIEVEMENTS

ONE OF THE LARGEST RETAIL CHAIN IN INDIA. With an estimated Annual Turnover of Rs. 30,000 Cr in the FY 2024-25, the department is one of the largest retail chain in India and serving approximately 44.8 Lakh beneficiaries as per the customer profile detailed below:



DISTRIBUTION OF QUANTITATIVE DISCOUNT (QD) AND CANTEEN NET TRADE SURPLUS (CTS) FOR THE WELFARE OF TROOPS AND FAMILIES. CSD is a revenue generating Deptt. under Department of Defence (MoD). Despite the low profit margin charged to provide maximum benefit to its beneficiaries, during the FY 2024-25, an amount of ₹426.54 Cr as QD and ₹131.24 Cr as CTS was distributed to the beneficiary organizations to be utilized for the welfare of the troops and their families as per guidelines issued by MoD on the subject.

PROGRAMMES ALIGNED WITH GOVERNMENT INITIATIVES

During the year, CSD undertook several initiatives aimed at fostering national pride, social responsibility, and employee well-being. Key activities included participation in the Har Ghar Tiranga Abhiyan to strengthen national integration, tree plantation drives under Ek Ped Maa Ke Naam Abhiyan, and the Swachhata Hi Seva Campaign for promoting cleanliness and hygiene. CSD also organized International Yoga Day sessions to encourage holistic health, Vigilance Awareness Week to reinforce integrity, and the Nasha Mukta Bharat Abhiyan to spread awareness on addiction-free living. On International Women’s Day 2025, awareness lectures, health check-up camps, and sessions on government schemes for women employees were conducted.

Below are few glimpse of these events:-



Har Ghar Tiranga Abhiyan at Ghatkopar Estate



Ek Ped Maa k Naam abhiyan at Ghatkopar Estate



Swachhata Campaign 2024 at Agra Depot



International Yoga Day 2024 at Delhi Depot



Nasha Mukta Bharat Abhiyan at Lucknow Depot



Medical Camp at CSD HO, Mumbai

VISIT BY HON'BLE RRM

Hon'ble RRM visited CSHO, Mumbai on Jan 15, 2025 and was briefed about the overall functioning of CSD and initiatives taken by Department.



Hon'ble RRM Visit to CSD HO, Mumbai



Hon'ble RRM inspecting items display at CSD HO Mumbai

FUTURE ROAD MAP OF CANTEN STORES DEPARTMENT

IMPLEMENTATION OF CSD E-COMMERCE PROJECT.

In order to facilitate delivery of goods at the doorstep of the CSD beneficiaries up to 50% of their entitlement, CSD has taken initiative to launch its e-commerce portal. Tender for hiring of Aggregator has been published and implementation of CSD e-Commerce Project is expected in the Financial Year 2026-27 in seven depots in pilot phase. This project will go a long way in providing enhanced customer satisfaction to our esteemed beneficiaries.

IMPLEMENTATION OF CSD AUTOMATION PROJECT.

In line with Govt's Digital India Mission, CSD is in the process of automating complete operations including Supply Chain Management, Finance and Administration using ERP based solution. It will help in optimizing the processes and enhancing the overall efficiency of the Department. Presently, the RFP for the project is under finalization and implementation is expected by Financial Year 2026-27.

COLLEGE OF DEFENCE MANAGEMENT

College of Defence Management (CDM) is a tri-Service institution which imparts the skills of contemporary management to the senior leadership of the three Services, Para Military Forces, officers of the Ministry of Defence and International participants. The education imparted at CDM has a vast international footprint that includes Military Officers (Col & Equivalent) from Asia, Africa, South America and Pacific Islands.

DEFENCE SERVICES STAFF COLLEGE

Defence Services Staff College (DSSC) affords an invigorating environment serving as a Cradle for Middle Level Military Leadership, creating excellent staff officers and stellar leaders as the cutting edge of the armed forces with accentuated levels of professionalism and steadfastly upholding the virtues of 'Duty, Honour and Valour'.

ARMED FORCES TRIBUNAL

Government has established Armed Forces Tribunal (AFT) for the adjudication of complaints and dispute regarding service matters and appeals arising out of verdicts of the Court Martial of the Members of the three Services (Army, Navy and Air Force) and to provide speedy justice to the members of the Armed Forces. At present Armed Forces Tribunals have been functioning at Delhi (Principal Bench) and at Regional Benches at Chennai, Jaipur, Lucknow, Chandigarh, Kolkata, Kochi, Guwahati, Mumbai, Jabalpur and Srinagar (functioning at Jammu).

FINANCE DIVISION

Finance Division in the Ministry of Defence deals with all matters having a financial implication. This Division is headed by Secretary (Defence Finance)/ Finance Advisor (Defence Services).

The Ministry of Defence has been delegated with higher financial powers to facilitate decision making. These powers are exercised with the concurrence of the Finance Division. Finance Division prepares and monitors Defence Services Estimates, Civil Estimates of the Ministry of Defence and the Estimates in respect of Defence Pensions. Break-up of the actual expenditure for the years 2023-24, the Revised Estimates for 2024-25 and Budget Estimates for 2025-26 in respect of the four grants of this Ministry and service/Department-wise breakup of Defence service estimates are given in Table A and Table B respectively.

TABLE A : Grant-wise Break-up of Defence Expenditure

(Rs in Crore)

Details of Grant	2023-24 Actuals	2024-25 RE	2025-26 BE(Net)
Grant No 19 MoD (Civil) (Net)	22,712.09	26,656.65	28,682.97
Grant No 20 Defence Services-Revenue (Net)	2,90,442.92	2,97,222.35	3,11,732.30
Grant No 21 (Capital Outlay on Defence Services)	1,54,256.28	1,59,500.00	1,80,000.00
Grant No 22 Defence Pensions	1,42,092.99	1,57,681.00	1,60,795.00
Grand Total	6,09,504.28	6,41,060.00	6,81,210.27

TABLE B: Service/Deptt-Wise Break-up of Defence Service Estimates[Revenue(Net)+Capital]

(Rs in Crore)

Service/ Department	2023-24 Actuals	2024-25 RE	2025-26 BE
Army	2,20,222.16	2,32,654.77	2,39,600.68
Navy	85,024.15	97,880.29	1,03,502.62
Air Force	1,13,782.54	98,142.91	1,18,511.68
Directorate of Ordnance (Coordination & Services)	1,787.61	2,097.85	1,965.50
Director General of Quality Assurance	955.22	1,249.59	1,335.00
Research & Development	22,927.52	24,696.94	26,816.82
Total	4,44,699.20	4,56,722.35	4,91,732.30

Defence Accounts Department

The Defence Accounts Department (DAD) functions under the administrative control of Ministry of Defence and is headed by the Controller General of Defence Accounts. It is one of the oldest departments in the Government of India with a legacy of over 277 years. The department is mandated to carry out the functions of Internal Audit, Accounts, Payments and Financial Advice to all the organisations under the Ministry of Defence like Army, Navy, Air Force, Indian Coast Guard, BRO, DRDO, DGDE, MES, etc. These functions are aimed at ensuring the optimum and outcome oriented utilization and management of defence finance to meet defence related national security objectives. The Defence Accounts Department operates through a robust network of 1,154 offices located across 269 locations throughout the country. The department is responsible for managing the Ministry of Defence's gross budget.



Major Achievements

Project e-Raksha Awaas

Project e-Raksha Awaas was implemented by the Defence Accounts Department to streamline the generation and forwarding of Rent Bills & Allied charges in respect of government accommodation occupied by Defence personnel, civilians and for private/commercial properties.

As a centralized application, e-Raksha Awaas has replaced the earlier standalone application Bhawan across all AAOs (BSO) and AOs (GE) offices handling revenue work. Over 33 lakh rent bills amounting to ₹ 595.06 crore have been generated on e-Raksha Awaas.

Defence Travel System 2.0

DTS 2.0 was launched by the Hon'ble Raksha Mantri Shri Rajnath Singh on DAD Day, i.e., 1st October, 2024. DTS 2.0 offers enhanced features including improved performance and scalability of the application architecture.

DTS 2.0 provides better user interface with significantly reduced latency and improved system reliability. There is a substantial increase in the number of bookings processed daily. As compared to 20,000 Rail bookings and 2,000 Air bookings per day in DTS 1.0, 35,000 Rail bookings and 3,500 Air bookings per day have been made in DTS 2.0, which reflect its better operational efficiency.

Implementation of e-HRMS 2.0

The Government of India launched the revamped e-HRMS 2.0 to deliver end-to-end online HR services to government employees covering areas such as leave management, reimbursements, training etc. Implementation of e-HRMS 2.0 in DAD commenced in November 2024.

Agniveer Pay System

The Agniveer Pay System marks a significant milestone in the digital transformation of defence financial management. It ensures streamlined, transparent and accountable payroll services for Agniveers, right from on-boarding to final financial closure.

A modern, secure pay management system, it currently manages the pay and allowances of 1,43,194 enrolled Agniveers disbursing ₹390 crore (approx.) per month by providing a comprehensive solution for the full service cycle of these personnel. At its core, the system automates key tasks and integrates multiple functional modules including Pay Bill Generation, DO II Validation, User Management, DAK Tracking and Final Settlement processing to deliver an end-to-end solution. Data integrity, transactional traceability, and compliance with internal audit requirements are the core pillars underpinning its design.

Cyber Security Campaign

A three-day online training session, attended by approximately 12,000 DAD officials, was conducted by the CGDA office, as a part of the National Cyber Security Awareness month in October, 2024.

For strengthening of cyber security framework in DAD and setting up of prompt incident reporting and responding mechanism, dedicated Dy. CISOs have been nominated along with constitution of Cyber Incident Management teams at each PCsDA/CsDA offices.

Project SAMPŪRṆA

SAMPŪRṆA (System Automation for Procurement Payment and Uniform Raksha Accounting) erstwhile DEFMAPPS (Defence Economics and Financial Management through Automated Procurement and Payment System) conceptualized by Controller General of Defence Accounts (CGDA), is a comprehensive procurement and payment system. The system aims at ensuring an end-to-end automation of procurement, payment process and high level management information for the policy makers by using Data Analytics, Artificial Intelligence and Machine Learning. The system will also ensure transparency and efficiency in defence procurement.

Detailed Project Report (DPR) and Acceptance of Necessity (AON) for Project SAMPŪRṆA/ DEFMAPPS, at an estimated cost of ₹ 205.35 crore (i.e ₹ 174.03 crore plus 18% of GST of ₹ 31.32 crore) has been approved by the Hon'ble Raksha Mantri.

Formulation of Request for Proposal (RFP) for selection and engagement of System Integrator for development, implementation and operation and maintenance of Project SAMPŪRṆA has been initiated and is in progress.

Market Intelligence Report (MIR) for the FY 2023-24

The 1st Market Intelligence Report (MIR) 2023-24 was released by the Hon'ble Raksha Mantri on DAD Day 2024. It provides insights into vendor and product profiles of procurement undertaken on the GeM platform, expenditure analysis including GST contributions of the defence forces leading to impact on state and national economy and a detailed analysis of stores and miscellaneous GeM procurements by Indian Army, Indian Navy, Indian Air Force and DRDO.

The Defence Accounts Department will continue to generate Market Intelligence Report (MIR) on an yearly basis by incorporating more informative ideas that may guide policymakers, procurement officers and financial advisers to enable effective decision making and ensuring compliance with regulatory standards.

Recovery of Over Payments in respect of Post Audit of ECHS Bills

Review of post audit of Medical Treatment Related Expenditure (MTRE) Bills under ECHS carried out in March 2025, has revealed an over payment of ₹ 202.62 crore as over payment during the period 2013-14 to 2024-25. A sum total of ₹ 55.67 crore has been recovered/settled.

Revenue accrued to the Government through recovery of Rent Bills

Huge loss of revenue due to delay in generation of rent bills has been observed as per Annual Review of Works Expenditure (ARWE) 2023-24 and e-Suchna report. As of now, ₹ 143 crore out of ₹ 367 crore has been recovered.

Progressive amount recovered during July 2024 to March 2025 is ₹142,18,08,354. The amount recovered during the month of March 2025 is ₹ 12,12,86,886.

COSHE (Comprehensive Statistical Handbook of Defence Expenditure)

COSHE, earlier known as Statistical handbook of Defence Expenditure, is published by the Office of the CGDA. It contains compilation of defence budget and expenditure along with various important analysis. The 2024 publication, which was the 8th edition of the Handbook, has the following new features :

- a. A revised and comprehensive format duly updating the time series data on expenditure pertaining to Defence Services.
- b. New chapters comprising data related to ECHS, disability pension and family pension of the Armed Forces .
- c. Legacy data
- d. Expanded database which incorporated data from budget documents issued by Ministry of Finance, RBI, websites of respective organizations etc.
- e. Snapshot of Indian defence spending in international context.
- f. Reflection on "Atma Nirbhar Bharat" Policy presented through growing Indian defence production and exports data

Training

CGDA office is conducting the Mid-Career Training Programmes (MCTPs) for Phase III, IV & V for IDAS officers through Arun Jaitley National Institute of Financial Management (AJNIFM), Faridabad. As per the MoU with AJNIFM, IDAS officers are attached to ISB, Hyderabad (it being a partner institute of AJNIFM) for 19 days out of a total of 28 days in Phase-III, 12 days out of a total of 21 days in Phase-IV, and 10 days out of a total of 14 days in Phase-V.

SPARSH

SPARSH Outreach Programme

System for Pension Administration - Raksha (SPARSH) Outreach Programmes are organized by the Defence Accounts Department at regular intervals to reach out to the defence pensioners located across the length and breadth of the country. They are intended to provide last mile connectivity to pensioners and provide on the spot resolution for queries and grievances.

During the outreach programmes, the defence pensioners are assisted by providing various services/clarifications on how to submit life certificate, registering grievances, reporting of casualties (Death/Missing/Conviction etc.), giving IT Savings and Declarations etc.

The effectiveness of these programmes is ensured through active participation of various stakeholders like Service HQrs, Pensioners Welfare Associations, Zila Sainik Boards, Rajya Sainik Boards and Local Military Authorities. 94 SPARSH Outreach Programmes were conducted during FY 2024-25.

Normalization of ASIS cases

Introduced in October 2020, SPARSH has led to increased transparency and visibility of data for Defence pensioners. This provides an opportunity to the pensioner to seek correction of data or raise any other related grievance, which was hitherto not possible. Due to poor quality of data available with the erstwhile PDA, discrepancies arose for 6.43 lakh legacy pensioners who had migrated to SPARSH on ASIS basis. A concerted drive in mission mode has been launched by CGDA office and PCDA (Pension) Prayagraj, by deploying additional manpower and leveraging technology, to convert the current ASIS cases to normal ones. This has facilitated the generation of correct PPOs. Data updation and normalization of 3.69 lakh cases has been completed till 8th May, 2025.

Grievance Disposal

To ensure effective redressal of public grievances, grievance redressal mechanism has been strengthened by enhancing sensitivity, accessibility and accountability. Adopting a "Whole of Government Approach" maximum number of field offices have been mapped under CPGRAMs portal to redress the grievance within 21 days.

Over 36000 grievances/appeals were redressed during the year 2024 which is almost double the grievances/appeals resolved during the year 2023. This shows the citizens' belief in the system as well as the commitment of the organization.

Integrated Financial Advice

Integrated Financial Advisor (IFA) System comprising Principal IFAs (PIFAs) and IFAs has ensured the timely and effective rendition of financial advice to the Indian Armed forces and other organizations under MoD. During the period- January to December 2024, a total of 80,531 procurement proposals amounting to ₹ 1,03,468 crore were concurred at Acceptance of Necessity (AON) stage and financial concurrence (Expenditure Angle Sanction) was accorded for 91,520 Proposals amounting to ₹ 87,125 crore.

Synergy Conferences

Conduct of Command Level Synergy Conferences have been initiated to promote regular interaction and consultation amongst PIFAs/IFAs and executive functionaries. DAD participated in the following Synergy Conferences:-

One Day Financial Conference on Enhancing Cohesion & Synergy on Financial Issues: Organized by HQ IDS on 05th August, 2024 at Manekshaw Centre, New Delhi with representation from MoD(Fin), CGDA, PIFAs, Service HQrs and CGHQ.

CFA-FA Synergy "SAMVAD": Organized by DGFP on 13th December, 2024 at Manekshaw Centre, New Delhi with representation from CGDA, DGFP, IHQ Army, Col FPs of Commands/Corps.

DEFENCE COOPERATION WITH FOREIGN COUNTRIES

Bilateral

Algeria

India has inked an MoU with Algeria on cooperation in Military Field during the visit of our Chief of Defence Staff (CDS) led delegation to People's Democratic Republic of Algeria from 31 Oct – 04 Nov 2024.

Australia

- (i) Chief of Royal Australian Navy, visited India from 02-06 Apr 24.
- (ii) Biennial, multi-national exercise Pitch Black 2024 held between Indian Air Force (IAF) and the Royal Australian Air Force (RAAF) conducted from 12 July 24 to 02 August 24 at Darwin, Australia. The name 'Pitch Black' was derived from the emphasis on night time flying over large un-populated areas. The IAF contingent comprising of over 150 highly skilled Air Warriors including pilots, engineers, technicians, controllers and other subject matter experts, operated the formidable Su-30 MKI multirole fighters, with the C-17 Globemaster and the IL-78 Air-to-Air Refuelling aircraft in combat enabling roles. The exercise provided IAF with an opportunity forwards force integration with participating nations and mutual exchange of best practices.
- (iii) The 3rd edition of joint military Exercise AUSTRAHIND held in Pune, Maharashtra from 8-21 Nov 2024. Exercise AUSTRAHIND is an annual event conducted alternatively in India and Australia. Last edition of the same exercise was conducted in Australia in Dec 2023.
- (iv) Director General Defence Intelligence Agency (DG DIA) visited Australia from 19-21 March 2025. This visit was aimed to further strengthen bilateral defence intelligence cooperation and enhance strategic engagement between India and Australia.
- (v) Implementing arrangement on Air-to-Air refuelling was exchanged between India and Australia.
- (vi) The 9th edition of India-Australia Defence Policy Talks was held in New Delhi on 17 Mar 2025. The Indian delegation was headed by Joint Secretary while the Australian side was led by First Assistant Secretary International Policy Division, Department of Defence, Australia.
- (vii) The fourth India-Australia 2+2 Secretary Level Consultations were held on 14th Oct 2024 in New Delhi. The Indian Delegation was headed by Defence Secretary Shri Giridhar Aramane and Foreign Secretary Shri Vikram Misri, while Australian side was led by Secretary, Department of Defence (DoD) Mr. Greg Moriarty and Secretary, Department of Foreign Affairs and Trade (DFAT) Ms. Jan Adams



The Secretary (Department of Defence), Australia Mr Greg Moriarty calling on the Union Minister for Defence, Shri Rajnath Singh, in New Delhi on October 14, 2024.

- (viii) Chief of Defence Staff (CDS) visited Australia from 04-07 March 2025. The visit underscored the growing engagement between the two nations under the Comprehensive Strategic Partnership, emphasizing shared commitment towards regional security and military collaboration.
- (ix) RRM inaugurated the India pavilion at Land Forces Expo held from 11-13 Sept 2024 at the Melbourne Convention and Exhibition Centre, Australia. This was the first-ever participation of Indian Defence Industry in the Land Forces Exposition in Melbourne.

Austria

A meeting was held between Defence Secretary and Dr. Arnold Kammel, Secretary General (equivalent to Defence Secretary), Austria on 21.08.2024 at South Block, New Delhi. During the meeting various important issues on Defence Cooperation were discussed.

Bangladesh

- (i) Memorandum of Understanding (MoU) between DSSC Wellington and DSCSC Mirpur for “Cooperation concerning military education in the field of strategic and operational studies” was signed on 22 June, 2024.
- (ii) Chief of the Navy Staff (CNS), India visited Bangladesh from 01-04 July, 2024.

Belgium

Belgium Economic Mission visited India in March, 2025. During the visit, Hon'ble RM meet with Belgium's Minister of Defence and Foreign Trade Mr. Theo Francken on 03.03.2025 in New Delhi.



The Union Minister for Defence, Shri Rajnath Singh meeting with the Princess Astrid of Belgium and the Minister of Defence of Belgium, Mr Theo Francken, in New Delhi on March 03, 2025.

Bhutan

Chief Operating Officer of Royal Bhutan Army visited India during 02-05 Feb 2025.

Brunei

- (i) Indian Coast Guard's Pollution Control Vessel (PCV) Samudra Paheredar made a port call at Muara, Brunei on 9 April 2024, as part of its ongoing overseas deployment to ASEAN countries. The visit of ICG specialized vessel to ASEAN countries is in pursuance of India ASEAN Initiative for Marine Pollution, as announced by Raksha Mantri in the year 2022 in Cambodia during the ASEAN Defence Minister Plus Meeting.
- (ii) Indian Naval Ship Kiltan visited Muara, Brunei on 25 May 24, and was accorded a warm welcome by the Royal Brunei Navy. The visit was part of Operational Deployment of the Indian Navy's Eastern Fleet to South China Sea.

Cambodia

- (i) The 1st edition of Joint Table Top Exercise, CINBAX, between the Indian Army and the Cambodian Army held from 01-08 Dec 2024 in India.
- (ii) Indian Navy's First Training Squadron (ITS) comprising- INS Sujata, and ICGS Veera made a port call at Sihanoukville Port, Cambodia from 14-17 Feb 2025. During the three-day visit, the Indian Navy engaged with the Royal Cambodian Navy on various fronts, forging deeper bonds, enhancing cooperation and interoperability and strengthening Bridges of Friendship. A Small Arms Simulator was handed over to the Royal Cambodian Army as a part of ongoing exchanges and defence engagement. The goodwill visits of ITS reaffirmed bilateral engagement and enduring maritime partnership between India and Cambodia aligned with the vision of SAGAR (Security and Growth for All in the Region).

Democratic Republic of Congo

First Secretary level meeting between the Defence Ministries of India and Democratic Republic of Congo (DRC) was held in New Delhi on July 05, 2024. The meeting was aimed at identifying areas for collaboration to fulfil the potential of bilateral defence cooperation.

Egypt

10th India-Egypt Joint Defence Committee (JDC) meeting was held on 29 July 2024 in New Delhi. The meeting was co-chaired by JS(IC/AP). In the meeting, both sides discussed a wide range of avenues for Defence Cooperation in areas like military cooperation, training, defence industries, R&D etc. Both sides agreed for institutionalisation of Navy to Navy Staff Talks and to hold NNST on the side-lines of 11th JDC.

France

CDS led delegation visited France from 21-25 April, 2024. During the visit, the CDS interacted with the senior civil and military leadership of France and visited the French Space Command, the Land Forces Command and Defence Industries, including Safran Group, Naval Group, and Dassault Aviation.

Germany

- (i) The Chief of Air Staff (CAS) led delegation visited Germany from 5-8 June, 2024. This visit underscored the deepening military cooperation and strategic partnership between India and the Germany, aiming to further strengthen defence cooperation and foster stronger bonds between both nations.

- (ii) Defence Secretary co-chaired a meeting Mr. Nils Hilmer State Secretary of Germany on 25 Oct 2024 in New Delhi. During the meeting bilateral defence cooperation activities were discussed.

Greece

The Chief of Navy Staff(CNS) led delegation visited Greece on an official visit from 26-29 Sept 2024. This visit underscored the deepening military cooperation and strategic partnership between India and Greece, aiming to further strengthen defence cooperation.

Guyana

Brig Omar Khan, CDS Guyana visited India from 04 to 08 Nov 2024. CDS Guyana interacted with the Defence Secretary, CDS and the Service Chiefs on 05 Nov 2024 and with various defence industries from 06 to 08 Nov 2024.

Indonesia

- (i) The 7th Joint Defence Cooperation Committee (JDCC) meeting between India and Indonesia held in New Delhi on 03 May 2024. The meeting was co-chaired by Defence Secretary and Secretary General of Ministry of Defence, Indonesia.
- (ii) Indian Coast Guard (ICG) Offshore Patrol Vessel Sujay, made port calls in Jakarta and Bali, Indonesia, as part of its ongoing overseas deployment to East Asia, Indian Coast Guard (ICG) Offshore Patrol Vessel Sujay, with an integral helicopter, on August 21, 2024, made a port call at Jakarta for a two-day visit and at Bali on Sept 18, 2024, for a three-day visit.
- (iii) 9th edition of India-Indonesia Joint Special Forces Exercise GARUD SHAKTI 24 held in Jakarta, Indonesia from 01-12 Nov 2024. The Indian contingent was represented by troops from the Parachute Regiment (Special Forces) and Indonesian contingent comprising 40 personnel was represented by Indonesian Special Forces Kopassus.
- (iv) Chief of the Naval Staff (CNS) visited Indonesia from 15 to 18 Dec 24. This visit was part of ongoing efforts to further consolidate bilateral defence relations between India and Indonesia, in line with the deepening Comprehensive Strategic Partnership, with a focus on enhancing Naval Cooperation.
- (v) Chief of Staff of the Indonesian Navy, visited India as part of the high-level delegation accompanying President Prabowo Subianto, the Chief Guest for the Republic Day Parade 2025.
- (vi) 2nd High-Level Meeting (HLM) between the Indian Coast Guard (ICG) and the Indonesia Coast Guard (Badan Keamanan Laut Republic Indonesia- BAKAMLA) held in New Delhi on 27 Jan 2025. During the meeting ICG and Indonesian Coast Guard renewed their Memorandum of Understanding (MoU) on Maritime Safety and Security Cooperation for another three years. BAKAMLA Chief Vice Admiral Irvansyah with an eight-member delegation, was on an official visit to India from Jan 24-28, 2025. ICG Ship Shaunak was deployed to Jakarta from 27-30 Jan 2025.

Israel

The 16th Joint Working Group (JWG) meeting on Defence Cooperation between India and Israel was held on 23 July 2024 in New Delhi. Indian delegation was led by Defence Secretary and the Israeli delegation was led by Director General, Ministry of Defence, Israel. The Defence Secretary emphasized the role of defence cooperation as important pillar of the overall relationship between India and Israel. Israeli DG brought out the importance of India for Israel and further elaborated on the current war in the region.

Japan

- (i) The eighth edition of bilateral Japan-India Maritime Exercise JIMEX 2024 held in June 2024.
- (ii) 3rd edition of India-Japan 2+2 dialogue, held in New Delhi on August 20, 2024. During the meeting, the Defence Ministers reviewed the existing defence cooperation activities and discussed ways to enhance further cooperation.
- (iii) 2nd India-Japan Joint Service Staff Talks (JSST) between Headquarters, Integrated Defence Staff (HQ IDS) and the Joint Staff of Japan Self Defence Force (JSDF) held from 19-20 Nov 2024 in New Delhi.
- (iv) A Memorandum of Implementation was signed at the Embassy of India, Tokyo on 15 Nov 2024 between Govt. of India and Govt. of Japan, for co-development of UNICORN mast for fitment on board Ships of Indian Navy.

Kenya

- (i) The 3rd Joint Defence Cooperation Committee (JDCC) meeting between India and Kenya was held in New Delhi on 03 Sept 2024. The meeting was co-chaired by JS(IC/AP). During the meeting the two sides discussed a wide range of avenues for defence cooperation in areas like military cooperation, training, defence industries, R&D etc. India offered training courses, training assistance in the field of Maritime Medicine, training courses on counter-terrorism, counter-insurgency, counter-IED.
- (ii) Defence Secretary led Indian Delegation visited Kenya from Sept 26-27, 2024. Wide range of issues were discussed with the Principal Secretary, Ministry of Defence of Kenya on further strengthening bilateral defence cooperation. During the visit, the Defence Secretary with the Pr. Secretary, Ministry of Defence, Kenya, jointly laid the foundation stone of a new Radiology Complex, being built and equipped with the help of India.

Kuwait

MoU between the Government of Republic of India and the Government of the State of Kuwait on Cooperation in the field of Defence was signed on 22 Dec 2024 during the visit of Hon'ble Prime Minister to Kuwait.

Malaysia

- (i) Two Indian Naval ships Delhi and Shakti visited Kota Kinabalu, Malaysia as part of the Indian Navy's Operational Deployment. During the port call, personnel from Indian and Malaysian Navies engaged in Subject Matter Expert Exchange (SMEE) sessions. The Indian Navy ships also participated in a Maritime Partnership Exercise (MPX)/PASSEX at sea with ships of the Royal Malaysian Navy. This was aimed to enhance the degree of interoperability between the two Navies, which was reiterated during the recently concluded MILAN 2024 and Ex Samudra Lakshmana 2024.
- (ii) Joint Air Exercise, Exercise Udara Shakti 2024 was conducted in between the Royal Malaysian Air Force (RMAF) and Indian Air Force (IAF) from 05 to 09 August 2024 at Kuantan, Malaysia. The IAF participated with Su-30MKI fighter jets.
- (iii) The 4th edition of India-Malaysia Joint Military Exercise HARIMAU SHAKTI was conducted from 02-15 Dec 2024 at Bentong camp, Pahang district, Malaysia.
- (iv) The 13th Meeting of Malaysia-India Defence Cooperation Committee (MIDCOM) took place in Kuala Lumpur on 19 Feb 2025. The meeting was co-chaired by Defence Secretary and Secretary General of Ministry of Defence, Malaysia.
- (v) The 11th meeting of the Sub-Committee on Military Cooperation (SCMC) between India and Malaysia took place at Malaysia on 18th Feb 2025. The meeting was co-chaired by Joint Secretary (International Cooperation), Ministry of Defence and Assistant Chief of Staff, Defence Operation and Training, Malaysia.

Maldives

- (i) The 5th Defence Cooperation Dialogue (DCD) was conducted during 06-07 Sep 2024 in India. The Indian delegation was led by Defence Secretary.
- (ii) Defence Minister of Maldives, Ghassan Maummon visited India during 07-11 Jan 2025.



The Union Minister for Defence, Shri Rajnath Singh in bilateral meeting with Defence Minister of Maldives, Mr Mohammed Ghassan Maummon, in New Delhi on January 08, 2025.

Mongolia

- (i) The 12th Joint Working Group (JWG) meeting between the Defence Ministries of India and Mongolia took place in Ulaanbaatar on May 16-17, 2024. The meeting was co-chaired by JS(IC/AP).
- (ii) The 13th Joint Working Group (JWG) meeting between India and Mongolia took place in New Delhi on 07 Feb 2025, focusing on strengthening bilateral defence cooperation. The meeting was co-chaired by Joint Secretary, MoD and State Secretary of MoD, Mongolia. The JWG meeting is part of ongoing efforts to strengthen the strategic partnership between India and Mongolia, which includes initiatives like joint military exercises.

Nepal

- (i) COAS of Nepal Army visited India during 11-14 Dec 2024.
- (ii) Chief of the Army Staff (CoAS), India visited Nepal from 21-24 Nov, 2024.

Netherlands

Meeting of Hon'ble RM with Minister of Defence, Netherlands were held on 18.03.2025 at New Delhi. Issues on bilateral Defence Cooperation including Shipbuilding and Space Sectors were discussed for future potential collaboration.



The Union Minister for Defence, Shri Rajnath Singh in a bilateral meeting with the Defence Minister of the Netherlands, Mr. Ruben Brekelmans, in New Delhi on March 18, 2025.

New Zealand

- (i) New Zealand Prime Minister alongwith Chief of Navy, Royal New Zealand Navy (CN-RNZN), visited the latest indigenously built destroyer of the Indian Navy, INS Surat, at Naval Dockyard, Mumbai on 20 Mar 25.
- (ii) Memorandum of Understanding on Defence Cooperation between the Ministry of Defence of India and the New Zealand Ministry of Defence was signed on 17 Mar 2025. This will further strengthen bilateral defence cooperation and establish regular bilateral defence engagement. Both sides noted the need for ensuring the safety and security of sea lanes of communication and agreed there needs to be regular dialogue to discuss enhancement of maritime safety.
- (iii) Indian Navy worked with New Zealand Navy in the Combined Task Force-150, as part of Rainbow Staff for maritime security in the Indian Ocean.

Philippines

- (i) Indian Naval Ships Delhi, Shakti and Kiltan visited Manila, Philippines as part of Operational Deployment of the Indian Navy's Eastern Fleet to South China Sea. The port call included Subject Matter Expert Exchange (SMEE) between the Indian Navy and personnel of Philippines Navy, sports fixtures, cross deck visits, cultural exchanges and collaborative community outreach programmes.
- (ii) The 5th meeting of India-Philippines Joint Defence Cooperation Committee (JDCC) was held in Manila on Sept 11, 2024. The meeting was co-chaired by Defence Secretary and his counterpart Senior Undersecretary, Ministry of National Defence of Philippines.
- (iii) Indian Coast Guard (ICG) conducted the second bilateral meeting with Philippine Coast Guard (PCG) on Dec 09, 2024, at ICG HQs, New Delhi as part of the ongoing cooperation framework established under the MoU signed between the two Coast Guards.

Rwanda

India and Rwanda held the first edition of Joint Defence Cooperation Committee (JDCC) meeting in Kigali, Rwanda on 08 Feb 2024 to discuss a wide range of opportunities to enhance defence cooperation between the two countries. The Indian delegation was led by Joint Secretary (IC/AP). Detailed discussions were held in areas like training cooperation, Joint Military Exercises, Defence Industrial Cooperation etc. Both sides discussed for the establishment of the Rwanda National Defence College (NDC) and co-development of naval assets, co-development & co-production of High Mobility Vehicles (HMV).

Republic of Korea

Indian Coast Guard(ICG) Offshore Patrol Vessel Sujay, with an integral helicopter, made a port call at Incheon, South Korea on Sept 04, 2024, as part of its on-going overseas deployment to East Asia. During the four-day visit, the ICG crew engaged in professional interactions with the Korea Coast Guard (KCG), focusing on Marine Pollution Response, Maritime Search and Rescue and Maritime Law Enforcement.

Romania

Inaugural India-Romania Joint Committee on Defence Cooperation (JCDC) was held from 22-23 April 2024, at Bucharest, Romania. During the meeting, Military-to-Military Cooperation and Defence Industry Cooperation issues were discussed.

Russia

- (i) A High Level Russian delegation visited India on 1st Feb 2024 for discussions on the RELOS agreement.
- (ii) Following meetings were conducted as part of IRIGC-M&MTC:-
 - Meeting of the Working Subgroup on Navy under the Working Group on Military Cooperation of IRIGC-M&MTC was held on 30 Jan-01 Feb 2024 at St Petersburg, Russia.
 - Meeting of the Working Subgroup on Military Cooperation for Air Force and Air Defence was held between 03-04 April 2024 in New Delhi, India.
 - Meeting of the Subgroup on Military Cooperation for Land Forces under the Working Group on Military Cooperation of IRIGC-M&MTC was held on 26-28 June 2024 in New Delhi, India.
 - Meeting of Working Subgroup on planning of Military Cooperation under working Group on Military cooperation of IRIGC-M&MTC was held in New Delhi, India from 23-24 July, 2024.
 - Meeting of Working Group on Military Technical Cooperation under IRIGC-M&MTC was held from 18-22 Nov 2024 in New Delhi, India.
 - The 4th Meeting of Working Group of Military Cooperation under IRIGC-M&MTC was held at Moscow, Russia from 25-27 Nov 2024.
- (iii) Hon'ble RM led delegation visited Russia for the 21st Inter-Ministerial Meeting of Indian Russia Intergovernmental Commission on Military & Military-Technical Cooperation (IRIGC-M&MTC) from 08-10 Dec 2024.



Union Minister of Defence Shri Rajnath Singh attended 21st IRIGC Meeting at Russia in Dec 24

- (iv) Hon'ble RM attended the Commissioning Ceremony of INS 'Tushil' as the Chief Guest on 09th Dec 2024 at Kaliningrad, Russia.



The Union Minister for Defence, Shri Rajnath Singh in a group photograph during commissioning ceremony of INS Tushil at the Yantar Shipyard, in Kaliningrad, Russia on December 09, 2024.

- (v) Two members *IN* High-Level delegation led by DCNS participated in the Main Naval Parade of Russian Federation Navy held in St. Petersburg, Russia from 27th to 30th Jul, 2024. Further, Indian Navy warship 'Tabar' also participated in the Main Naval Parade of Russian Federation Navy held in St. Petersburg, Russia from 25th to 29th July 2024.

Saudi Arabia

India and Saudi Arabia conducted the 6th Joint Committee on Defence Cooperation (JCDC) meeting in Riyadh, Saudi Arabia on 04 Sept 2024. The meeting was co-chaired by JS(IC/AP). During the meeting both sides discussed new avenues to further strengthen the long standing and multi-faceted defence cooperation. Both sides agreed for institutionalization of Staff Talks between all the three Services and conduct the inaugural edition by first quarter of 2025.

Serbia

1st India-Serbia Joint Defence Committee Meeting was held on 12th Dec, 2024 at New Delhi, India. During the meeting both countries discussed issues of Defence and Defence Industrial Cooperation.

Singapore

- (i) Indian Naval Ships Delhi, Shakti and Kiltan visited Singapore from 06-09 May 24. This visit was part of the Operational Deployment of the Indian Navy's Eastern fleet to the South China Sea.
- (ii) 6th India-Singapore Defence Ministers' Dialogue Raksha Mantri & his Singaporean counterpart held in New Delhi to further bolster defence ties on 22 Oct 2024. Bilateral agreement on Joint Military Training Army was extended for further next five years.



The Union Minister for Defence, Shri Rajnath Singh receiving his Singaporean counterpart Dr Ng Eng Hen ahead of the sixth India-Singapore Defence Ministers' Dialogue, in New Delhi on October 22, 2024.

- (iii) 12 edition of the Joint Military Training (JMT) exercise between the Indian Air Force (IAF) and Republic of Singapore Air Force (RSAF) held on 21 Oct 2024, at Air Force Station Kalaikunda, West Bengal. The bilateral phase of the exercise conducted from 13 to 21 Nov 2024.
- (iv) The 31st edition of Singapore Indian Maritime Bilateral Exercise (SIMBEX) was conducted from 23-29 Oct 2024. RSS Tenacious of Republic of Singapore Navy along with Indian Navy's INS Shivalik of Eastern Fleet and Long-Range Maritime Patrol Aircraft P81 participated in the exercise. The Harbour phase of the exercise was held at Visakhapatnam from 23-25 Oct 24 which included Subject Matter Expert Exchanges (SMEEs), cross-deck visits, sports fixtures and pre-sail discussions. The Sea Phase was held on 28-29 Oct 2024, in the Bay of Bengal. The exercise saw advanced anti-air, anti-surface and anti-submarine exercises, seamanship drills and tactical manoeuvres further enhancing the interoperability between the two navies.
- (v) The 13th edition of Joint Military Exercise AGNI WARRIOR (XAW-2024), a three-day bilateral exercise conducted from 28th to 30th Nov 2024 between the Indian Army and Singapore Armed Forces.
- (vi) Indian Navy's First Training squadron (ITS) comprising INS Sujata, INS Shardul and ICGS Veera visited Changi Naval Base, Singapore from 06-09 Feb 25.

Tanzania

The 3rd Joint Defence Cooperation Committee (JDCC) between India and Tanzania was held at Goa from 26-27 Nov 2024. The meeting was co-chaired by JS(IC/AP). During the meeting, both sides discussed various areas such as Maritime Cooperation, Training and Cooperation in Defence Field etc. Tanzanian side was persuaded to co-host AIKEYME (multilateral Naval Exercise) in Dar-es-salaam in April/May 2025.

Thailand

- (i) The 13th edition of India-Thailand Joint Military Exercise MAITREE held from 01-15 July 2024 at fort Vachiraprakan in Tak Province of Thailand. The Last edition of the same exercise was conducted at Umroi, Meghlaya in Sept 2019.
- (ii) The 9th India-Thailand Defence Dialogue held in New Delhi on Dec 12, 2024. The meeting was co-chaired by Joint Secretary (International Cooperation) and Thailand's Deputy Permanent Secretary for Defence.

UAE

The 12th Joint Defence Cooperation Committee (JDCC) meeting between India and UAE was held in Abu Dhabi on 09 July 2024. The meeting was co-chaired by JS(IC/AP). In the side-lines of the JDCC, Staff Talks between the Navy and Army of the two countries were also conducted and Service specific cooperation was discussed in detail. Both sides agreed for institutionalization of Air to Air Staff Talks.

USA

- (i) Hon'ble RM led delegation visited USA from 23-26 Aug, 2024 to participate in a bilateral meeting with the US Secretary of Defence. During the visit, important bilateral defence cooperation activities were discussed.



The Union Minister for Defence, Shri Rajnath Singh meets the US Secretary of Defense, Mr. Lloyd Austin ahead of their bilateral meeting at Washington DC, in USA on August 23, 2024.

- (ii) Two agreements namely Security of Supply Agreement (SoSA) and Memorandum of Agreement between Indian MoD and US DoD on assignment of liaison officers were concluded in August 2024.
- (iii) Meeting of Hon'ble RM with Ms. Tulsi Gabbard, Director National Intelligence, US were held on 17 March 2025 on the side-lines of Raisina Dialogue. A wide range of issues on bilateral Defence Cooperation which include Defence and Information Sharing, aims to further deepen the India-US Partnership were discussed during the meeting.

Uzbekistan

- (i) 4th Joint Working Group (JWG) meeting on Defence Cooperation between India and Uzbekistan was held at Tashkent, Uzbekistan from 02-03 Apr 2024.
- (ii) The Chief of Army Staff visited Republic of Uzbekistan from 15-18 April, 2024, marking a significant step in bolstering the defence cooperation between India and Republic of Uzbekistan. During the visit, he interacted with the top defence leadership of the Republic of Uzbekistan. He also witnessed the Joint Exercise "DUSTLIK" between the Armed Forces of India and Uzbekistan, highlighting the interoperability and camaraderie developed between the two countries.

Vietnam

- (i) Indian-Coast Guard (ICG) Pollution Control Vessel Samudra Paharedar, with an integral helicopter, made a port call at Ho Chi Minh, Vietnam on April 02, 2024 as part of its ongoing overseas deployment to Association of Southeast Asian Nations (ASEAN) countries.
- (ii) Raksha Mantri visited the Vietnam Embassy in New Delhi on July 25, 2024 paid tribute, on behalf of the Govt and the people of India, to General Secretary of the Central Committee of the Communist Party of Vietnam Mr Nguyen Phu Trong, who passed away recently.
- (iii) The 14th India-Vietnam Defence Policy Dialogue took place in New Delhi on 01 Aug 2024. It was co-chaired by Defence Secretary Shri Giridhar Aramane and Deputy Minister of National Defence of Vietnam Senior Lieutenant General Hoang Xuan Chien. INS Kiltan visited Cam Ranh Bay, Vietnam on 12 May 24 This visit was poised to further strengthen the longstanding friendship and cooperation between the two maritime nations.

Multilateral – Meets / talks / exercises / trainings

- (i) A three-member MoD delegation led by JS(IC/AP) participated in the 1st Meeting of Heads of Structural Units of the Ministries of Defence of the SCO Member States responsible for International Military Cooperation held at Astana, Kazakhstan on 28.02.2024. The meeting was held in preparation to the SCO Defence Ministers Meeting (SCO-DMM) scheduled to be held on 26.04.2024 at Astana, Kazakhstan.
- (ii) Defence Secretary led the Indian delegation to Astana, Kazakhstan from 25-26 April 2024 for the Annual Meeting of the Defence Ministers' of Shanghai Cooperation Organization (SCO) Member States. The meeting reviewed the regional security issues within the SCO, including the defence cooperation initiatives. During the meeting, he delivered the India statement at the ministerial meeting. He also held meetings with Defence Ministers of the friendly countries of SCO, to discuss issues of bilateral defence cooperation.

- (iii) Shri Vishwesh Negi, JS(IC), MoD and Brig NS Grewal, Brig SD-3A, Army HQs attended the India-UN Strategic Dialogue at UN HQ, New York, USA from 18th to 19th Nov 2024.

Aero-India 2025

15th edition of Aero India-2025 was held from 10-14 Feb 2025 at Air Force Station, Yelahanka, Bengaluru, Karnataka. A total of 26 countries participated in 15th edition of Aero India event. During Aero India 2025, following were conducted:

Ministerial Level Interactions

Hon'ble Raksha Mantri engaged with defence counterparts from 13 countries including Fiji, South Sudan, Tanzania, Algeria, Zambia, Armenia, Malawi, Madagascar, Zimbabwe, Yemen, Ethiopia, Gambia, and Gabon.



Union Minister for Defence, Shri Rajnath Singh with Ms Aisha Mohammed (Eng), the Minister of Defence, Ethiopia in Bengaluru, Karnataka



Union Minister for Defence, Shri Rajnath Singh with the Minister of Defence, Zimbabwe Mrs Oppah Muchinguri Kashiri in Bengaluru, Karnataka.

Hon'ble Raksha Rajya Mantri conducted MoS level interactions with 13 countries: Italy, UK, Lesotho, South Africa, Maldives, Kyrgyz Republic, Philippines, Dominican Republic, Cyprus, Venezuela, Chad, Sri Lanka, and Armenia. Additionally, engaged with EVP International Development of Safran Aerospace Company on defence industry matters.

Secretary Level Engagements

Defence Secretary participated in MoS level interactions with UK and Italy, and Secretary level discussions with 9 countries: Israel, Sri Lanka, France, Mozambique, Nigeria, Nepal, Mauritius, Suriname, and Mongolia. The Defence Secretary also engaged with industry bodies including UK India Business Council and SIDM, and conducted strategic meetings with major defence companies: Rolls Royce, BAE Systems, Rosoboron Export, Safran, Asteria Aerospace, Leonardo, Dassault, and Raytheon Technologies



Multilateral

- (i) The 28th edition of the multi-national maritime exercise MALABAR 2024 held from 08-18 Oct 2024. The Opening Ceremony of MALABAR 2024 under the aegis of Eastern Naval Command was held on board Indian Naval Ship Satpura at Visakhapatnam on 09 Oct 2024. MALABAR, which was initiated in 1992 as a bilateral exercise between India and the US, gained further traction as a significant maritime engagement, with Japan and Australia joining in subsequently.
- (ii) The 4th edition of SITMEX, involving the navies of Singapore, India and Thailand, was conducted in the Bay of Bengal. The exercise aims to enhance interoperability and cooperation between the three navies. SITMEX 2024 included a harbour phase (Visakhapatnam from 23-25 Oct) with activities like subject matter expert exchanges and cross-deck visits, followed by a sea phase with advanced naval drills and tactical manoeuvres.
- (iii) Raksha Mantri attended the ASEAN Defence Ministers' Meeting Plus (ADMM-Plus) held in Vientiane, Lao PDR from November 20-22, 2024. He addressed the forum on Regional and International Security Issues during the meeting. On the side-lines of ADMM Plus, Raksha Mantri, held bilateral meetings with his counterparts from Malaysia, Lao, New Zealand, Republic of Korea, Australia, Japan and the Philippines.
- (iv) The 14th meeting of ASEAN Defence Ministers' Meeting-Plus (ADMM-Plus) Experts Working Group on Counter-Terrorism (EWG on CT) was held in New Delhi from 19-20 Mar 2025. Delegations from ASEAN Secretariat, ASEAN countries (Lao PDR, Malaysia, Indonesia, Myanmar, Singapore, Thailand, Malaysia, Philippines and Vietnam), ADMM-Plus member states (China, USA, Russia, Australia, Japan and Republic of Korea) participated in the meeting. India co-chaired the EWG on Counter-Terrorism for the first time. In the inaugural session, Defence Secretary Shri Rajesh Kumar Singh delivered the keynote address and interacted with participating head of delegations during the opening ceremony. He stated that terrorism remains a dynamic and evolving challenge with threats increasingly transcending borders. He highlighted India's efforts towards countering terrorism in the region, including adoption of Delhi Declaration during India's chairmanship of Counter-Terrorism Committee of the UNSC in 2022.
- (v) Chief of the Naval Staff flagged off the Navika Sagar Parikrama II expedition from Ocean Sailing Node, INS Mandovi, Goa on 02 Oct 2024. This landmark event marked a significant milestone in Naval ocean sailing history as the first ever circumnavigation of the globe on board a sailing vessel by Indian women in double handed mode. The expedition symbolises India's maritime endeavours, showcasing nation's prominence in global maritime activities and Indian Navy's commitment to excellence and women empowerment.

KEY INITIATIVES

Implementation of The Rights of Persons with Disabilities (RPwD) Act, 2016

Department of Defence, Ministry of Defence is making sincere efforts for effective implementation of The Rights of Persons with Disabilities (RPwD) Act, 2016. Disabled persons selected/nominated are appointed against vacancies reserved for them and also adjusted against unreserved vacancies as per instant instructions of DoP&T. The status as on 31st December, 2024 in respect of Group A, B & C with regard to the number of Persons with Disabilities is as under:-

Group	No. of Persons with Disabilities
A	76
B	601
C (Excluding Safai Karamchari)	3055
C (Safai Karamchari)	178
Total	3910

Posts/Vacancies for which Department of Defence, Ministry of Defence is not recruiting agency, are reported to UPSC/SSC etc. Recruitment to such vacancies are made on the basis of recommendation of UPSC/SSC etc.

Right to Information Act, 2005

Nodal RTI Section established in the Ministry of Defence to coordinate RTI-related work, transfer applications to concerned CPIOs/Public Authorities, and submit quarterly returns to the Central Information Commission.

Section 4(1) Compliance. Ministry's functions and functionaries uploaded on RTI portal – <http://mod.gov.in>.

Designation of Officers. Under Secretary/ Deputy Secretary/ Director level officers have been designated as CPIOs under Section 5(1) of the Act, according to the subjects being handled by them. Officers above the rank of CPIOs are designated as First Appellate Authorities in terms of Section 19(1) of the Act.

Application Handling Process. Central Registry forwards RTI applications/appeals to Nodal RTI Office for transfer to concerned authorities.

2024 Statistics: 21136 RTI applications and 222 First Appeals received (online & offline), promptly processed and transferred.

Transparency Measures. Updated list of CPIOs/First Appellate Authorities uploaded on Ministry's website. Also proactive disclosures as per Section 4 made regularly on the website.

Department of Defence Production



MINISTRY OF DEFENCE
Government of India

DEPARTMENT OF DEFENCE PRODUCTION

The Department of Defence Production (DDP) was set up in November 1962 with the objective of developing a comprehensive production infrastructure to produce the weapons/systems/platforms/equipment required for defence. Over the years, the Department has established wide ranging production facilities for various defence equipment through the Defence Public Sector Undertakings (DPSUs) and also facilitated private defence industry. The products being manufactured by these units include arms and ammunition, tanks, armoured vehicles, heavy vehicles, fighter aircraft and helicopters, warships, submarines, missiles, ammunition, electronic equipment, earth moving equipment, special alloys and special purpose steels.

AERO INDIA-25

Aero India 2025 marked the 15th edition of Asia's premier Aerospace and Defence Exhibition, held at Air Force Station, Yelahanka, Bengaluru, Karnataka from 11th to 14th Feb 2025. The mega biennial event's theme was 'Runway to a Billion Opportunities', showcasing the rise of a strong and self-reliant 'New India' by displaying India's growth in aerospace and defence capabilities. The focus was on showcasing indigenous equipment/technologies and forging partnerships with foreign companies, in line with the vision 'Make in India, Make for the world', for a secure and prosperous future. The event graced by the Hon'ble Raksha Mantri on the Inaugural day witnessed presence of 90 countries, 931 exhibitors, first ever Fly past with 53 aircrafts in the honor of the Hon'ble Defence Minister and a total footfall of 7+ lakh visitors over 05 days.

- (i) **Defence Testing Portal (DTP).** A centralised online Defence Testing Portal has been implemented as part of Digital DGQA Program for centralised, networked and optimal utilisation of Trial and Testing facilities of labs and firing ranges, by Indigenous Defence Industries. Phase wise on-boarding of Lab/ test facilities available with DGQA, DGAQA, DPSUs, DRDO, Industry and Academia is under progress. Defence Testing Portal was inaugurated by Hon'ble RM, during Aero India 2025 held at Bengaluru. Apart from onboarding of MoD Test facilities, the entities under Govt National Test House, Academia and Private firms are also being onboarded as Service Users and Service providers on Defence Testing Portal.
- (ii) **Release of Booklets on 'Defence Testing Capabilities' of DGQA.** Hon'ble RM had released eight booklets on Test Requirements for Defence Equipments/ Platforms on 10 Feb 2025, during CEO's Roundtable conference held on the sidelines of Aero India 2025.

Export Import Profile of Indian Defence Industry

- (i) **Defence Export.** India's Defence Exports have touched an all-time high of Rs. 23622 Cr in FY 2024-25, a growth of 12.04% over the last FY. Defence Export has been increased five folds in last 7 years. The important defence equipment exported include Weapon Simulators, Tear Gas Launcher, Torpedo Loading Mechanism, Alarm Monitoring & Control, Night Vision Monocular & Binocular, Light Weight Torpedo & Fire Control Systems, Armoured Protection Vehicle, Weapons Locating Radar, HF Radio, Coastal Surveillance Radar etc. Now Indian defence items are exported to more than 80 countries all over the world. The detail of export performance for last seven financial years is as under:

Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Export value (Rs in crore)	10746	9116	8435	12815	15920	21083	23622

- ii) **Defence Import.** The Directorate General of Foreign Trade (DGFT) have delegated powers to the Department of Defence Production (DDP) for grant of license for import of restricted items only, for defence use. The Standard Operating Procedure for issue of Import License for import of restricted items only for defence use has been notified and published on the website.

Defence Production

DDP has marked a milestone by reaching Value of Production (VoP) of 1.5 lakh crores (provisional) in FY 2024-25. The value of production for the last five years is as follows:

Year	DPSUs (In crores)	New DPSUs (erstwhile OFB) (In crores)	Non DPSUs (In crores)	Private Companies (In crores)	Total (In crores)
2020-21	46711.00	14635.00	6029.00	17268.00	84643.00
2021-22	55790.00	11913.00	7222.00	19920.00	94845.00
2022-23	63466.00	16998.00	7137.00	21083.00	108684.00
2023-24	74434.00	19551.00	6774.00	26675.00	127434.00
2024-25 Q1	13587.00	3580.00	1982.00	6080.00	25229.00
2024-25 Q2	17643.00	4551.47	2279.00	7496.00	31970.00
2024-25Q3 *(Provisional)	19032.00	4664.74	1273.67	7532.00	32502.00
Total	50262 .00	12797.00	5535.00	21108.00	89701.00

Licensing in Defence Sector

Defence Licenses increased from 215 licenses in 2014 to 728 licenses in Dec 2024. 134 companies covering 203 licenses have either reported commencement of production to DDP, MoD or have received permission for commencement of production from MHA till December 2024.

FDI policy in Defence Sector

- (i) As on date, 46 proposals/ Joint Ventures have been approved in defence sector.
- (ii) Cumulative FDI inflow value for the period spanning from the opening up of Defence sector till December 2024 is over Rs. 5516.16 crores.
- (iii) Total FDI inflow in the period from April 2014 to December 2024 is 4128.04 crores.

Major achievements in field of Indigenisation

The initiatives towards self-reliance in Defence Manufacturing are aimed to promote local manufacturing of the LRUs/ Systems/ Sub-systems/ Assemblies/ Sub-assemblies/ Spares & Components/ Raw Materials etc. required for Defence Platforms and to reduce imports by the Defence PSUs (DPSUs). In this direction, Five Positive Indigenisation Lists (PILs) consisting of 5012 critical items of DPSUs have been notified by DDP, of which 3025 items have been indigenised.

The Ministry of Defence (MoD) has launched an indigenization portal named 'Srijandefence.gov.in' in Aug, 2020. More than 38000+ defence items have been uploaded by the Defence PSUs (DPSUs) and Service Head Quarters (SHQs) on Srijan Portal for indigenisation by Industry. More than 13900 items have been successfully indigenised since the launch of Srijan Portal. From Jan 24 to Dec 24, 3402 items of Srijan Portal including 105 PIL items have been indigenised.

Department of Defence Production, Ministry of Defence has launched a key initiative named as "MISSION RAKSHA GYAN SHAKTI" (MRGS) in the month of April 2018 for creation and management of Intellectual Property Rights of Defence PSUs in Indian Defence sector. DPSUs have filed total 6187 IPR applications, out of which 2901 IPR have been Granted/ Registered.

In order to engage the budding Startup community for Defence Innovation, the Innovations for Defence Excellence (iDEX) was launched in Apr 2018. Innovations for Defence Excellence, managed by Defence Innovation Organization (iDEX-DIO) is proactively pursuing multiple objectives including seeding of defence enterprises, self-sufficiency and indigenization in defence production thus leading to better defence preparedness, shortened procurement cycle, reduction in costs, reverse brain drain, creation of jobs etc.

Developing Artificial Intelligence based capabilities

Department of Defence Production constituted a Task Force in February 2018 to study the strategic implications of Artificial Intelligence in National Security and Defence needs and to make appropriate recommendations. The Task Force submitted its recommendations to Ministry of Defence in June 2018. Based on the recommendations of the Task Force, Defence AI Council (DAIC) headed by the Hon'ble Raksha Mantri was established to provide necessary guidance to enable and effect development or tailoring of operating framework, policy level changes and structural support for AI implementation in Defence. A Defence AI Project Agency (DAIPA) with Secretary (DP) as the ex-officio head of the agency was also established to enable the design, development and production of AI based systems and AI based processes across the services and other defence organizations.

To implement the recommendations, AI roadmap for Defence PSUs was finalized for creating AI based products/technologies relevant to their platforms and earmark appropriate funds for the same. Total 146 AI enabled projects have been undertaken by DPSUs, out of which 77 products have already been developed by DPSUs till March 31st, 2025. Also, an AI Maturity Model has been developed to help organizations evaluate their current AI capabilities.

Defence Public Sector Undertakings (DPSUs)

There are sixteen Central Public Sector Undertakings under the administrative control of the Department of Defence Production, Ministry of Defence, as follows:

(I) Hindustan Aeronautics Limited (HAL)

Hindustan Aeronautics Limited (HAL) is a Maharatna Public Sector Undertaking and a premier aeronautics company in South Asia under the Ministry of Defence, Govt of India. The Company operates with 21 Divisions and 09 R&D Centers spread across 7 States and 10 geographical locations in India and is ranked 31st Among Global Aerospace Companies by Sales.

HAL has indigenously designed and developed 17 types of aircraft and helicopters. In addition, HAL has produced 14 types of aircraft and helicopters under license from global companies. So far, HAL has produced 4324 aircraft, 5590 aero-engines and has carried out 12584 overhauls of aircraft and 37148 overhauls of engine, besides manufacture and overhaul of related accessories and avionics.

During the year, HAL has filed 208 IPR applications which cumulatively amount to 2620 IPRs filed by company. Further, 94 IPRs have been granted during the year taking cumulative IPRs held by the organization to 1127 (Patents - 371, Industrial Designs - 171, Copyrights -583, Trademark - 2).

Major achievements.

- Hon'ble Raksha Mantri, Shri Rajnath Singh visited LCA MK1A production facility in Bengaluru on February 9, 2025.



Hon'ble Raksha Mantri, Sh. Rajnath Singh at LCA MK1A production facility in Bengaluru in February 2025

- HAL received Restricted Military Type Certificate for HTT 40 from Rajya Raksha Mantri, Shri Sanjay Seth during Aero India 2025.



HAL receiving Restricted Military Type Certificate from Hon'ble Rajya Raksha Mantri during Aero India 2025

- HAL's upgraded Hindustan Jet Trainer, HJT-36 `YASHAS' was unveiled on February 11, 2025. Shri Sanjeev Kumar, Secretary (DP) unveiled the new name in the presence of Dr D K Sunil, CMD, HAL and senior officers during Aero India 2025.



HAL's upgraded Hindustan Jet Trainer, HJT-36 `YASHAS' was unveiled in February, 2025

- HAL handed over the first AL-31FP Aero Engine of Su-30MKI under 240 engine contract, to IAF on September 30, 2024 in Koraput in the presence of Shri Sanjeev Kumar, Secretary (Defence Production).



HAL handing over the first AL-31FP Aero Engine of Su-30MKI to IAF in September, 2024 in Koraput in the presence of Shri Sanjeev Kumar, Secretary (Defence Production)

- HAL became the 1st Defence PSU to achieve the prestigious "Maharatna" status on October 12, 2024.
- First run of improved PTAE-7 engines in TWIN engine configuration for CATS-W application completed on November 21, 2024.
- Airframer Contract signed with SAFHAL Helicopter engines Pvt. Ltd. on August 30, 2024 for Design, Development, Manufacture and Supply of engines for IMRH and DBMRH.

(II) Bharat Electronics Limited (BEL)

BEL is a Navratna Public Sector Undertaking under the Ministry of Defence (MoD) and globally recognised electronics engineering company. BEL has been at the forefront of empowering the Indian Defence Forces and the Nation with breakthrough solutions.

Major Achievements.

- BEL developed a significant technological upgrade to THD-1955 Radar System under 'Atmanirbhar Bharat' initiative. The digitized THD 2.0 Radar was inaugurated by Air Marshal V Rajashekhar, DG (System) at Barnala on 29th July 2024.
- BEL was conferred with SIDM Champion Award for the year 2024 from Hon'ble Raksha Mantri, Shri. Rajnath Singh under the category Import Substitution for the development of Thermal Imager Technology modules for T90 Tanks. BEL is the only DPSU to receive the SIDM Championship Award 2024.
- BEL successfully completed delivery of 100 Control Centres for the indigenous Air Defence Control and Reporting System (Akashteer), keeping up its promise made to the Army Air Defence.



BEL has completed delivery of 100 Control Centres for Air Defence Control & Reporting System (Akashteer)

(III) BEML Ltd

BEML Limited, incorporated in 1964, is a schedule 'A' Public Sector Undertaking, under the Ministry of Defence engaged in the design, development, manufacturing and after-sales –service of a wide range of products for core sectors of economy such as Coal, Mining, Steel, Cement, Power, Irrigation, Construction, Road Building, Defence, Railway and Metro transportation system & Aerospace. BEML is a listed Company and Government of India holds about 54% of the total paid up capital of the Company.

BEML operates in three business verticals - Mining & Construction, Defence & Aerospace and Rail & Metro which is based on specific product mix. Further to have focused approach in different areas within the business verticals, the present business verticals of BEML have been restructured into 11 Strategic Business Units (SBU's) viz. Mining, Construction, Sustenance, HMV, Armoured, Commuter Rail, Metro Rail, International Business Division, Hydraulics & Powerline, Engine and Aerospace. Further 2 micro SBUs viz. SEZ & Maritime are created under SBU Aerospace.

Major Achievements.

- BEML has full-fledged Research & Development (R&D) Centres. During the year, R&D has taken initiatives for in-house design and development of high technology products, aggregates and up-gradation of existing products, including up-gradation to meet emission compliance wherever applicable and engineering of safety features as recommended by regulating authorities in all the three business verticals.
- In Defence and Aerospace, development and Maiden test-firing of India's First indigenously made 1500 HP engine for Main Battle Tank was accomplished at Mysore Complex. BEML has successfully handed over the first Strap on Base Shroud (SBS) structure to VSSC, ISRO for LVM 3 Program. BEML received contract for manufacture and supply of 56 numbers of Mechanical Minefield Marking Equipment (MMME) Mark-II, and 21 Nos. Command Post Vehicle (CPV) from MoD.
- In Mining and Construction, BEML Commencement of supply of India's first indigenously designed and developed 21cu.m electrical Rope shovel BEML, Kolar Gold Fields Complex.
- In Rail and Metro, Commencement of production of India's maiden Vande Bharat sleeper trainset prototype at BEML's Bangalore complex. BEML has handed over the first rake of indigenously built Rail Grinding Machine (RGM96) to M/s LORAM, USA during the year. Trial run of BEML designed & manufactured metro coaches supplied to Kolkata was commenced through India's first underwater river tunnel at Howrah. BEML received contract for manufacturing of 318 Metro cars from BMRCL.



VANDE BHARAT SLEEPER TRAIN

(IV) Bharat Dynamics Limited (BDL)

Bharat Dynamics Limited (BDL), a Miniratna Category-I Company was incorporated in the year 1970 under the MoD to manufacture SS11B1 ATGM and supply to Indian Army. A pioneer in the manufacture of Anti-Tank Guided Missiles (ATGM), since its inception it has been catering to services and grew from single product single customer to Multi product Multi customer. Presently it manufactures three types of ATGMs (Konkurs-M, Milan-2T, and Invar). It also manufactures Akash SAM for IAF and IA. Today BDL has well marked foot print in the Indian Defence market.

Major achievements.

- Hon'ble RRM Shri Ajay Bhatt flagged off the indigenously developed and manufactured Astra Missiles for supply to the Indian Air Force on 14th Jan 24 at Kanchanbagh, BDL, Hyderabad.
- As part of Internal Evaluation trials, Milan-2T Anti-Tank Guided Missile (ATGM) with Indigenous critical sub systems successfully test fired on 07th Dec 24 at MHOW.

(V) Garden Reach Shipbuilders & Engineers Limited (GRSE)

GRSE, a Mini Ratna, Schedule- A Company, under the administrative control of Ministry of Defence, has built over 790 platforms including 110 warships for Indian Armed Forces and friendly foreign countries - highest warships built & delivered by any Indian shipyard till date. GRSE is currently engaged in the construction of 42 vessels across ten projects. Among these, 17 are warships being built for the Indian Navy which include three **P-17A Stealth Frigates**, two **Survey Vessel (Large)**, eight **Anti-submarine Warfare Shallow Water Crafts (ASWSWC)** & four **Next Generation Offshore Patrol Vessels (NGOPV)**.

Major achievements.

- **Deliveries:** 2nd Survey Vessel Large (SVL) 'Nirdeshak' to IN on October 08, 2024 & 02 New Technology Platforms (NG Electric Ferry '**DHEU**' to Government of West Bengal on January 09, 2025 & USV '**Jal Doot**' to DRDO on October 28, 2024).
- **Launchings:** Simultaneous Launching of 02 ASW-SWCs on March 13, 2024 & 01 ASW-SWCon October 25, 2024.
- **Keel-Laying:** Simultaneous Keel Laying of 02 NGOPVs on November 05, 2024 and 01 ASW-SWC on May 10, 2024.
- GRSE achieved highest ever Annual Turnover of Rs. 4750 Crore (Prov. & Unaudited) for FY 2024-25 registering 43% CAGR during last 05 years.
- The 2nd Edition of 'GRSE Accelerated Innovation Nurturing Scheme - GAINS 2024' was launched by the Hon'ble Raksha Rajya Mantri, Shri Sanjay Seth on July 10, 2024 at GRSE, Kolkata.
- GRSE became the first DPSU Shipyard in the country to secure 100 IPRs granted/ registered by the Govt. of India on July 10, 2024.
- Upgradation of GRSE from Schedule B to Schedule A on September 17, 2024.

(VI) Goa Shipyard Limited (GSL)

Goa Shipyard Limited (GSL), a Mini-Ratna Group-I status company, has proven capabilities of in-house design and is building sophisticated high technology warships for Indian Defence Forces and other varied clients, including export market. GSL has excelled in its core competencies in the areas of design and construction of a wide range of warships such as Frigates, Missile Crafts, Patrol Vessels, Landing Crafts, Training Vessels, Survey Vessels, Sail Training Ships, Fast Patrol Vessels, etc.

Major Achievements

- Delivery of 1st LPG Cylinder Carrier vessel Yard 1261 to Union Territory Lakshadweep Administration on July 19, 2024.
- Launching of 1st Missile Frigate Yard 1258 for Indian Navy by Adv. Smt. Rita Sreedharan in presence of Shri P.S. Sreedharan Pillai, Hon'ble Governor of Goa on Jul 23,2024.



Launching of 1st Missile Frigate Yard 1258 for Indian Navy

- Launching of 1st Pollution Control Vessel Yard 1267 for Indian Coast Guard by Smt. Neeta Seth in presence of Shri Sanjay Seth Hon'ble Raksha Raja Mantri on Aug 29,2024.



Launching of 1st Pollution Control Vessel Yard 1267 for Indian Coast Guard

(VII) Hindustan Shipyard Limited (HSL)

Hindustan Shipyard Ltd., the largest and strategically located shipyard on the east coast at Visakhapatnam, Andhra Pradesh, is the nation's premier shipyard engaged in shipbuilding, ship repairs, submarine refits as well as design and construction of sophisticated state-of-the-art offshore and onshore structures.

Awards

- **PSU Samarpan Award.** CMD was honoured with "PSU Samarpan Award" by GovConnect, an initiative by ilouge Media in recognition to his exemplary leadership in driving the transformation of Shipyard on 03 May 24 at New Delhi.
- **14th PSE Excellence Awards.** HSL received three Awards in the categories of 'CMD of the year' and 'Contribution of Women in PSEs' and 'CSR & Sustainability' organized by PSE Excellence in their 14th edition at Delhi on 21st Dec 24.

(VIII) Mazagon Dock Shipbuilders Limited (MDL)

Mazagon Dock Shipbuilders Limited (MDL) is the leading Shipyard amongst all Defence PSU Shipyards engaged in construction of Warships and Submarines. MDL is the only shipyard in India with proven capability of building Destroyers and two different types of conventional Submarines for the Indian Navy with its facilities located in Mumbai and Nhava. MDL is also one of the unique Shipyards in the world with such diverse range of products.

Major Achievements.

- MDL celebrated 250 years of successful operations in May 2024, marking a significant milestone that demonstrates resilience and growth.
- MDL was awarded Navratna Status by the DPE in June 2024. Thus, MDL has become the first amongst the government owned shipyards of the country having “Navratna” status.
- Fourth Guided Missile Destroyer of Project 15B, INS Surat and First Stealth Frigate of Project 17A, INS Nilgiri were delivered to the Indian Navy on 20 Dec 2024.
- Sixth Scorpene Class Submarine of Project 75, INS Vaghsheer was delivered to the Indian Navy on 09 Jan 2025.



Delivery of INS Vaghsheer to India Navy

(IX) Mishra Dhatu Nigam Limited (MIDHANI)

MIDHANI, a listed PSU (Mini Ratna-I) based at Hyderabad, is one of the few integrated and modern metallurgical plants in the world manufacturing a wide range of Superalloys, Titanium and Titanium alloys and Special Steels in various mill forms using state-of-the-art production facilities.

MIDHANI, incorporated under the companies act as public sector undertaking (PSU) in November 20, 1973, was conceived to help India achieve self-reliance in the manufacture of a wide spectrum of critical and complex alloys. MIDHANI Armour facility at Rohtak has been setup to meet the requirements of personal as well as group protection equipment for Tri-Services, CAPFs and State Police like Vehicle armouring, BP Jackets, Helmets, etc.

MIDHANI is playing a significant role for supplying materials to various strategic sectors like Space, Defence and energy since its inception.

Major achievements

- Development of alloy IHTA (for AUSC project) & Superni 41 (for Aerospace Applications) and same was recognized by Hon'ble Raksha Mantri in SAMRTHYA event at Aero India 2025, Bengaluru.
- Introduction of new technique in Cast sticks manufacturing resulting in increased yield by 20% and highest ever cast alloy sticks production from VIM 600 kg.

(X) Munitions India Limited (MIL)

Munitions India Limited [MIL] is a Defence Public Sector Enterprise [CPSE] under the Ministry of Defence, Government of India, established on Oct 01, 2021, after incorporation of erstwhile Ordnance Factory. MIL, the India's biggest manufacturer and market leader is engaged in Production, Testing Research & Development and Marketing of comprehensive range of ammunition & explosives for Army, Navy, Air force & Para-Military Forces. MIL's Product portfolio includes ammunition, explosives, pyrotechnics, and other defence-related products. Munition India Limited is known for its high- quality products that meet the strict standards and requirements of the Indian Armed Forces, Para Military Forces & Exports.

Major achievements

- Substitution of "Significant Accounting Policy" with "Material Accounting Policy Information" and adoption of MIL Ind-AS Material Accounting Policy Information.
- Identification and Classification of Units of MIL based on the respective location for the purpose of posting and deployment of Officers (GO-A & GO-B) and Identification of Section/ Sub-Groups in units of MIL as Core & Non-Core section for the purpose of Manpower deployment.
- MIL IT Policy: Scale of Authorization for IT hardware (Laptop/Notebooks/Phablet/Ultrabook/ Notepad/Similar devices) and MIL IT Policy: Scale of Authorization for Communication Equipment for Senior Executive were framed during the financial year 2024-25.

(XI) Armoured Vehicles Nigam Limited (AVNL)

Armoured Vehicles Nigam Limited (AVNL) is a newly formed, fully owned Government company which commenced its operations w.e.f. 01.10.2021 and was established on 14th Aug, 2021.

AVNL has adopted care and concern for the People and the Planet as one of its core business philosophy, which is reflected its Corporate Social Responsibility (CSR) activities. AVNL's Flagship CSR initiative for partnering with Indian Army for providing education, skilling, wellness and mentorship to border area children in J&K has received recognition at the National Level.

(XII) Advanced Weapons & Equipment India Limited (AWEIL)

AWEIL is one of the seven (7) new Defence PSUs, incorporated by converting the erstwhile OFB into fully owned Government of India Enterprise. AWEIL has been incorporated under the Companies Act 2013 on 14th August, 2021 and commenced its business on 1st October 2021. It comprises eight production units and two non- production units.

Major Achievements.

- Ordnance Factory Tiruchirappalli (OFT) a unit of AWEIL has installed a new state of the art Hard Chrome Plating plant. It is an automatic plant having automatic material handling and effluent treatment system with minimum recyclable discharge. This will greatly improve the quality of plating of barrels and drastically reduce RFR and rejections.
- Ordnance Factory Medal (OFMK), a unit of ANVL, signed a Memorandum of Understanding (MoU) with HQ Telangana & Andhra Sub Area (TASA), Secunderabad, under CSR Initiative. The MoU facilitates the procurement and supply of medical equipment to Ex-Servicemen Contributory Health Scheme (ECHS) polyclinics, aiming to enhance healthcare services for veterans and their families.

(XIII) Troop Comforts Limited (TCL)

Troop Comforts limited is a Defence Public Sector Enterprise under the Department of Defence Production of Ministry of Defence, Government of India with corporate office at Kanpur. TCL incorporated on 16th August 2021 under the companies Act, 2013(18 of 2013) with 100% equity share held by Government of India. TCL is a conglomerate of 04 manufacturing units (OEF, Kanpur, OCF Shahjahanpur, OCF Avadi, OEF, Hazratpur & a Training Institute TCLTA).

TCL is having expertise of more than 160 years to provide solutions to take care the requirements of Troop Comforts range of items operating in the ambient temperature ranges of +500 C to -500 C (Desert to Glacier). TCL is engaged in production, testing, Research & Development and marketing of a comprehensive product range of troop comforts items.

Major Achievements.

- Implementation of Performance Linked Incentive Scheme (PLI) in TCL manufacturing units to motivate the industrial employees of TCL to increase the productivity.
- Associating TCL in the user driven Product Improvement drive of Indian Army for troop comforts items.
- During the reported year, TCL has also established production lines for the manufacturing of new items of Indian Army such as Bag Sleeping Light Weight, Mattress ECC and Boot High Ankle PU Rubber Sole & Tent High Altitude.
- During the said year, TCL has developed indigenous version of following ex-import items under ATMANIRBHAR BHARAT, which were being imported by Indian Army:
 - a) Boot Crampon for super high altitude areas up to -50⁰ C temperature.
 - b) Modular Gloves for super high altitude areas up to -50⁰ C temperature.

(XIV) Yantra India Limited (YIL)

Yantra India Limited (YIL), a fully owned Government of India, Enterprise, under Department of Defence Production, Ministry of Defence has been incorporated under Companies Act 2013

and is operational from 1st October 2021. YIL is engaged in production of Ammunition Hardware and Ordnance Components. YIL strives for primary objective of "Atmanirbhar"- सशस्त्र सेनाओं का सशक्तिकरण - self-reliance in equipping the armed forces with state-of-the-art battlefield equipment. Yantra India Limited is a conglomerate of 8 production units, Training Institute, and Marketing Centre. The production units are located in West Bengal (2), Uttar Pradesh (1), Madhya Pradesh (2), Maharashtra(3).

Major Achievements.

- YIL had orders of Rs. 750 Cr. for supplying various types of Railway axles to Indian Railways/ CONCOR and supplied Axles worth Rs. 317 Cr. during the F.Y. 2024-25.

(XV) India Optel Limited (IOL)

India Optel Limited (IOL), a Schedule 'B' Public Sector Undertaking is primarily engaged in production of Opto-Electronics Systems for Services and MHA.

IOL is headquartered at Dehradun (Uttarakhand) with two manufacturing units at Dehradun and one unit at Chandigarh. In addition, IOL also operates 'Ordnance Factories Institute of Learning' for the training of its own manpower in all cadres and for the training of personnel of its customers in operation and maintenance of the various equipment made by IOL.

(XVI) Gliders India Limited (GIL)

Gliders India limited is Government of India Undertaking under the Department of Defence Production and was incorporated on 14th August 2021 as a company 100% owned by GOI. Ordnance Parachute Factory is the only production unit under Gliders India limited and was established in the year 1941 at Kanpur (UP), India.



Other Offices under Department of Defence Production (Attached/ Subordinate)

(I) Directorate General of Quality Assurance (DGQA).

Directorate General of Quality Assurance (DGQA) is an Inter-Service Organisation functioning under the Department of Defence Production in the Ministry of Defence. DGQA is responsible for Quality Assurance of all defence stores and equipment, both imported as well as indigenous for the Indian Army, Navy (excluding Naval Armaments) and common user items for the Air Force procured from Defence Public Sector Undertakings (DPSUs) and Private Sector.

Important policy decisions taken during the year

- (a) **Reorganisation of DGQA:** Approval for reorganisation of DGQA was issued by MoD/DDP on 15 Mar 2024. In the re-organised structure, existing 95 establishments have been merged/reorganized into 53 establishments for facilitating product based QA services to Industry. In addition, 09 Technical Directorates have been consolidated into 06 by merging 03 Tech Dtes. The Technical Directorates of DGQA have been aligned to the line directorate of Army and CQAs have been reconfigured as Product Centric Nodal AsHSP. An SOP on hierarchical functioning of reorganised DGQA and accountability has also been promulgated.
- (b) **SOP on Provisioning of PSCs and Consumables.** A comprehensive SOP has been formulated by DGQA, in consultation with all stakeholders, to lay down guidelines for provisioning of various types of PSCs & Consumables, required for Proof/Trial/Testing of weapons and ammunition.

Main activities and important happenings of interest:

- a) **Digital DGQA Programme.** The programme includes Web portal based Enterprise Resource Planning (ERP) Application for Automation of DGQA Technical processes, Secured Networking amongst DGQA Entities and secured C-DAC BOSS Operating System for all the PCs of the Organisation.
- b) **Industry 4.0/ QA 4.0.** A total of 511 products across all DPSUs have been selected for adoption of Industry 4.0, which shall automate nearly 2923 processes at production stage. Similarly for QA 4.0, a total of 217 products incorporating 3029 processes are being selected for automation at Quality Assurance stages.
- c) **Enhancement/ Widening of Policy for Green Channel Scheme (GCS) & Self Certification Scheme (SCS).** Review of policy on Green Channel Status policy and Self-Certification Scheme is under progress to bring in more defence industries under the ambit of Green Channel/ Self Certification Status. The salient features of the schemes are being reviewed to make the schemes more attractive.

Important Contributions

- a) **Methodology to Reduce Time for Trials.** Instructions regarding reduction/ optimisation of timelines in carrying out Tech evaluation by DGQA Estts have been issued. The salient aspects of the instructions issued are as under: -

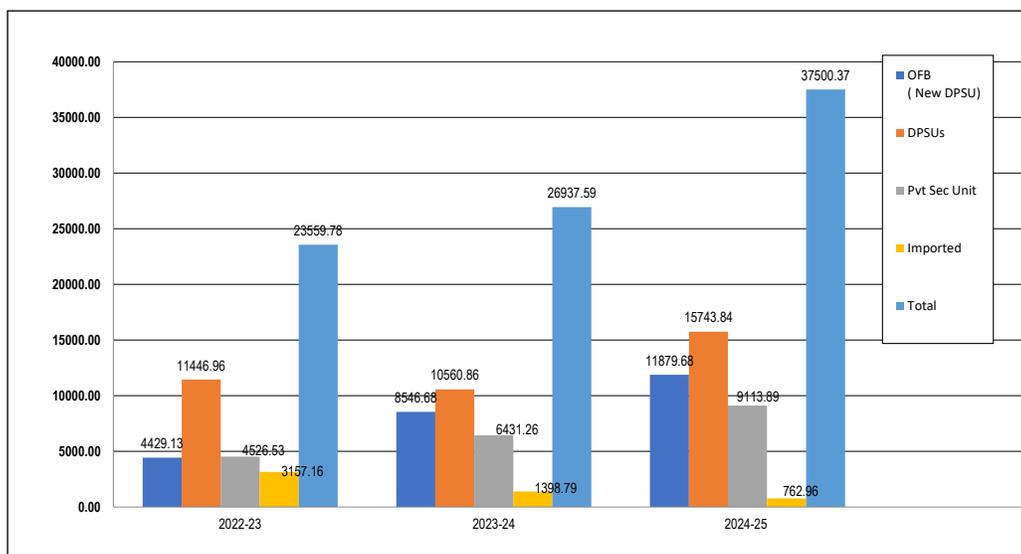
- (i) Acceptance of SDoC/ CoC for non-critical parameters.
- (ii) Concurrent evaluation in Equipment Under Trials (EUTs).
- (iii) Non repetition of tests at evaluation stage if the same is already carried out at Design / Development stage.
- (iv) Creation of additional test facilities.

Major Achievements

a) **Promotion of MoD Schemes.** Under the government’s policy of “**Make in India**” and “**Ease of Doing Business**”, a number of new Govt Schemes were launched and implemented. Till 31 Mar 2025, the details of achievements are given below: -

SI No	MoD Scheme	Achievements
(i)	Green Channel Status	Granted to 31 Firms comprising of 123 equipment & 38,216 items.
(ii)	Self-Certification Scheme	Granted to 21 Firms comprising of 58 equipment and 11,643 spares
(iii)	Third Party Inspection	08 Firms registered till date for 17258 items (04 Registration valid as on 31 Mar 2025)
(iv)	Defence Export Promotion	‘Fit for Military Use Cert’ issued to 06 firms for 12 Vehicles/ Equipment
(v)	iDEX Projects	DGQA is presently associated with 78 iDEX Projects

b) **QA Work Load.** Value of Defence stores inspected by DGQA since last 03 years, are :



(II) Directorate General of Aeronautical Quality Assurance (DGAQA).

Directorate General of Aeronautical Quality Assurance (DGAQA) is the Government Quality Assurance (GQA) Regulatory Authority for Quality Assurance and final acceptance of Military Aircrafts, Unmanned Aerial Vehicles, Aero engines, Airborne Systems, Avionics, Armaments, Consumables (Aviation Grade Fuel, Oil & Lubricants), Allied Ground Systems and Missiles during Design & Development, Production, Repair, Modification, Life Extension and Overhaul at various Defence Public Sector Undertakings (DPSUs), Ordnance Factories-Defence Public Sector Units (OF-DPSUs), DRDO Labs, Oil Refineries and Private Firms.

The primary role of DGAQA is to perform Government Quality Assurance (GQA) functions in respect of military aviation and allied stores. DGAQA provides technical consultancy to the User Services, Ministry of Defence and Design & Development/Production/Maintenance, Repair & Overhaul Agencies. DGAQA participates in Defect Investigations and Court of Enquiries related to aircraft accidents/incidents. DGAQA is also involved in Capacity Assessment & Registration of Firms and Test Labs.

DGAQA is the nodal agency for Military System Quality Assurance Agency (MSQAA) and Strategic Systems Quality Assurance Group (SSQAG).

Major Achievements.

- **Revision of DDPMAS document:-** IMAP- 23 (Indian Military Airworthiness Procedure) document has been jointly prepared by DGAQA and CEMILAC which will align Indian Military Airworthiness Practices with best International Practices and Global Standards.

(III) Directorate of Standardization (DoS).

Directorate of Standardisation (DoS) is the nodal organization under Department of Defence Production (DDP), Ministry of Defence for steering, directing & coordinating Standardisation and Codification activities in the Ministry of Defence with an aim to achieve entry control, variety reduction and optimization/ rationalisation of Defence inventory.

During the year, total of 11,259 items were codified. Codification of 94 Common use equipment (with Three/Two- Service use) comprising of 43,394 items including spares in the inventory of the Services has been completed during the year.

(IV) Directorate of Planning & Coordination (Dte. of P&C).

The Directorate of Planning and Coordination, an attached office of Department of Defence Production, was established in 1964. The Directorate is primarily mandated to formulate various enabling policies under 'Atma Nirbharta' initiative to encourage participation of domestic Industry in design, development and manufacture of defence equipment through various routes such as Make Procedure; encourage preference to procurement from indigenous route for capital requirements of Services; handhold and galvanize the startup ecosystem and foster a sustained culture of innovation through iDEX Scheme and formulate policies to provide level playing field to private sector.

In addition, the Directorate renders advice on capital acquisition proposals of Service Headquarters and also plays key role in streamlining of Defence Acquisition Procedure (DAP). The Directorate also plays pivotal role in speeding up the on-going efforts for modernization of Naval Shipyards.

(V) Defence Exhibition Organization (DEO).

The Defence Exhibition Organisation (DEO) was established in 1981 with the main charter to organize and coordinate Aerospace and Defence (A&D) exhibitions in India and abroad. DEO, through these exhibitions promotes export potential of indigenous Aerospace and Defence sector and its ecosystem. The exhibitions conducted offer an excellent opportunity to show case the capabilities of the Indian Defence Industry. The shows are conducted on an international level. The forum also facilitates interaction with senior foreign delegations. The primary objective is to promote defence export from both the Defence Public Sector Undertakings (DPSUs) and the Indian Pvt Public Sector industries.

(VI) Directorate of Ordnance (Coordination & Services).

The Union Cabinet decided to corporatize functions of 41 production units (Ordnance Factories) of the Ordnance Factory Board (OFB), functioning under the Department of Defence Production, Ministry of Defence on 16th June, 2021. The management, control, operation and maintenance of 41 production units was handed over to newly formed 7 DPSUs namely Munitions India Limited (MIL), Armoured Vehicles Nigam Limited (AVNL), Troop Comfort Limited (TCL), India Optel Limited (IOL), Advanced Weapons and Equipment India Limited (AWEIL), Yantra India Limited (YIL), Gliders India Limited (GIL) w.e.f 1st October, 2021. Under restructuring of Ordnance Factories Organization, Ordnance Factory Board (OFB) was dissolved w.e.f. 1st October, 2021 and Headquarter formation of OFB was renamed as Directorate of Ordnance (Coordination & Services).

The Directorate has following composition:

- a) DoO(C&S), Kolkata consisting of 6 Divisions – OF Hospitals & Schools; Group-B officers; NIEs & IEs; Budget & Assets Management; Administration & Coordination and IT. 7 Field units located at Ambajhari, Avadi, Dehradun, Jabalpur, Kanpur, Khadki, and Kolkata
- b) DoO(C&S), Delhi consisting of 2 Divisions namely Gr 'A' Gazetted and New Defence Companies

(VII) Defence Offsets Management Wing (DOMW).

Defence Offsets Management Wing (DOMW), under the Department of Defence, is responsible for formulation of Defence Offset Guidelines and all matters related to post offset contract management.

Defence Offset Guidelines have been continuously evolving based on the experience in management of offset contracts. Amendments in these Guidelines have been carried out from time to time in consultation with the stakeholders, which have facilitated faster conclusion of procurement contracts, significant progress in implementation of offset contracts and increased verification of offset discharge claims. Private sector has become increasingly competitive in becoming Indian Offset Partner (IOP) with the foreign OEMs and correspondingly the prospects of private sector investment in defence manufacturing have significantly improved.

The list of items requiring license has been significantly pruned and most of the components have been taken out from the purview of licensing. Hence many eligible items under defence offsets are being manufactured by IOPs in the private sector without the requirement of an industrial license. As on date, the numbers of Indian Offset Partners (IOPs) undertaking offset obligations for the foreign vendors have increased to more than 350 out of which 146 IOPs are MSMEs. As of 31st Dec, 2024 offset amounting to US \$ 6.00 Billion have been successfully completed and claimed by the foreign vendors from the beginning of offsets.

Others Institutes/Divisions/Cell

(I) National Institute for Research and Development in Defence Shipbuilding.

NIRDESH is a Society of the Ministry of Defence/ Department of Defence Production (MoD/DDP), registered under the Societies Registration Act XXI of 1860 on 20th November 2010. NIRDESH is guided by a General Body (GB) and Board of Governors (BoG) and the functioning is under the directions of an Executive Committee (EC). The member organizations are Indian Navy (IN), Indian Coast Guard (ICG), DRDO and four DPSU Shipyards. NIRDESH, was set up with a vision of achieving self-reliance in warship and submarine building. NIRDESH is now in the process of restructuring as a society of DPSU shipyards with Indian Navy, Indian Coast Guard and DRDO as co-opted members. The re-constituted Board of Governors (BoG) will be headed by CMD MDL.

(II) Defence Industrial Corridors.

To fillip domestic defence production and create defence manufacturing ecosystem in the country, Government of India has established two Defence Industrial Corridors (DICs), one in Uttar Pradesh with 6 nodes viz. Agra, Aligarh, Chitrakoot, Jhansi, Kanpur & Lucknow and another in Tamil Nadu with 05 nodes viz. Chennai, Coimbatore, Hosur, Salem and Tiruchirapalli.

The Major areas of investments in these Corridors are Drones & UAVs, Ammunitions& Explosives, Small Arms, Advance Composites, Optical instruments, Defence Packaging, Common Facility Centres, Missiles & Satellites systems, MRO, R&D, Aero Engines & components, Electronic & Communication Systems, Textiles, Centre of Excellence, A & D materials and components etc.

Till December 31, 2024, the proposed investment worth Rs. 31,528 crore has already been attracted through 172 MoUs etc. in Uttar Pradesh Defence Industrial Corridor (UPDIC) and actual investment of Rs. 3,828 crore has been made.

Similarly, in Tamil Nadu Defence Industrial Corridor (TNDIC), the proposed investment worth Rs. 21,825 crore has already been attracted through 80 MoUs etc. and actual investment of Rs. 4,669 crore has been made.

The Major areas of investments in these Corridors are Drones & UAVs, Ammunitions& Explosives, Small Arms, Advance Composites, Optical instruments, Defence Packaging, Common Facility Centres, Missiles & Satellites systems, MRO, R&D, Aero Engines & components, Electronic & Communication Systems, Textiles, Centre of Excellence, A & D materials and components etc.

Under Defence Testing and Infrastructure Scheme (DTIS) Department of Defence Production (DDP) is establishing State – of – the art testing and certification facilities for industries including MSMEs in both the Defence Industrial Corridors (DICs). In UPDIC, facilities on Unmanned Aerial

System, Communication and Mechanical & Material and in TNDIC, facilities on Unmanned Aerial System, Electronic Warfare, Electro-Optics and Mechanical & Material are being established.

(III) Defence Investor Cell (DIC).

Defence Investor Cell was formed in January 2018, to act as an integrator & facilitator to Defence Entrepreneurs & MSMEs. It acts as a single point of contact to entrepreneurs/industry, to address queries related to policy and investment opportunities in defence production, thereby facilitating investment into defence production sector. Defence Investor Cell (DIC) can be accessed online at <https://defenceinvestorcell.gov.in>. All services provided by DIC are without any charges.

(IV) Defence Production Information Technology (DPIT) Division.

DPIT was formed in 2018 with the approval of Hon'ble Raksha Mantri to implement IT related initiatives in DDP and DPSUs. DPIT has undertaken several information and Communication Technology initiatives under DDP and DoD. Various projects include DDP website, DDP dashboard, Srijan Defence portal, Defence Offsets management portal, Defence Exim portal, India Defence Mart (IDM) portal, DefExpo website, AeroIndia website, RM Awards portal etc.

Shared Commitments

In addition to the core operational achievements, the constituent organizations of DDP pursued a range of initiatives in areas of national importance and institutional best practices. Several common initiatives were undertaken during the year, reflecting a collective ethos of responsibility that goes well beyond business operations. These efforts are presented thematically below.

Promotion of Official Language - Hindi

The organizations made concerted efforts to strengthen the progressive use of Hindi in official communication. Hindi Fortnight and Hindi Diwas were observed across units with active employee participation in workshops, competitions, and awareness programmes. Several entities received recognition at the Town Official Language Implementation Committees (TOLICs) for excellence in implementation—among them, GRSE in Kolkata, MIDHANI in Hyderabad-Secunderabad, and GSL in Goa.

Publications such as HAL's in-house Hindi magazines, BEML's "BDL Bharati" e-magazine, and MIDHANI's award-winning e-journal *Sankalp* enriched the literary space with original Hindi writing in both technical and non-technical fields.

Environmental Protection and Afforestation

Environmental stewardship remained a shared priority. Almost all organizations are ISO 14001 certified and rigorously monitored emissions, waste management, and effluent treatment. Large-scale plantation drives were a visible feature across the board. Notably, BDL planted more than 8,366 nos of various species under the national "Ek Ped Maa Ke Naam" campaign, while MIDHANI planted 12,144 saplings with an impressive survival rate.

GRSE strengthened ecological resilience through the planting of 12,000 mangroves and fruit-bearing trees, while TCL, GIL, AWEIL, and others organized regular plantation and cleanliness drives, coupled

with anti-plastic awareness campaigns. At HAL, waste-to-energy initiatives were expanded with a 500 kg bio-gas plant in Bangalore, processing over 1,400 tonnes of organic waste in the year.

Energy Use and Conservation

The shift toward renewable energy gathered momentum, with solar installations emerging as a common feature. HAL alone has reached nearly 50 MW of installed renewable capacity, meeting about 40% of its electricity needs, while BDL and GRSE added substantial rooftop plants during the year. MDL signed an agreement with NTPC Vidyut Vyapar Nigam Ltd. for a 1,375 kW solar project, and AWEIL reported renewable energy meeting nearly 40% of its demand.

Alongside generation, conservation efforts were widespread. Organisations replaced conventional lighting with LEDs and BLDC fans, introduced 5-star rated appliances, deployed energy-efficient transformers and VFDs, and explored electric mobility. GSL achieved 100% LED lighting across its facilities by January 2025, while GIL took the lead in battery-operated transport within its production units. MIL's structured Six-Point Action Plan provided a long-term framework aligned with India's climate commitments.

CSR and Public Outreach

A number of organisations deepened their engagement with society through healthcare, education, and skill development. GRSE supported community health camps, TB awareness, and children with disabilities, while also facilitating job-oriented training for youth. GSL partnered with local institutions to revive traditional weaving practices and provide livelihood support to disadvantaged communities.

MDL invested in public health by strengthening infrastructure in Mumbai hospitals, supporting vaccination drives, and providing financial aid to cancer patients. Similar initiatives in sanitation, skill training, and village development were reported across multiple organisations, reaffirming the sector's role in inclusive national development.

Cyber Security and Digital Compliance

Cyber hygiene and resilience featured prominently in the agenda. Organisations such as TCL and GIL adopted the Ministry's secure IT platforms, including MAYA OS and CHAKRAVYUH, alongside regular CERT-IN audits. Monthly "Cyber Jagrookta Diwas" programmes at GIL kept employees sensitised to evolving threats, while workshops and awareness campaigns ensured compliance with national cyber security guidelines.

Conclusion

Taken together, these shared initiatives highlight a culture of responsibility and foresight across the organisations. Whether through the embrace of renewable energy, commitment to linguistic inclusivity, or proactive community engagement, the collective efforts go well beyond operational mandates. They embody a forward-looking ethos—balancing industrial growth with environmental care, technological security, and social development.

Department of Military Affairs



MINISTRY OF DEFENCE
Government of India

DEPARTMENT OF MILITARY AFFAIRS

The Department of Military Affairs (DMA), headed by the Chief of Defence Staff (CDS) as its Secretary, was created with the approval of Cabinet Committee on Security (CCS) with the aim of bringing about jointness between the three Armed Forces of the country in training, staffing, procurement and operations, to facilitate optimal utilization of resources and to promote inter-service cooperation. Hence, work exclusively pertaining to military matters was placed within the purview of the Department of Military Affairs, while the Department of Defence was mandated to deal with larger issues pertaining to defence of the country, including Defence Policy.

Appointment of CDS & Secretary DMA

The post of CDS in the rank of four star General with salary and perquisites at par with a Service Chiefs was created in Dec 2019. The Government has also defined his roles and responsibilities. The CDS, apart from dual hatting as Secretary, DMA is also the permanent Chairperson of the Chiefs of Staff Committee. He acts as the Principal Military Advisor to the Hon'ble RM on all tri-Services matters, while the three Chiefs continue to advise Hon'ble RM on matters exclusively concerning their respective services. As the Permanent Chairperson of Chiefs of Staff Committee, CDS is supported by the Headquarters of the Integrated Defence Staff in undertaking assigned functions.

Gen Bipin Rawat PVSM, UYSM, AVSM, YSM, SM, VSM, ADC was appointed as the first CDS and Permanent Chairperson COSC with effect from 31 December 2019 by the Government of India. General Anil Chauhan PVSM, UYSM, AVSM, SM, VSM has been appointed as the present CDS & Secretary DMA with effect from 30 September 2022.

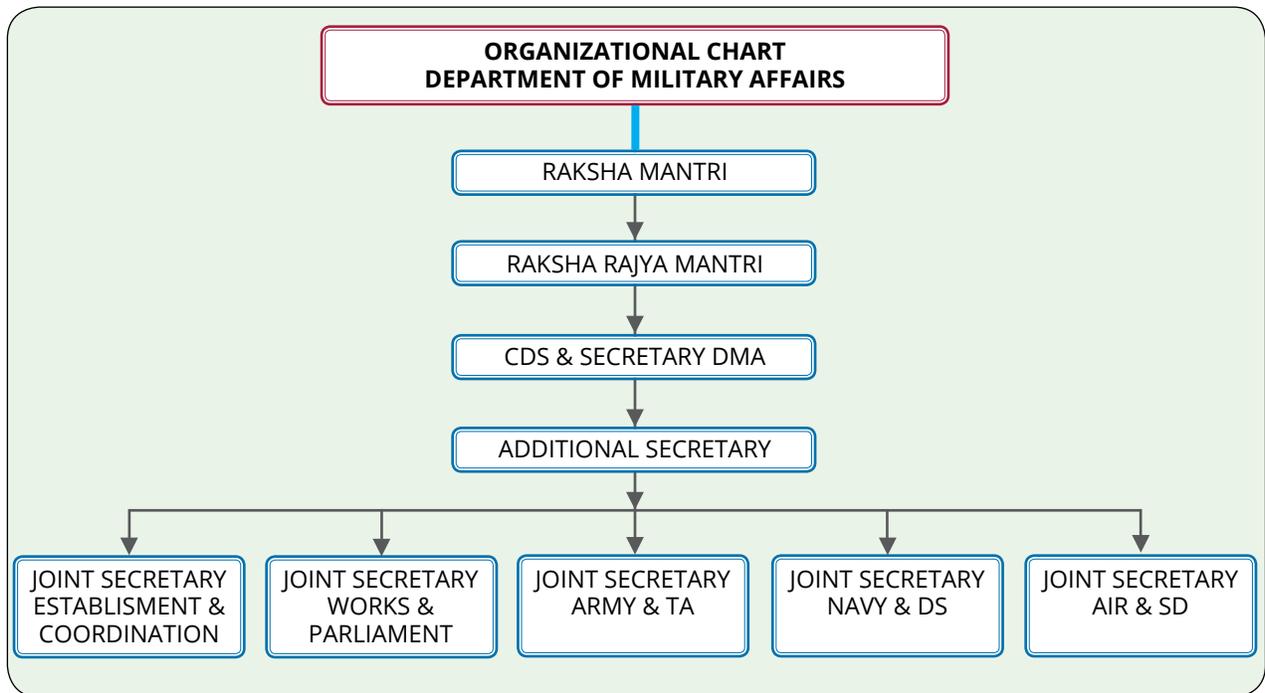
Charter of the Department

The following subjects were allotted to the new Department of Military Affairs after amending Allocation of Business Rules, 1961 :-

- (a) The Armed Forces of the Union, namely, the Army, the Navy and the Air Force.
- (b) Integrated Headquarters of the Ministry of Defence comprising Army Headquarters, Naval Headquarters, Air Headquarters and Defence Staff Headquarters.
- (c) The Territorial Army
- (d) Works relating to Army, Navy and Air Force
- (e) Procurement exclusive to the Services except capital acquisitions as per prevalent rules and procedures.

Structure of the Department

One post of Additional Secretary and three posts of Joint Secretary in the Department were created vide CCS approval, following which the structure of the department is as shown below:



Attached Offices: Attached offices of DMA are as follows :-

- (a) Army Headquarters.
- (b) Naval Headquarters.
- (c) Air Headquarters.
- (d) Headquarters Integrated Defence Staff.

INDIAN ARMY

The security challenges confronting our nation are diverse and intricate. The Indian Army (IA) recognizes these complexities alongside the swiftly changing geopolitical, socio-economic, and technological landscapes. Consequently, the IA has designated the period from 2022 to 2032 as the 'Decade of Transformation' to build a future-ready force. While continuously assessing operational readiness, the IA remains dedicated to advancing national interests and protecting the country's sovereignty and unity from both external and internal threats. The IA is actively working to enhance its capabilities to fulfill the vision of a developed India by 2047.

OPERATIONAL READINESS

Operations

The IA is maintaining full spectrum of operational preparedness, along the Line of Actual Control (LAC) and Line of Control (LC). Relentless counter terrorist operations are being conducted, alongside constant review of emerging and future threats.

Situation at LAC: Overall situation along the LAC is stable but sensitive. IA deployment is robust, with adequate reserves to cater for any emerging contingency. Post prolonged negotiations at diplomatic and military levels, on 21 October 2024, broad consensus has been achieved to restore ground situation based on principles of equal and mutual security. Patrolling activity has commenced to traditional patrolling areas in Depsang and Demchok. Post this resolution, the situation has reverted back to Status Quo in these areas.

Jammu & Kashmir (J&K): Union Territory of J&K is at the cusp of a historic transformation. Despite intermittent violence, situation in J&K remains firmly under control. Maintaining robust anti-infiltration grid and conduct of relentless operations created a conducive environment for successful conduct of elections.



Maintaining robust anti-infiltration grid

Situation along LC: Situation along the LC remains peaceful. IA is closely monitoring the situation and remains prepared to respond to any escalation along the LC. A decline in the intensity of infiltration along the LC was observed compared to previous years.

Situation in Hinterland

- Since 2019, security situation in hinterland continues to witness consistent improvement. Incipient normalcy has resulted in consequent rise in tourism.
- **Amarnath Yatra - 2024:** In July and August 2024, Amarnath Yatra was conducted in the backdrop of heightened threats. Under OPERATION SHIVA, approximate 5,000 troops and other resources were deployed for prophylactic security. At the request of civil administration, resources like tents and medical cover were also provided along both the routes. Owing to the relentless and synergized efforts of the security apparatus, the Yatra was incident free.
- **Local Recruitment:** The local youth have severed their association with the path of violence and are reaping the benefits of various Government schemes and policies. In 2024, the number of locals joining terrorist ranks has significantly reduced from 191 to 4 over the period of 2020 to 2024, thus discrediting Pakistan's narrative of home-grown terrorism.
- Despite improvement in the overall situation, intermittent spurts of violence were witnessed, especially in the form of targeted killings of non-local civilians, minorities and Security Forces personnel. In high tempo Counter Terrorist (CT) operations, 48 terrorists were eliminated this year (including 18 Pakistan terrorists) in the hinterland. Pakistani terrorists constitute nearly 55% of the total terrorists eliminated this year, which clearly indicates Pakistan's intent to keep the pot boiling in UT of J&K.

Security Situation in the North East (NE): Except Manipur, the internal security situation in NE States has been stable. Manipur is witnessing trigger based cyclic violence episodes which erupted in May 2023 has largely been stabilised. Synergised efforts by Security Forces over the past one and a half years, along with proactive initiatives by the Government, have brought the situation under control. In August 2024, the Chief of Army Staff (COAS) took a review of the security situation in Manipur during which COAS interacted with troops deployed in Manipur. He also interacted with the State administration in Manipur and discussed critical issues concerning the current situation.



Chief of Army Staff (COAS) took a review of the security situation in Manipur

Operational Logistics

Infrastructure development in border areas is one of the key imperatives of operational preparedness. Development of essential infrastructure from operational perspective is being carried out in a holistic and comprehensive manner.

Operational Works: Enhanced allotment of funds for operational works (approximately Rs.1,884 Crore) has been ensured to improve the operational infrastructure. The construction efforts are focused on development of infrastructure to include force preservation assets, operational logistics infrastructure, billeting, establishment of forward connectivity, anti-infiltration system and aviation related infrastructure. Habitat for more than 1,800 troops has been constructed.

Sikkim Restoration Works: Connectivity in Sikkim was severely affected due to Glacial Lake Outburst Flood event in October 2023. Further, the flash floods in the month of May 2024 severely affected roads and bridges in Sikkim. Formations of IA were proactively involved with civil administration for restoration works and development of new infrastructure for redundancy.



Restoration Work after Flash Floods in Sikkim

Shinkunla Tunnel: Shinkunla Tunnel is 4.1 kilometres long tunnel planned for construction in the strategically important Nimu-Padam-Darcha Road at a cost of approximately Rs. 1,681 crore. On the occasion of Kargil Vijay Diwas (26 July 2024), the Hon'ble Prime Minister virtually carried out the first blast of the tunnel.

Maintenance Repair & Overhaul (MRO) Hubs: In sync with the Government's initiative of transforming India into a global MRO player, MRO hubs for Army Aviation fleet are in the process of full capacity realization. MRO hub for Advance Light Helicopter (ALH) fleet has been established at Mamun and Misamari for IA and IAF respectively by Hindustan Aeronautics limited (HAL). MRO hub for Remotely Piloted Aerial System (RPAS) fleet has been established at Bhiwani (Haryana) and is being expanded to cater for additional tri-services requirements through a Joint Services Comprehensive Annual Maintenance Contract.



Maintenance Repair & Overhaul (MRO) Hubs

Overhaul of Tank T-90: In line with Nation’s vision of achieving technological and logistics self-sufficiency in defence, Army Base Workshop has undertaken complete overhaul of first Tank T-90, which had undergone accelerated extensive exploitation for its stipulated life. The overhauled tank was successfully rolled out in October 2024.

National Logistics Policy: In synchronization with Pradhan Mantri Gati Shakti National Master Plan (PM GS NMP), details of dual use infrastructure like border roads, hospitals, railway lines etc. have been uploaded on GS NMP portal. 103 proposals of IA have been incorporated, which will facilitate integration of defence logistics into the framework of National logistics. An MoU with Gati Shakti Vishwavidyalaya has also been signed for up-skilling IA personnel in logistics, PM Gati Shakti and National Logistics Policy subjects. Capability building workshops have also been conducted pan Army in which more than 300 officers have been trained on iGOT Karmayogi platform and over 50 officers have been trained at BISAG N till date.



MoU with Gati Shakti Vishwavidyalaya

CAPABILITY DEVELOPMENT AND MODERNISATION

Capability Development

Capability development through force modernisation and 'Atmanirbharta' is progressing at a steady pace. Cognisance is being taken of hi-tech war fighting equipment being developed and employed across the active war zones worldwide. Defence Acquisition Procedure (DAP) - 2020 is likely to undergo a complete revamp in 2025. More than 500 schemes have been planned for acquiring potent fighting capability in next 15 years.

Atmanirbharta

In the context of 'Atmanirbharta', IA is one of the largest stakeholders attributable to the scope & scale of its war fighting inventory. Out of 164 Capital Acquisition contracts concluded in last four FYs (2021-22 to 2024-25), 148 Capital Acquisition contracts (90%) have been signed with Indian vendors under Normal/ EP acquisition process. From 01 January to December 2024, 19 contracts have been concluded out of which 17 are signed with indigenous industries.

Ammunition Procurement: A clear roadmap for ammunition procurement for long term requirement has been laid out under 'Manufacture of Ammunition for IA by Indian Industry'. As a result of sustained proactive efforts, 154 out of 175 (nearly 88%) ammunition variants have been indigenised in close coordination with other agencies. The balance are intended to be indigenised by the year 2030.

Annual Indigenisation Plan (AIP): To achieve 'Atmanirbharta' in spares and components of all the in-service weapons platforms, AIP 2024-25 has been promulgated. It comprises 109 projects and includes indigenisation of 357 assemblies/ sub-assemblies/ component packages costing approximately ₹ 74.97 crore.

Srijan Web Portal: Srijan portal developed by IA is being gainfully utilised for giving wider visibility of our indigenisation requirements to Indian defence industry. So far, 551 items have been uploaded on the portal.

Initiatives by Army Design Bureau (ADB)

- ADB acts as a facilitator of technological Research & Development (R&D) efforts and procurement of indigenously developed weapons and equipment through different routes like Make Projects, Army Technology Board (ATB), Technology Development Fund (TDF) etc.
- The number of projects being steered under ATB has increased from 17 to 62 in one year. These projects are being undertaken in collaboration with leading academic institutions of India, which deal with developing niche technologies like Ramjet Projectile, Low Light Imaging technology and various Artificial Intelligence (AI) based projects.
- TDF has been launched by the Government for giving impetus to R&D projects beyond the proof-of-concept stage. At present five projects (approximately ₹ 50 crore) are being progressed by the ADB through TDF. Effective synergy has been established with Defence Research Development Organisation (DRDO) for progressing 49 Design & Development (D&D) projects and 61 Technology Demonstrator (TD) projects.

- **Innovation:** Innovation in Defence Excellence (iDEX) and Acing Development of Innovative Technologies with iDEX (ADITI) have been announced by the Government to synergise the innovation culture in the country and to create an ecosystem that encourages creativity. As part of the iDEX challenges, presently 88 projects are being progressed.
- **IA Idea and Innovation Competition-2024:** 'Idea and Innovation Competition' is being held annually to promote critical thinking, facilitate absorption of fresh ideas and encourage out of box thinking. This year a total of 72 innovations, pan IA were shortlisted. Out of these, 22 innovations were selected for final demonstration during the culminating phase of the competition in December 2024.



Idea and Innovation Competition 2024

Exercise SWAVLAMBAN SHAKTI: Exercise SWAVLAMBAN SHAKTI was conducted in October 2024 at Babina Field Firing Range (BFFR). It was a Battle Group level Integrated Fire and Manoeuvre Exercise. Aim of the exercise was to integrate all available New Technology Equipment (NTEs) at tactical and operational level. The exercise also provided a platform to emerging start-ups for demonstrating their capabilities. Approximately 1,800 personnel, 210 armed vehicles, 50 specialist vehicles and multiple aerial assets participated in the exercise. In addition, over 50 NTEs from more than 40 prominent industry partners including DRDO laboratories also participated in the exercise.



Exercise SWAVLAMBAN SHAKTI

Modernization and Technology Infusion

Disruptive technologies are transforming nature of modern warfare. Analysis of recent conflicts demonstrates that self-reliance in warfighting platforms and access to critical technologies through indigenous R&D is a must for any nation to survive and thrive in future conflicts. IA is committed to transition into a modern agile, adaptive and technology enabled future ready force. Infusion of technology requires innovation, absorption and adaptation. Declaration of year 2024 and 2025 as 'Years of Technology Absorption' and 2022-32 as 'Decade of Transformation' is aimed at achieving force modernisation by infusion of technology and contribution to the vision of 'Viksit Bharat'.

IA Technology Committee: IA is now part of technology related national missions such as National Quantum Mission. In order to institutionalise a framework for technology infusion in IA, a three-tiered Technology Committee has been formalised by converging erstwhile Technology Committees and Automation Committees. 16 technical clusters, each one of which is related to a niche technology domain such as AI, Blockchain, 3-D Printing, Nano Technology etc, have been identified with well-defined tactical, operational and strategic goals. These clusters are being steered by anchor Directorates, functioning under a lead Principal Staff Officer, in a time bound manner.

Raising of Signals Technical Evaluation and Adaptation Group (STEAG): The elite STEAG has been raised to leverage advanced communication technologies such as 5G, 6G, Internet of Things, AI, Machine Learning, Quantum Computing and Software Defined Radio for effective communication in the battle field.

Indian Army Artificial Intelligence Incubation Centre (IAAIC): To integrate AI into its operational framework, an AI roadmap has been prepared which spells out lines of effort and timelines for implementation. An agreement was signed with Bharat Electronics Limited (BEL) for joint technology incubation. As a result of this agreement, AI Incubation Centre for IA has been established at BEL, R&D Centre in Bengaluru. IAAIC will align IA's technological aspirations with national priorities, marking a significant step towards achieving global leadership in military AI applications making it an 'AI Ready Force'.



Indian Army Artificial Intelligence Incubation Centre (IAAIC)

Project Quantum Key Distribution (QKD): In a significant step toward 'Atmanirbharta', a contract for development of QKD system was signed in September 2024 which will replace existing algorithm-based encryption system thus enabling greater security.

Innovation to Induction: The following innovations developed in-house have been inducted:

- **Vidyut Rakshak:** An Internet of Things Enabled Integrated Generator Monitoring, Protection and Control System, developed by service personnel has been inducted in Northern Command.



Vidyut Rakshak

- Transfer of Technology (ToT) of two innovations developed by service personnel namely 'Xploder'- Improved Explosive Device Disposal and Room Intervention Unmanned Ground Vehicle (UGV) and 'AGNIASTRA'- A Portable Multi Target Detonation Device has been undertaken with two private industries. Both the innovations have been extensively utilised in conventional and sub conventional operations.

Digitisation and Automation

Digitised, networked and automated in-house solutions are being explored to meet the operational, functional and HR requirements. A glimpse of how digitisation and automation initiatives are reshaping the digital landscape of IA is seen in a book unveiled by Hon'ble Raksha Mantri in October 2024 during 'Chanakya Defence Dialogue-2024'. This book highlights over 100 softwares/applications that have been developed in-house in domains such as operations, intelligence, logistics, human resource, administrative functioning and analytics.



Chanakya Defence Dialogue-2024

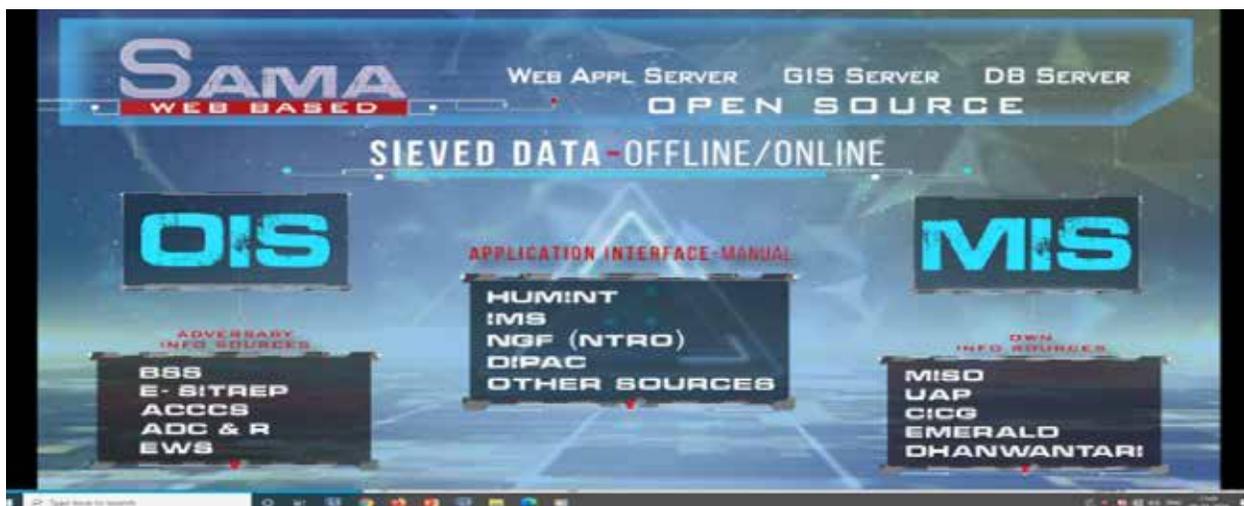
Project SANJAY (Battlefield Surveillance System) Phase 2: Project 'SANJAY' aims to integrate SATA sensors at Formation level on a customized Geographical Information System (GIS) platform. It provides an assessed situation in near real time to facilitate quick decision making. This system also provides inputs to Army Integrated Decision Support System (AIDSS), ACCCS and interacts with other components of Tactical C3I system including Situational Awareness Module for Army (SAMA).



Project SANJAY

Officer's Automated & Structure Information System (OASIS): OASIS software was launched in 2019 as an interface for Officers Record Organisation (ORO), serving officers and the units, the software assists in creating a central data repository of service records of all the serving officers. 100% digitisation of all serving officers was achieved in March 2024 through OASIS.

SAMA 2.0 (Intelligentised SAMA): SAMA is a web-based application with AI features to ingest and integrate inputs from all Operational Information Systems, Management Information Systems and other intelligence sources. The project is planned to provide real time situational awareness for commanders to take timely and informed decisions, based on credible intelligence inputs.



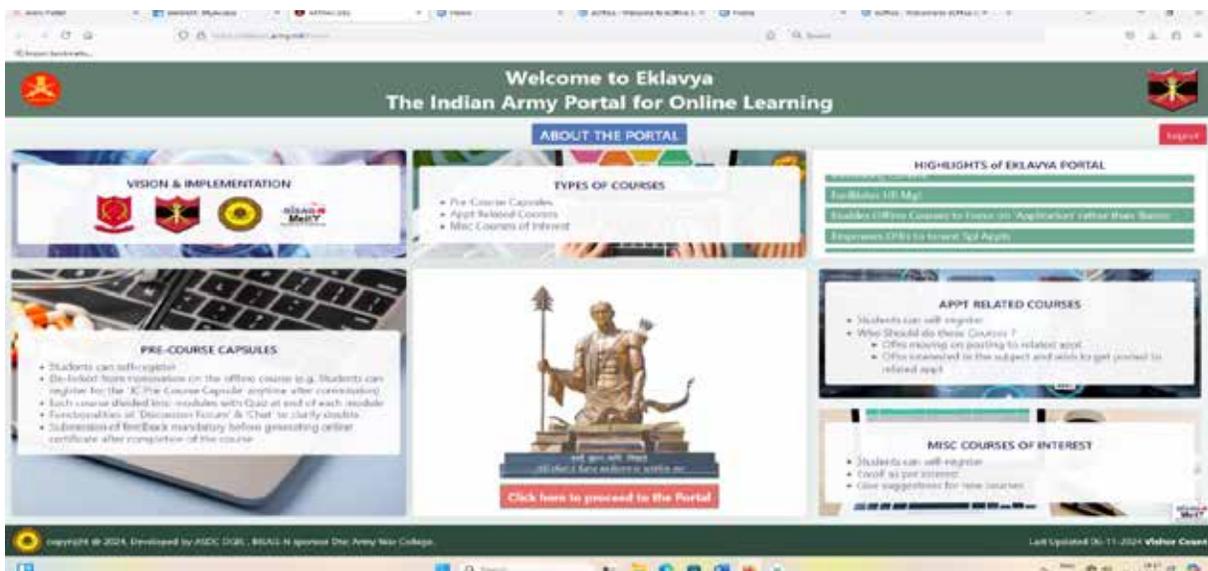
SAMA 2.0

Project ANUMAAN 2.0: ANUMAAN 2.0 metrological application has been developed in-house as a near real time passive metrological forecast system. It provides metrological messages for 72 hours at hourly intervals, for horizontal layers from ground level up to 30,000 meters (approximately) to

the artillery units to carry out field firing. It is integrated with Indian Air Force (IAF) & Indian Navy (IN) weather forecasting systems.

U-Win: Military Hospitals are being on-boarded on the U-Win portal, which is a digital platform for online appointment and registration of all pregnant women and children for individualized tracing for vaccination and follow up. Health care workers will be able to generate real time data for efficient planning and vaccine distribution.

Project Eklavya (Distant Education Software): 'Project Eklavya' aims to revolutionise professional military education in the IA through online courses. This platform offers basic mandatory courses like Young Officer's course, Junior Command course, special courses that are linked to specialist appointments and various other courses of interest. It also hosts searchable 'Knowledge Repository' containing numerous research papers, military articles and journals. The project was inaugurated in November 2024.



Project Eklavya-Online Learning Portal

e-Granthalaya: e-Granthalaya application was launched by the Hon'ble Raksha Mantri during Joint Commander's Conference in September 2024. It is a flagship knowledge sharing platform for tri-services, which acts as collaborative institutional database as well as single online repository of knowledge and study material of the tri-services. Catalogues from 26 tri-services institutes amounting to approximately nine lakh book listings have been ingested.

Automation of Contract Data: ProMo (Procurement Monitoring) Application: A web-based application 'ProMo' has been developed in-house and hosted in February 2024. It ensures simultaneous data visibility, with real time accuracy in multi-stage Capital procurements where multiple stakeholders are involved at each stage. It accentuates Capital procurement process and negates foreseeable errors at various stages of procurement.

Operationalisation of Defence Travel System (DTS) Version 2.0: The DTS version 2.0 has been launched by the Hon'ble Raksha Mantri on 01 October 2024. This system aims at providing improved user experience with faster performance and reduced downtime. IA has successfully migrated to this new system which provides e-ticketing solution for journey by rail and air.

Army Civilians Data Management System (SANCHAY): SANCHAY is an internet-based application developed in-house and hosted on NIC Cloud in January 2024. Data of approximately 58,000 Army civilians has been captured so far. It facilitates utilization of data/ statistics for analysis and faster decision-making by the stakeholders.

TRI SERVICE SYNERGY

IA is committed towards enhancing the operational synergy and efficiency of the Indian Armed Forces. Integration among three Services is a crucial aspect of this endeavor and significant progress has been made in this aspect. IA is playing a key role in supporting and enabling impending Theaterisation. Endeavours have been made for formulation of common policies on issues concerning all three Services including mandatory tri-services exposures, appraisals and promotions.

Integrated Theatre Commands (ITCs): Re-organising present Army Commands into Joint/ Integrated Theatre Commands is a major step towards modernizing our forces and is based on 'Unity of Command' and 'Synergy of Effort' to enhance interoperability, synergise operational planning and execution, reduce asymmetry through combined effects, optimize efforts and exercise financial prudence. IA is actively working towards consensus-based approach to take the process of Theaterisation forward and individual Service concerns are being addressed through mutual discussions at various levels, including at the level of Service Chiefs' and Vice Chiefs'.

Exercise BHARAT SHAKTI: A synergized demonstration of indigenous defence capabilities in the form of a tri-service live firing and manoeuvre exercise was conducted at Pokhran Field Firing Ranges in March 2024. The exercise demonstrated the prowess of the country, premised on the Nation's Atmanirbharta initiative.



Exercise BHARAT SHAKTI

Joint Training

- **Exercise JALPRAHAR-I and II:** Joint amphibious training exercise with IN, Exercise JALPRAHAR-I & II, were conducted at Vishakhapatnam in January and September 2024 respectively. This was followed by Operation Sea Test (OST) of INS JALASHWA, which was conducted at Kakinada in October 2024.



Exercise JALPRAHAR-I and II

- **Exercise TIGER TRIUMPH-2024:** Exercise TIGER TRIUMPH-2024 is a bilateral tri-services Humanitarian Assistance and Disaster Relief (HADR) exercise between IA and United States of America. It was conducted on the Kakinada Beach in March 2024. The exercise aimed at improving interoperability between the two forces for executing HADR operations and refining Standard Operating Procedures (SOPs) to enable rapid deployment and flawless coordination during natural disasters.



Exercise TIGER TRIUMPH-2024

- **Exercise TATRAKSHA:** Exercise TATRAKSHA was conducted at Bhuj in February 2024. It is a multi-agency exercise for the security of the Kutch Peninsula.



Exercise TATRAKSHA

- **Exercise SANYUKT VIMOCHAN - 2024 (Annual Joint HADR Exercise):** Annual Joint HADR Exercise 'SANYUKT VIMOCHAN 2024' was conducted at Ahmedabad & Porbandar in November 2024. The exercise aimed at assessing the efficiency of disaster response and to optimise existing disaster management structures. The event featured a Table Top Exercise, a demonstration showcasing joint response to a natural disaster and industrial display of indigenous equipment for carrying out such missions. Representatives from nine Friendly Foreign Countries (FFCs) attended the event fostering international cooperation. The exercise served as a platform for the participants to share best practices and gain expertise.



Exercise SANYUKT VIMOCHAN-2024

Joint Doctrines

Services are working together to develop joint doctrines and operational plans to address emerging security challenges. Such integration is crucial to ensure a unified approach towards safeguarding national interests.

- **Cyberspace Operations:** Cyberspace has emerged as a crucial as well as challenging domain in modern warfare. Joint doctrine for Cyberspace Operations was released by the Chief of the Defence Staff (CDS) in June 2024. This doctrine will guide the Armed Forces in planning and execution of seamless operations in the cyberspace domain.
- **Amphibious Operations:** The amphibious operations capability empowers Indian Armed Forces in conduct of multitude of operations in the Indian Ocean Region both during war and peace. It serves as the best example of cohesion and integration amongst the Armed Forces. A joint doctrine for conduct of 'Amphibious Operations' was released by the CDS in September 2024.

Joint Communication Architecture (JCA): Endeavour to integrate the network of the three Services and HQ IDS was undertaken with IA as the lead Service. The Services networks have now been integrated with HQ IDS and HQ Andaman Nicobar Command. Various websites of the Services have been made available through JCA. Messaging Application for tri-services (MAT), developed indigenously by IA, is now being used for exchange of classified messages across Services and HQ IDS.

Tri Services Logistics Management Application (TLMA): The application is being developed as an interface between the customised/ Enterprise Resource Planning (ERP) inventory management automation platforms of the three Services. It is aimed at providing visibility to common stores initially,

followed by raising of demands and single Service being responsible for provision of these common stores. Phase I of TLMA comprising select equipment inventory has been hosted on ADN.

Centralized Policy on Maintenance of Small Arms (SAs) of Tri-Services: A centralized policy for joint maintenance of nine SAs which are identified as common with all three Services has been prepared. A total of 22 Base Repair Points of the three Services (19 of IA, two of IN & one of IAF) have been identified to carry out common repairs.

Integrated Maintenance Working Groups (IMWG): Seven IMWGs, with a lead service concept, have been set up to study implementation of joint sustenance measures for common equipment amongst tri-services. IMWGs, with IA as lead Service, are focused on small arms and ALH fleet repair system.

MILITARY DIPLOMACY

Defence cooperation with Friendly Foreign Countries (FFCs) constitutes an important tool for furtherance of our national interests and foreign policy objectives. In line with India's rising global stature in recent years, there has been a considerable increase in diplomatic activities undertaken by the IA. Presently, IA is engaged with 118 countries through various defence cooperation activities.

New Defence Wings: As part of reorganisation of defence wings, the number of defence wings has been increased from 45 to 52. Four new defence wings have been established at Poland and Algeria in June 2024 and at Ethiopia and Mozambique in October 2024.

Visits: Multi-tiered 'Security and Strategic Dialogues' are held frequently at all levels with various FFCs to establish areas of common and mutual interest amongst armed forces. In 2024, a total of four visits of COAS to FFCs and seven inbound visits of COAS of FFCs have been conducted. Details of important visits are given below:

Visits by Foreign Military Dignitaries	
Country	Dignitary
France February 2024	Gen Pierre Schill, Chief of French Army
Japan February-March 2024	Lt Gen Togashi Yuichi, Commanding Gen, Eastern Army, Japan
Greece April 2024	Gen Dimitrios Choupis, Chief of Hellenic National Defence Gen Staff
Democratic Republic of Congo, July 2024	H.E Maj Gen Lukwikila Metikwiza Marcel, The Permanent Secretary, MoD
Mongolia July 2024	Maj Gen Gyanbyamba Sunrev, Chief of Gen Staff of Mongolian Armed Forces
Japan October 2024	Gen Yoshihide Yoshida, Chief of Staff Joint Staff, Japan
Nepal December 2024	Subrapal Janasewashree Gen Ashok Raj Sigdel, Chief of the Army Staff, Nepali Army

Joint Exercises: Joint Exercises with FFCs are the flagship activities of our defence cooperation engagements. IA participated in 39 joint exercises. Out of these 39 joint exercises, 16 are tri-service exercises, nine are bi-service exercises and 14 are single service exercises. New bi-lateral exercises are also being planned with Egypt, UAE, Kingdom of Saudi Arabia (KSA) and Cambodia. 'Atmanirbharta', 'Yoga' and 'Nari Shakti' themes are being given due emphasis during the conduct of these joint training exercises.

Out Visits of COAS
Republic of Uzbekistan April 2024
Japan October 2024
Nepal November 2024
Vietnam December 2024



Joint Training Exercises with FFCs

Engagements with FFCs: The important aspects of training engagements with FFCs are elucidated below:

- **Long Term Training Teams:** Currently, there are 34 all ranks deployed in various Indian training teams (excluding Indian Military Training Team) across 12 FFCs. New training teams i.e. Indian Army Training Team (IATT), Madagascar and IATT, Infantry School, Tanzania are in the advance stage of deployment.
- **Non-Commissioned Officer (NCO)/ Other Ranks (OR) Courses Abroad:** Participation of IA NCOs in military special courses abroad has been increased from 2 to 17 in the year 2024.
- **Training of Women:** Participation of foreign Women Officer Cadets at Officers Training Academy, Chennai has been increased from 4 to 10. Courses like Mountain Warfare and Low Intensity Conflict Operations have also been opened for Women Officers of FFCs.
- **Mobile Training Team (MTT):** Deployment of MTTs abroad has been increased from erstwhile 2 to 10 per year. In the year 2024, five MTTs were deployed in Kenya, Myanmar, Cambodia, Kazakhstan and Uzbekistan.
- **Outbound Courses:** Annual training cooperation engagement has been increased from erstwhile 40 to 65 FFCs now.
- **Inbound Courses:** A total of 3,382 vacancies have been offered to FFCs in the current training year. Flagship courses like M.Tech at College of Military Engineering have now been offered to FFCs from June 2024.

United Nations (UN) Peacekeeping

India is one of the original founding members of the UN. Guided by the principles of neutrality and dynamism, IA carries out UN mandated tasks with a nuanced understanding of sensitivities and neutrality. IA Peacekeepers are recognised for their professionalism in operations, conduct and discipline and their contributions have earned various appreciations and awards. So far, India has participated in 53 out of 72 UN Peacekeeping Missions and has contributed over 2,92,000 personnel till date. 181 Indian Peacekeepers have made supreme sacrifice defending the UN mandate. India’s approach to Peacekeeping is guided by the 5S as enunciated by the Hon’ble Prime Minister i.e. Samman (Respect), Samvaad (Communication), Sahyog (Cooperation), Samridhi (Prosperity) and Shanti (Peace).



ACCOLADES	
UNIT	MISSION
INDBATT-I	UNMISS
INDBATT-II	
Force Signal Unit	
INDBATT-I	MONUSCO
INDBATT	UNISFA
INDBATT	UNIFIL
Logistic Company	UNDOF

Presently, IA has deployed approximately 5,200 military personnel in five Infantry Battalions and 11 Formed Units apart from Staff Officers/ Military Observers across ten UN missions in Democratic Republic of Congo, South Sudan, Abyei, Western Sahara, Central African Republic, Addis Ababa, Lebanon, Syria, Israel and Cyprus. To ameliorate the suffering of women and children in the conflict zone, Female Engagement Teams (FETs), Women Psychological Counsellors and Military Nursing Service (MNS) officers have been deployed to various missions.

UN Journal 2024: UN Journal 2024 titled ‘Blue Helmet Odyssey - Resilience and Adaptability. The New Era of UN Peacekeeping’ was unveiled by Hon’ble Raksha Mantri at New Delhi on 02 April 2024 during the Army Commanders’ Conference. This journal encapsulates the myriad experience and challenges faced by our Peacekeepers and celebrate their enduring resilience and adaptability in face of adversity through cerebral and thought-provoking articles by senior military and diplomatic leadership, distinguished academia and experiential inputs from the mission area.



Release of UN Journal 2024

Contribution to Nation Building

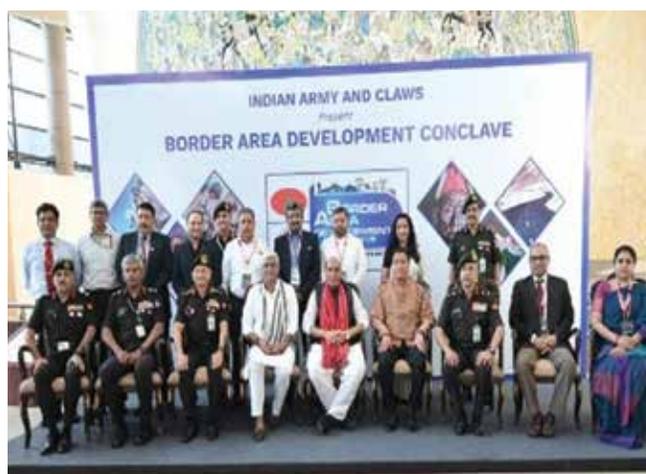
Development of Border Areas

Military Civic Action Programme: The IA continued with its endeavours in 'Winning Hearts and Minds' of people settled in remote border areas by undertaking large number of Military Civic Action projects under Operation SADBHAVANA and Operation SAMARITAN. These projects with an annual financial outlay of approximately ₹ 150 crore include a wide range of activities in the fields of healthcare, HR development, women empowerment, environment protection, education, sports and national integration.



Military Civic Action Programme

Border Area Development Conclave: Inter-ministerial conclave on 'Border Area Development' was organised by IA in September 2024 at New Delhi. The Conclave aimed at formulating a mechanism to augment Border Area Development (Surakshit - Viksit Seemaen). Four key pillars i.e education, infrastructure development, tourism and communication have been identified to ensure better coordination between IA and all stakeholders.



Border Area Development Conclave

Ecology Restoration and Conservation

Ecological Restoration by Ecological Task Force (ETF): ETF battalions deployed across the nation are actively involved in ecological restoration activities in degraded areas. So far, these units have jointly planted approximately 37.35 lakh saplings in approximately 3,422 hectares for the year 2024-25. To

commemorate Platinum Jubilee of Territorial Army, 128 ETF Battalion achieved a remarkable feat by setting three world records on 22 September 2024 through community participation in Jaisalmer.



Ecological Restoration by Ecological Task Force

'Ek Ped Maa ke Naam' Campaign: A special tree plantation drive was undertaken in IA on 22 July 2024 with an aim of planting 65 lakh trees by 26 January 2025. The campaign aimed at emphasizing relationship between mother earth and environment, wherein all service personnel, their families and veterans were being encouraged to plant a tree each.

Green Hydrogen based Micro-Grid Project: In synchronisation with National Green Hydrogen Mission, the IA in collaboration with National Thermal Power Corporation (NTPC) has put in motion installation of micro grid power plant at Chushul. This project entails setting up a 200 Kilo Watt Green Hydrogen power plant for hydrolysis of water to produce hydrogen during non-solar hours, the hydrogen thus produced will provide power through fuel cells. This project will usher in a new era of sustainability.

World Environment Day 2024: World Environment Day 2024 was celebrated with a theme focused on importance of land restoration, combating desertification and enhancing drought resilience. All military stations of IA organised environmental activities like resuscitation and restoration of waste land, landfills, water bodies, creation of ponds, rain water harvesting, organising '3R (Reduce, Re-use, Re-cycle) drives', cycle rallies, awareness runs and campaigns.

Swachh Bharat

Swachhata Hi Seva (SHS): Aligned with the national initiative of promoting cleanliness and hygiene as part of the 'Swachh Bharat Abhiyan', SHS campaign was undertaken. More than 1,500 events were organised under themes such as 'Swachhata ki Bhaagidari', 'Sampoorna Swachhata' and 'Safaimitra Suraksha Shivar'. The primary aim of the campaign was to foster a culture of cleanliness and hygiene while engaging both Army personnel and civil staff in meaningful activities.

Special Campaign 4.0: In order to institutionalise 'Swachhata', enhance organisational efficiency and reduce pendency, IA participated in Government's Special Campaign 4.0. As part of the Campaign, a total of 2,667 sites have been cleaned so far, approximately 6.25 lakh files have been categorised, recorded and reviewed and 62 complex rules have been simplified.



Humanitarian Aid and Disaster Relief (HADR) Operations

Despite its operational commitments, IA remained at the forefront in providing succour to the population in disaster affected areas. During the year, IA deployed 92 Columns (including Engineer Task Forces) in fourteen States and rescued 30,972 civilians. Medical aid was provided to approximately 3000 civilians and relief material distributed for over 13,000 civilians as part of HADR operations. Major relief operations were undertaken at Manipur (May 2024), Wayanad landslide, Kerala (July 2024), Uttarakhand landslide (July 2024) and Gujarat Floods (August 2024).



Flood Relief Operations in Gujarat



Relief Operations at Wayanad, Kerala

Achievements in Sports and Adventure

In the true spirit of 'Khelo India', IA sportspersons made their mark in various national and international sporting events. IA sportspersons won 109 Gold, 78 Silver and 86 Bronze medals in national events and 31 Gold, 26 Silver and 24 Bronze medals in various international events.

Paris Olympics 2024: 13 renowned sportspersons from IA participated and brought glory to our Nation.

Paralympics Games 2024: In Paris Para Olympics 2024, Mrs Simran (visually impaired since birth), wife of Naik Gajendra Kumar won Bronze Medal in Women's 200-meter T-12 Category. She also secured 4th position in T-12, 100 meters event.

Army Sports Conclave: In September 2024, IA hosted the 'Army Sports Conclave' in New Delhi which highlighted the role of IA in India's sporting ecosystem. The 'Army Sports Conclave' emphasised upon importance of drawing collaborative strategies with Indian Olympics Association, Sports Authority of India and National Sports Federations to enhance India's global aspirations.

International Yoga Day

This year marked the 10th 'International Day of Yoga' with the theme of 'Yoga for Self and the Society'. IA celebrated the occasion by performing yoga across the length and breadth of the country. Yoga was practiced by the soldiers deployed at the freezing heights of Siachen Glacier in the North to the coastal areas of Kanyakumari (Tamil Nadu) in the South and from areas of Longewala (Rajasthan) and Kutch (Gujarat) in the West to the mountainous region of Kibithu in Arunachal Pradesh and Imphal (Manipur) in the East. Hon'ble Raksha Mantri joined all ranks and their families and practiced yoga in the ancient city of Mathura.



International Yoga Day 2024

Activities of Army Adventure Wing (AAW)

AAW is the apex body for conduct of adventure activities in the IA and excels in conduct of Aero, Aqua and Land adventure training and expeditions. It also participates in various national and international adventure events and competitions. The notable activities of AAW are enumerated below:

- **Mountaineering:** IA mountaineering team comprising of three officers and three Other Ranks participated in 3rd Council International Sports Military (CISM) Climbing for Peace event along with teams from 13 CISM nations in the Joint International Expedition to successfully scale Mount Elbrus (5,642 meter) on 25 July 2024 at Tereskol, Russia, the highest point of Europe.



Climbing on Mount Elbrus

- **Mountain Terrain Biking (MTB):** Rifleman Kushiman Garti of IA Mountain Bike Team represented the nation in Asian Mountain Bike Championship which was held in May 2024 at Putrajaya, Malaysia. He was selected by CFI to participate in the prestigious championship.
- **Aero - Mission, Competitions and Expeditions**
 - **Telomoyo Cup (Indonesia):** IA Hang Gliding and Para Gliding teams successfully participated in Telomoyo Cup 2024 held in July-August 2024. The IA Hang Gliding team was adjudged overall best team.



Telomoyo Cup (Indonesia)

- First ever skydive by specially-abled serving officer of IA from 10,000 feet without an artificial limb was conducted on 26 March 2024 at Bathinda by Accelerated Freefall (AFF) methodology with two Army Adventure Wing Instructors. This outstanding achievement of the officer is a testament to human spirit, resilience and the power of determination.



Skydive by Specially-abled Serving Officer

HUMAN RESOURCE MANAGEMENT

Infusing Domain Specialisation: A series of actions have been taken to enhance efficiency by tapping various skills sets and competence of the officers in the organisation. Some of the actions are as under:

- Additional data fields have been added for mapping and capturing of competencies gained by individual officers over the years. This information is utilised for posting planning of officers as per their competence and skillsets in various domains.
- Incentivising technical specialists for better utilisation of their skills.
- Provisions for continuity through extended tenure/ highly technical/ highly technical (specialised) tenures to support the organisational requirement of stability and modernisation have been reviewed.
- Deputation opportunities for all officers have been significantly increased. Further, lateral absorption into Directorate General of Quality Assurance has been facilitated.
- Opportunities for foreign assignments and diplomatic exposures have been extended to larger number of officers including women officers and non-empanelled officers.

Comprehensive Promotion Policy: New Comprehensive Promotion Policy has been introduced which emphasises upon uniform provision, meritocracy in promotions, addressing aspirations of officers and aligning medical requirements with exacting operational requirements. The policy reinforces culture of excellence and adaptability; essential for national security.

Induction of Officers/ Officers' Selection

- **Army Cadet Corps (ACC) (Graduate) Entry:** Graduate soldiers will be allowed to join IMA, Dehradun for 18 months training after going through a selection process akin to ACC Entry. The selection standards will be pitched at graduate level both in written exam and SSB. It will motivate the soldiers to achieve higher education goals which will usher a cultural shift in IA and is likely to uplift the overall education standard of the organisation.
- **Capacity Building of Service Selection Board (SSB):** Efforts to enhance the Officers' Selection capacity, both integral as well as accretional are being progressed. The integral capacity of existing SSBs would be enhanced by approximately twenty percent and the case for accretional capacity i.e raising of three additional SSBs is also progressing as planned.
- **Induction of Officer Cadets:** During the year 2024, a total of 1,981 candidates were inducted in Pre-Commissioning Training Academies as Officer Cadets. This induction is the highest in last 10 years.

Army Welfare Placement Organisation (AWPO): AWPO is a welfare organisation functioning as a society. It is mandated to facilitate retiring soldiers, Army veterans, widows and their dependents in seeking suitable jobs with corporate and other organisations. Ever since its inception in the year 2010, it has successfully placed a total of 2,342 officers, 23,613 JCOs, 1,10,384 OR and 1,835 widows/wards. In the year 2024, placements through AWPO saw a quantum jump and 416 officers, 14,542 JCOs/ OR have been placed. Also, there has been an overall increase of 27% in placement of widows and wards with 290 widows having been placed in the year 2024.

WELFARE INITIATIVES

Welfare Initiatives for Soldiers

- **'After Me' Folder in Regional Languages:** Information booklet 'After Me Folder' curated in English, Roman Hindi and regional languages have been issued to serving and retired JCOs and OR. Digital version of the same has also been made available.
- **Health Related Welfare Initiatives:** IA has established five Palliative Care Centres, two Paraplegic Rehabilitation Centres and 20 Early Intervention Centres (EICs) for Armed Forces personnel. EICs have been established with an aim to detect onset of disease at an early stage and carry out timely intervention for enhancing functional capabilities and improve the quality of life of the patient. Over 6,000 especially abled children are registered with the EICs. Over 1,40,417 sessions of occupational, psychological and speech therapy sessions have been conducted since inception.
- **Establishment of All India Army Helpline Number (155306):** An emergency helpline number similar to Dial '100' has been established for serving soldiers and veterans for addressing emergency mobile and landline calls for help during crisis situations such as traffic accidents, medical crisis, natural calamities and major criminal activities.
- **Sports Scholarship:** With an aim to promote culture of sports amongst wards of IA personnel, Sports Scholarship Scheme has been introduced for wards who participate at national and international level in recognized sports events. The scheme is applicable for participation in individual events, team sports and Paralympics events. The incentive amounts are as under:

Medal	National	International
Gold	₹ 1,00,000/-	₹ 2,00,000/-
Silver	₹ 80,000/-	₹ 1,50,000/-
Bronze	₹ 60,000/-	₹ 1,00,000/-
Participation	₹ 30,000/-	₹ 50,000/-

Department of Indian Army Veterans (DIAV) Initiatives: DIAV acts as the nodal agency for handling and resolution of issues that affect the veterans. It also facilitates greater connect and disseminate information pertaining to different policies and welfare schemes. Initiatives taken by DIAV towards welfare and betterment of the veterans are enumerated in succeeding paragraphs:

- **System for Pension Administration Raksha (SPARSH):** DIAV is working closely with all the stakeholders like Comptroller General Defence Accounts (CGDA), Principal Controller of Defence Accounts PCDA (P) Allahabad, Tata Consultancy Services (TCS) and Records Offices to ensure minimum turbulence in migration of pensioners to the new system for sanction and disbursement of defence pension i.e. SPARSH.
- **Chatbot SAMBANDH:** Chatbot SAMBANDH was launched by COAS on the occasion of 'Army Day' in January 2024. It aims to keep the relationship between the retired members and the organization, vibrant and meaningful. This Chatbot leverages popular social media platform, WhatsApp, to provide relevant information about SPARSH, Ex-Serviceman Contributory Health Scheme (ECHS), Canteen Stores Department etc.

- **Project NAMAN:** Project NAMAN inaugurated at New Delhi in August 2024, involves establishing a reception cum facilitation centre offering SPARSH enabled services for pensioners and Government to Citizen (G2C) services and also Business to Customer (B2C) services at one location. The Common Service Centre (CSC) is dedicated to IA veterans, Veer Naris and Next of Kins.



Project NAMAN

- **Grievance Redressal:** A total of 42,649 grievances were received by DIAV through CPGRAMS, online queries, offline letters and physical visitors to the Directorate. 41,492 grievances have been resolved till date and action on balance of the grievances is under progress. As part of drive to resolve various pension anomalies, large number of cases have been resolved and approximately ₹ 11,94,12,734 have been credited in pensioners' account.

Shaurya Sampravah 1.0: In a forward-looking initiative, a formal interactive session with senior veterans, 'Shaurya Sampravah 1.0' was convened at New Delhi on 19 August 2024. The event is a major step towards harnessing the rich experience and insights of veteran community to shape the future of the IA and contribute to the Nation's growth and attaining objectives of Viksit Bharat@2047.



Shaurya Sampravah 1.0

Veteran Achievers Award: 'Veteran Achievers Award' has been institutionalized to recognize the outstanding achievements of veterans. The award aims to highlight the contribution of veterans towards society and Nation building. The award is conferred by the COAS during the monthly Retiring Officers Seminar and also during his visits to various Formations.



Veteran Achievers Award

Entrepreneurship Training: IA under an MoU with an accredited firm 'I Create India', a not-for-profit organisation, has been facilitating empowerment of volunteer prospective retirees in entrepreneurship training since 2018. This initiative aims to transform the trainees from a 'Job Seeker' to 'Job Creators'. The programme involves one-on-one mentoring and hand holding of aspiring entrepreneurs for business plan preparation, providing linkages for finance and stabilisation of their business. The complete cost of training is borne by the training partner.



Entrepreneurship Training

CEREMONIAL EVENTS

Army Day-2024

Army Day Parade: The Army Day Parade - 2024 was held at Lucknow on 15 January 2024. Idea of celebrating the 'Army Day' outside Delhi is to take the country's tradition and military progress to the people. COAS laid the wreath at Smritika War Memorial and reviewed the grand parade. He also felicitated gallantry award winners and awarded COAS Unit Citations to deserving Units for their exceptional performance in the line of duty.



Army Day Parade 2024 at lucknow

Swagat Samaroh: 'Swagat Samaroh - At Home' was organised at Lucknow on the eve of Army Day on 14 January 2024. The event highlighted the saga of valour and sacrifice of IA in service of the Nation. Hon'ble Raksha Mantri, Governor and Chief Minister of Uttar Pradesh graced the occasion along with a large number of Defence Attaches and Consulate representatives from different countries who attended the event. Veer Naris, gallantry award winners and outstanding achievers were felicitated during the 'Swagat Samaroh'.



Swagat Samaroh

Shaurya Sandhya: 'Shaurya Sandhya' was organised at Lucknow on 15 January 2024 highlighting the courage and might of IA against all odds. Graced by Hon'ble Raksha Mantri, the evening marked the finale of the 'Army Day', showcasing a breath-taking display of martial arts, motor cycle display and incorporation of indigenous technology as force multipliers in the IA.



Shaurya Sandhya

Republic Day Celebration 2024

Parade at Kartavya Path: Republic Day Parade was held at Kartavya Path on 26 January 2024. The spectacular event included ceremonial gun fire by indigenous 105 millimetre Light Field Gun (LFG). The parade also witnessed participation by two all Women Marching Contingents of Indian Armed Forces on Kartavya Path for the first time.



Glimpses of Republic Day Parade at Kartavya Path

Beating Retreat Ceremony: The ceremony was held on 29 January 2024 and included performances of bands of IA, Indian Navy, Indian Air Force and Central Armed Police Force. The event was attended by Hon'ble President of India, Hon'ble Prime Minister of India, Hon'ble Raksha Mantri, CDS and the three Services Chiefs.

Kargil Vijay Diwas: 'Rajat Jayanti Samaroh' of Kargil Vijay Diwas was conducted on 26 July 2024. Hon'ble Prime Minister along with Hon'ble Raksha Rajya Mantri, senior Government and military dignitaries graced the occasion. In addition, 24 Veterans, 26 Veer Naris, 3 Veer Matas and 17 Dependents/ NoKs of brave hearts attended the solemn ceremony. A number of seminal activities were also conducted across the Nation with an aim to promote patriotism and Nation building. Commemorative Postage Stamp and 'First Day Cover' was released as tribute and memorabilia of the Kargil War.



Rajat Jayanti Samaroh

Independence Day Celebration

78th Independence Day was celebrated with full fervour at New Delhi. Following major events were conducted as part of the celebrations:

- **Flag Hoisting at Red Fort:** The Hon'ble Prime Minister of India hoisted the National Flag at Red Fort. A tri-service and Delhi Police Guard presented the 'Guard of Honour' to the National Flag.
- **21 Gun Salute:** As the National salute was presented to the National Flag, 21-Gun salute was presented with indigenous 105 millimetre LFG.



78th Independence Day Celebration

Platinum Jubilee of Territorial Army (TA)

The TA celebrated its Platinum Jubilee on 09 October 2024 which witnessed numerous Nation building activities conducted by the TA units including awareness campaigns, adventure activities, tree plantation drives and organising blood donation camps. A few important activities are highlighted below:



Platinum Jubilee Expedition

Seminar/ Conferences

Chanakya Defence Dialogue (CDD)- 2024: Second edition of the flagship international seminar, CDD-2024, was held in October 2024. The two-day seminar, focused on critical aspects of Nation building and security. Hon'ble Raksha Mantri graced the event as the Chief Guest. The event brought together policymakers, strategic thinkers, academicians, defence personnel, veterans, scientists and subject matter experts from India and abroad to explore India's strategic pathways and development agendas. During the Seminar, the Hon'ble Raksha Mantri also inaugurated IA's 'Green Initiative 1.0' and 'Digitisation of IA 1.0'.

Army Commanders' Conference (ACC) 2024: The first edition of the ACC for the year 2024 was conducted in hybrid mode at New Delhi in March-April 2024, while the second edition of the apex level conference was held in Gangtok and New Delhi in October 2024. The senior hierarchy of the IA discussed emerging challenges and strategies to sharpen IA's warfighting capabilities, modernisation of the Armed Forces, innovation for capability development, leveraging technology and measures to address emerging human resource challenges.



Army Commanders' Conference 2024

Seminar Cum Exhibition on Theme ‘Year of Technology Absorption - Empowering the Soldier’:

A seminar cum exhibition showcasing progress and capabilities of India’s defence sector was held at New Delhi in April 2024. The theme of the seminar was ‘Year of Technology Absorption - Empowering the Soldier’. The event aimed at fostering a collaborative environment for academia and the defence industry to fast-pace ongoing initiatives for technological absorption in the military. Experts and industry professionals came together and deliberated upon the adoption of niche technologies in the military domain.



Year of Technology Absorption

Himtech Symposium-2024: IA under the aegis of Federation of Indian Chambers of Commerce and Industry (FICCI) conducted 'HIMTECH 2024' on 20-21 September 2024 at Leh, Ladakh. The theme of the seminar was ‘Harnessing Technology for High Altitude Area’. The event aimed at highlighting technology and systems required to meet operational requirements along Northern Borders.



Himtech Symposium-2024

Project ‘Udbhav’: Project ‘Udbhav’ has been undertaken to study the evolution of indigenous military system, war fighting and strategic thought so as to develop an indigenous vocabulary rooted in India’s philosophy and culture. The project was inaugurated by Hon’ble Raksha Mantri on 21 October 2023. Having undergone a series of deliberations by various intellectuals and subject matter experts, the project culminated as a seminar on ‘Historical Patterns of Indian Strategic Culture’ on 21 May 2024 at National Museum, New Delhi.

INDIAN NAVY

India, as a maritime nation located along critical international shipping routes in the Indian Ocean, relies heavily on its naval capabilities for international outreach, with 95% of its trade by volume transported via sea. Given the geopolitical challenges on its land borders, the Indian Navy (IN) plays a crucial role in maintaining security in the region and fostering peace and stability in the Indian Ocean Region (IOR).

The IN faces evolving threats from both conventional and sub-conventional sources, requiring continuous adaptation to safeguard maritime interests. To maintain high Maritime Domain Awareness (MDA), the Navy deploys assets along critical sea routes and chokepoints. Additionally, in alignment with India's broader security vision—Security and Growth for All in the Region (SAGAR)—the IN actively collaborates with partner nations in the IOR, enhancing their naval capabilities and strengthening maritime infrastructure through training, platform transfers, and technical assistance.

Important Activities in 2024

Anti - Piracy Patrol in Gulf of Aden (Op PoG): Anti-Piracy Patrol in Gulf of Aden commenced in 2008 to ensure safe passage of Indian Flagged Merchant Vessels, and 127 *IN* ships have since been deployed in the Gulf of Aden. In addition, *IN* has also commenced deployments to counter piracy off the West Coast of Africa, in Gulf of Guinea, since 2022. Over the last one year, Indian Navy has successfully conducted six Anti-Piracy operations, saving 120 lives. Significant among these include release of *MV Ruen*, *MV Lila Norfolk*, Fishing Vessel *Iman*, Fishing Vessel *Al Naeemi* and Fishing Vessel *Al Kamar 786*. Anti-piracy operations for the release of *MV Ruen* also highlight *IN-IAF* coordination and joint capability in successfully conducting operations at extended ranges from the Indian coast.



Anti-Piracy Operations

Maritime Security Operations: Consequent to manifestation of Israel-Hamas conflict in the maritime domain, Indian Navy commenced maritime security operations in the region. High tempo of operational deployments of *IN* assets continue to be maintained, with a close watch on Indian Flagged Merchant Vessels (IFMVs) and vessels carrying critical commodities for India. Over the last one year, in response to Houthi shipping attacks, and rising incidents of piracy in the Western Arabian Sea, Indian Navy has deployed over 30 ships in the region, and has responded to over 25 incidents. The credible and swift actions of *IN* saved more than 400 lives, irrespective of nationality of crew. As of November 2024, Indian Navy has safely escorted over 230 Merchant Vessels, carrying over 90 Lakh

Metric Tons of cargo, valued over Four Billion USD. *IN* efforts have garnered international/ national acclaim, consolidating its position as a **'Preferred Security Partner'** and **'First Responder'**.

***IN's* Response to Maritime Incidents:** Mission deployed unit(s) in Gulf of Aden (GoA) and adjoining seas have responded to numerous maritime incidents with resolve and alacrity. Salient operations undertaken/ assistance provided are as follows:

- **MV Marlin Luanda:** In January 2024, based on the request from Master of Marshall Island flagged Oil Tanker *MV Marlin Luanda*, a team of personnel from mission deployed *IN* ship embarked the distressed vessel. The vessel had reported major fire onboard, following a likely missile attack in position 160 National Miles (nm) East of Djibouti. The *IN* team provided requisite assistance to the crew for fire-fighting (FF). In addition, about 1300 Ltrs of FF solution were also transferred by boat to the distressed vessel. Post extinguishing the fire, *IN* ship safely escorted the Motor Tanker to harbour.



Assistance to MT Marlin Luanda

- **MV Ruen:** In March 2024, based on intelligence inputs with respect to movement of *MV Ruen* from the East coast of Somalia to the high seas, for suspected piracy activities as a pirate mother ship, deployed *IN* ship intercepted the vessel and confirmed presence of pirates onboard. In subsequent calibrated tactical action, that ensued for next 40 hours, including air drop of MARCOS by *IAF* C-17 aircraft, the ship was able to ensure release of all 17 crew members, with all 35 pirates apprehended and handed over to police authorities at Mumbai for further legal proceedings.



Rescue Operation of MV Ruen

- **MV True Confidence:** In March 2024, based on inputs with respect to fire onboard Barbados flagged Bulk Carrier MV *True Confidence*, due to drone/ missile attack approximately 54 nm South West of Aden, Yemen, deployed *IN* ships were diverted to render necessary assistance and rescued a total of 21 crew from a life raft located in vicinity of the MV by helicopters and boat. Whilst one critically injured crew succumbed to injury, remaining 20 crew members were expeditiously evacuated to Djibouti on the same day for further medical management.



Assistance to MT True Confidence

MILAN 2024: MILAN 2024 was conducted at/ off Visakhapatnam from February 19 to 27, 2024. This year's edition was conducted at an unprecedented scale, involving participation of over 36 ships, two submarines, 55 aircraft and senior leadership of 47 Friendly Foreign Countries (FFCs) from six continents. As many as 25000 Service/ civilian personnel participated in the event, that was witnessed by over seven lakh spectators/ visitors.



MILAN 2024

Twin Carrier Operations: *IN*'s carriers participated in MILAN 2024 and twin carrier operations were conducted off Goa, in March 2024, on the sidelines of first edition of the bi-annual Commanders' Conference. These operations were a potent demonstration of *IN*'s fast growing blue water capability and gained considerable attention from national and international media.



Twin Carrier Operations

Exercise Poorvi Lehar (XPOL) 2024: The Indian Navy conducted Exercise Poorvi Lehar (XPOL-24) in March 2024, in multiple phases on the East Coast of India. The exercise was aimed at validation of procedures towards assessment of Indian Navy's preparedness to respond to various maritime security challenges.



Missile Firings during XPOL 24

Coastal Security: The coastal security construct is regularly exercised in coordination with various stakeholders. Regular coastal security deployments and exercises have greatly assisted in streamlining the SOPs and enhanced interoperability. Coastal security exercises Sea Vigil, *Prasthan*, and Op Sentinel have been conducted in 2024.



Coastal Security Operations

Final Operational Clearance (FOC) of INS Vikrant: INS Vikrant, the first indigenously built aircraft carrier of the Indian Navy, post certification of aviation facilities, commenced Final Operational Clearance (FOC) in January 2024 for an approximate duration of one year. To date, as part of the FOC, more than 750 hours of flying has been undertaken from Vikrant with various types of carrier borne aircraft, including extensive day and night flying by fighter aircraft and all types of helicopters in the Indian Navy.



Final Operational Clearance Tasks Onboard Vikrant

Search and Rescue Assistance to MV Prestige Falcon: On July 15, 2024, *IN* proactively responded to provide SAR assistance towards locating and rescuing crew of Comoros Flagged Oil Tanker *MV Prestige Falcon*, which had capsized at about 70 nm South of Duqm, Oman (approx. 800 nm West of Mumbai). Accordingly, mission deployed *IN* ship and *IN* LRMP aircraft undertook SAR efforts in coordination with Omani authorities. *IN* ship *Teg* safely rescued nine surviving crew members (eight Indians and one Sri Lankan) and recovered mortal remains of one crew member (Indian). The crew was disembarked at Duqm, Oman.



SAR Assistance to MV Prestige Falcon

SAR Assistance to MV True Confidence: *IN* helicopter conducted search for abandoned life raft carrying 21 injured crew of missile hit *MV True Confidence* and rescued a total of eight survivors.



SAR Assistance to MV True Confidence

Exercise with Foreign Navies

Ex-Malabar: The 28th Edition of Exercise Malabar, which is a multi-national maritime exercise between India, Australia, Japan and the US, was hosted by Indian Navy at/ off Visakhapatnam from October 08 to 18, 2024. Ships from Japan (*JS Ariake*), Australia (*HMAS Stuart*) and USA (*USS Dewey*), alongwith US P8 aircraft participated in the exercise. The Sea Phase of the exercise included live weapon firings, complex surface, anti-air and anti-submarine warfare drills and joint manoeuvres.



Exercise Malabar

Ex-RIMPAC: IN ship *Shivalik*, IN LRMP aircraft and a team of Marine Commandos were deployed in South China Sea and Pacific Ocean from May to August 2024 for participation in the 29th edition of multi-national exercise RIMPAC at/off Pearl Harbour, Hawaii, from June 27 to August 02, 2024. During the closing ceremony of RIMPAC-24, IN ship was awarded the Rodeo trophy for excelling in Gunnery firings amongst participating units.



Exercise RIMPAC

Rodeo Trophy – Best Gunnery Firing Ship

JIMEX 24: The eighth edition of bilateral maritime exercise between the Indian Navy and the Japanese Maritime Self Defence Force (JMSDF), JIMEX 24, was held in Yokosuka, Japan, in two phases, from June 11 to 14, 2024. JIMEX 24 provided an opportunity for the two countries to share best practices, strengthen their operational interactions and reaffirm their commitment to maritime security in the Indo-Pacific region.



JIMEX 2024

Ex-Varuna: The 22nd edition of Exercise Varuna was conducted from September 01 to 04, 2024, in the Mediterranean Sea, wherein maiden *IN LRMP European* detachment was undertaken at Istres, France for participation in Ex-Varuna 24.

IBSAMAR VIII: One *IN* Ship participated in the India-South Africa-Brazil trilateral exercise IBSAMAR VIII at/ off Simon's Town, South Africa, from October 10 to 16, 2024.



Exercise IBSAMAR 2024

Ex-Samudra Laksamana: The third edition of *IN* and Malaysian Navy bilateral *Samudra Laksamana* maritime exercise was held from February 28 to March 02, 2024, off the coast of Visakhapatnam. Indian Naval Corvette and Royal Malaysian Ship KD Lekir, along with *IN* Maritime Patrol Aircraft and ship borne helicopter, participated in the exercise.



Ex-Samudra Laksamana

India - Myanmar Naval Exercise (IMNEX 2024): One *IN* ship participated in IMNEX 24 with Myanmar Navy Ship Kong Sing Phyu Shin, off Visakhapatnam, from February 28 to March 02, 2024. Myanmar naval personnel visited Visakhapatnam during the Harbour Phase of the exercise, wherein Tower Work-up and Maritime Interdiction Operations (MIO) training were undertaken.



IMNEX 2024

SIMBEX: The 31st edition of the Singapore India Maritime Bilateral Exercise (SIMBEX) was conducted at Visakhapatnam from October 23 to 29, 2024. RSS Tenacious and one *IN* ship *Shivalik* along with *IN* MR aircrafts, Hawks and shipborne helicopters participated in the exercise. This year's edition aimed to further strengthen the strategic partnership between India and Singapore by enhancing interoperability, improving Maritime Domain Awareness and fostering cooperation to address common maritime challenges.



Conduct of SIMBEX 24 at/ off Visakhapatnam

Ex-Sea Dragon: *IN* LRMP aircraft operated from Andersen Air Force Base, Guam, for the multi-lateral exercise Sea Dragon from January 08 to 22, 2024. The Indian *IN* LRMP crew was adjudged first in the identification of tonals.



Exercise Sea Dragon

Coordinated Patrols (CORPAT): As part of maritime security cooperation with maritime neighbours, Coordinated Patrols along the IMBL are being conducted with navies of IOR littorals, as per established MoUs/ SOPs, as follows:

- **37th INDO – THAI Coordinated Patrol (CORPAT):** 37th edition of Coordinated Patrol (CORPAT) between *IN* and Thailand Navy was conducted from February 14 to 15, 2024.
- ***IN*-Myanmar Navy (MN) Coordinated Patrol (IMCOR) 2024:** Two *IN* ships participated in the 16th edition of IMCOR with Myanmar Navy from May 01 to 10, 2024. The harbour phase was conducted at Yangon, Myanmar from May 01 to 03, 2024, followed by sea phase from May 04 to 07, 2024.



IN-Myanmar CORPAT

- **IND - INDO Coordinated Patrol:** 42nd edition of Coordinated Patrol by *IN* and Indonesian Navy was conducted from May 16 to 25, 2024.



IND-INDO CORPAT

Foreign Cooperation Assistance to FFCs

Assistance to Sri Lanka

- **Deployment of Maritime Patrol Aircraft to Sri Lanka:** A Letter of Exchange was signed between GoI and GoSL for positioning one Maritime Patrol Aircraft at Sri Lanka, for undertaking Maritime Surveillance and Search and Rescue operations. One Maritime Patrol Aircraft has been handed over to Sri Lankan Air Force on August 27, 2024 at Kochi on yearly turnaround basis. A team comprising five Air Technical personnel have been deputed along with the aircraft to train and assist the SLAF crew in aircraft operations and maintenance.
- **Maritime Rescue Coordination Centre (Sri Lanka):** A MRCC project comprising one MRCC at Colombo, one Maritime Rescue Sub Centre at Hambantota and seven Sub-Stations has been provided by *GoI* (project worth USD 6 Million) on grant to Sri Lanka. The MRCC was inaugurated by the Hon'ble EAM on June 20, 2024, during his visit to Sri Lanka.
- **Maiden Underwater Egress Training (UWET) Course for Sri Lanka Aircrew:** Maiden UWET course for four Sri Lanka Air Force officers and three Sri Lanka Navy officers was conducted by Water Survival Training Facility (WSTF) from January 07 to 12, 2024. The course included egress training from ditched aircraft, practice of sea survival training, boarding and de-boarding of life raft and rescue hoist training.
- **Provisioning of CPP Spares for SLNS Sindhurala:** Whilst the ship was docked at Colombo Dockyard for repairs on propeller, SLN side requested for provisioning of two critical spares viz *Blade Carrier* and *Moving Yoke Cylinder* on urgent basis. The *Moving Cylinder Yoke* was dispatched to SLN in July 2024, and the *Blade Carrier* would be dispatched by end 2024.
- **Dispatch of Halon Bottles to Sri Lanka:** As part of Foreign Cooperation initiatives, *IN* undertook major overhaul of nine Halon bottles, including manufacture of new cradles for transportation of bottles by SLNS Sagar and SLCGS Suraksha.



Gifting Halon Bottles to Sri Lanka

Assistance to Maldives

- **Refit of MNDF CGS Huravee:** As part of refit preparatory activities of MNDF CGS Huravee, a three member *IN* technical delegation from Naval Dockyard (Mumbai) was deputed to Maldives from June 23 to 26, 2024 for undertaking assessment of the scope of work. The team undertook detailed discussion on the projected defects and also undertook a day's sortie to assess running state of various machinery/ auxiliaries.
- **Provisioning of Machinery Spares for MCGS Huravee:** Post approval of the Competent Authority, expeditious provisioning of machinery spares, including that of control systems, was undertaken to Maldives in August 2024 for sustenance of MCGS Huravee (ex-*Tarmugli*; gifted by *IN* to MNDF).

Assistance to Mozambique

Gifting of Two Fast Interceptor Craft (FIC): Two Fast Interceptor Craft (FICs) from *IN* inventory have been gifted to Government of Mozambique. These FICs were transhipped onboard *IN* Ship Gharial to Mozambique in October 2024.

Assistance to Myanmar

- **Provisioning of Radar Spares to Myanmar Navy:** Spares of Radar RAWL 02 MK II were provisioned to Myanmar Navy in February 2024.
- **Defect Rectification of Medak Gun Mount:** A team comprising *IN* reps were deputed to Myanmar for defect survey and subsequent defect rectification of Medak Gun Mounts onboard *MN* platform from May 21 to 23, 2024. Defect survey, defect rectification and functional checks were undertaken onboard UMS 559. Further, optical alignment checks and training on alignment onboard UMS 560 were conducted.
- **Visit of Myanmar Delegation to INS Satvahana:** A delegation of Myanmar Navy visited INS Satvahana on June 26, 2024, for discussions on setting up of submarine training facility in Myanmar for EKM class of submarines.



Visit of Myanmar Delegation to INS Satvahana

Assistance to Mauritius

- **Successful Completion of Short Refit of MCGS Victory:** Maiden Short Refit of MCGS Victory was conducted from October 15, 2023 to January 31, 2024. The refit of the ship was successfully completed within the promulgated timelines. Further, crew training by Local Workup Team was also undertaken from February 12 to 17, 2024. The ship thereafter participated in Harbour and Sea Phases of MILAN 24 and returned to Mauritius on March 01, 2024.
- **Maritime Diplomacy:** *Sunayna* escorted PS Zoroaster from Kochi to Port Victoria, Mauritius and participated in International Yoga Day - 24 along with Mauritian Navy at Port Louis on June 24, 2024. The ship also participated in 48th National Day of Seychelles, wherein ALH capability was demonstrated to the President of Seychelles, and undertook EEZ surveillance off Seychelles.

Training Support to FFCs

- **Afloat Phase Training of RSNF Cadets:** In continuation of *IN* commitment towards being a preferred training partner in IOR, afloat training for the second set of 76 RSNF cadets was conducted over 29 days in June and July, 2024.



Afloat Training of RSNF Cadets

- **Joint EEZ Surveillance:** EEZ Surveillance of Mauritius, Tanzania, Seychelles and Mozambique has been conducted along with respective navies in the preceding year.

Hydrographic Cooperation

Indian Naval Hydrographic Department (INHD) has taken a lead role on Hydrography in the Indian Ocean Region. Spectrum of activities conducted as Foreign Cooperation initiatives include the following:

- **India - Myanmar:** 3rd India - Myanmar Joint Committee Meeting (JCM) on Hydrography was held from July 23 to 25, 2024 at Yangon, Myanmar. A two member *IN* delegation led by the Chief Hydrographer attended the meeting. Implementing Arrangement on Hydrography between India and Myanmar has been extended for next three years *wef* December 2023. One *IN* survey ship was deployed to Myanmar for hydrographic survey of Myanmar waters in March 2024.



Presentation of Chart to Myanmar Navy

- **India - Kazakhstan:** Indian Hydrographic Training Team visited Kazakhstan from August 19 to 31, 2024, for training Kazakhstan personnel.
- **Hydrography Courses at National Institute of Hydrography (NIH), Goa:** 41 foreign personnel (05 Sri Lanka, 01 Indonesia, 02 Bangladesh, 05 Ghana, 02 Vietnam, 04 Malaysia, 02 Namibia, 06 Myanmar, 04 Tanzania, 02 South Africa, 02 Maldives, 02 Cameroon, 03 Mauritius, and 01 Madagascar) are undergoing various Hydrographic Courses at NIH, Goa.
- **Sale of Charts:** INHD successfully fulfilled the significant demand of over half million Electronic Navigation Charts (ENC) in the Indian Ocean Region.

Indo-Pacific Regional Dialogue (IPRD)-2024: The 2024 edition of the annual apex-level international conference of the Indian Navy, Indo-Pacific Regional Dialogue (IPRD), was conducted from October 03 to 05 2024. The IPRD is the principal manifestation of Indian Navy's international engagement at the strategic-level that addresses holistically maritime security issues across the Indo-Pacific. The overarching theme of IPRD-2024 was '**Resource-Geopolitics and Security in the Indo-Pacific**'. The Hon'ble RM was the Chief Guest for the event, and he addressed the attendees during the Commemorative Session on October 04, 2024.

Submarine Search and Rescue Cooperation: As a preferred partner in the field of ‘Submarine Search and Rescue Cooperation’ in the IOR, the Indian Navy is pursuing agreements with Friendly Foreign Countries (FFCs) of the region to provide rescue cover for any submarine in distress in the IOR. In this regard, an Implementing Agreement (IA) on Submarine Rescue Support and Cooperation has been signed between India and South Africa in addition to the existing IA with Singapore.

Navy to Navy Interaction

Seychelles National Day Celebrations: *IN* ship deployed to South West IOR from June to July, 2024 participated in Seychelles National Day celebrations, whilst also demonstrating indigenous Advanced Light Helicopter (ALH) capabilities to various dignitaries including Hon’ble President, Vice President and Senior military officers of Seychelles.



Seychelles National Day Celebrations and ALH Demonstration

Russian Navy Day Celebration: *IN* Ship deployed to Mediterranean Sea and Atlantic Ocean from June to September, 2024 participated in Russian Navy Day celebrations at St. Petersburg, Russia and exercise INDRA 24 with Russian Navy from July 25 to August 01, 2024.



IN Ship at St. Petersburg, Russia

7th Meeting of the India-US JWGACTC: A four member *IN* delegation visited US for the 7th meeting of the Joint Working Group on Aircraft Carrier Technology Cooperation (JWGACTC) from 10 to 12 Apr 24. The delegation, along with PEO (Project Executive Officer) Carriers, US Navy, visited various state-

of-the-art us facilities including Naval Surface Warfare Centre (NSWC), Carderock and the Virginia Advanced Shipbuilding Carrier Integration Centre (VASCIC).



IN Delegation Visit onboard US Carriers

Visit of Saudi and Australian Navy Delegation: Visits of high level delegations from Royal Saudi Naval Forces and Royal Australian Navy were facilitated at Kochi. The delegation led by Commander of Royal Saudi Naval Forces visited Kochi from January 12 to 13, 2024 and delegation led by Chief of Royal Australian Navy visited Kochi from April 03 to 05, 2024. During the visit, the delegations visited various training schools and were apprised of India's indigenous shipbuilding capacity at CSL.



Visit of Chief of Navy, RAN



Interaction with COS, RSNF

Visit by Oman Training Delegation: Oman Training Delegation comprising two officers and a sailor visited Southern Naval Command (SNC), Kochi from April 21 to 27, 2024 to participate in workshop on conduct of Annual Inspections of shore establishments. The workshop on conduct of Annual Inspections of shore establishments was conducted from April 23 to 25, 2024 wherein delegation was briefed on the nuances of conducting an Annual Inspection by HQSNC and modalities of conduct of AI such as maintenance and inspection of books and records, SOPs, audits and reports, and check-off lists.



Workshop on Conduct of Annual Inspection

Visit by Jordan Training Delegation: A training delegation comprising Commander Hazem I Maitah, Lt Cdr Ahmad Abdulsalam Alqatawneh and Lt Cdr Abdel Rahman Falah Alhawamleh from Royal Jordanian Navy visited training establishments under Southern Naval Command, at Kochi from April 30, 2024 to May 05, 2024 to strengthen bilateral naval cooperation and share best practices on training issues, as agreed upon during the second Consultative Meeting on Defence Cooperation in 2023.



Jordan Training Delegation visit to SNC

Visits by Foreign Delegation to Indian Naval Academy (INA): Visits by foreign delegations to INA are integral to fostering international cooperation and building strategic partnerships. These visits provide opportunities to proudly showcase our excellent training standards to the world besides being opportunities for exchange of knowledge, sharing of best practices, and strengthening of diplomatic ties.



Jordan Armed Forces Delegation



French Navy Delegation

Visit by South African Navy (SAN) Workup Team: A nine member delegation of South African Navy Work up team led by Rear Admiral (JG) NK Howell visited Southern Naval Command, at Kochi from October 21 to 31, 2024 to witness work up of Indian Navy ship *Teg*. During the visit, Rear Admiral (JG) NK Howell called on Chief of Staff and Flag Officer Sea Training. The delegation visited various training establishments and were exposed to training methodology in *IN*. They were also embarked for sea sorties onboard *IN* ship and were briefed on evolution such as pilotage, flying operations, tanker work up and gun firing exercises.



Visit of SAN Officers onboard IN Ship



Call on by RAdm (JG) – NK Howell

Shipbuilding Project

The Indian Navy (IN) has commissioned over 137 ships and submarines built in India, significantly boosting domestic shipbuilding and promoting self-reliance in defence manufacturing. Of the 62 planned warships, 61 are being built locally, with orders for 62 more nearing approval. The Navy's strategic plans align with the long-term growth of the Indian shipbuilding industry, with a strong focus on increasing indigenisation in weapons, sensors, and equipment. The ships/ submarines which have been commissioned/ delivered and those scheduled for delivery this year are as follows:

- **Commissioning of Survey Vessels Large:** INS Sandhayak, the first of four Survey Vessel Large (SVL) was commissioned into the Indian Navy in the presence of Hon'ble Raksha Mantri Shri Rajnath Singh on February 03, 2024, at Visakhapatnam. The second ship of SVL project, Yard 3026 (*Nirdeshak*), was commissioned on December 18, 2024. Induction of these vessels have enhanced the hydrographic survey capabilities of the navy and the nation.



Commissioning of Sandhayak



Commissioning of Nirdeshak

- **Commissioning of P1135.6 Follow-on Ship (ex-Yantar, Shipyard, Russia):** Contract for construction of two ships, Addl P1135.6 FO, ex Russia, was signed on October 23, 2018 between MoD and JSC RoE. The first of the two ships, INS Tushil, was commissioned on December 09, 2024. The ship is installed with state-of-the-art weapon and sensors and would significantly enhance the combat capability of the Indian Navy.



Commissioning Ceremony of Tushil

- **Delivery of Barges and Yard Craft:** Three 25 Tons Bollard Pull tugs, four of the eleven Ammunition Cum Torpedo Cum Missile (ACTCM) barges and fifth of the eight Missile-Cum-Ammunition (MCA) barges were delivered to Indian Navy in 2024 by MSME shipyards.



Induction of Yardcraft

Launching of Ships/ Yardcraft

- **16 x ASW SW:** 5th and 6th Anti-Submarine Warfare Shallow Water Craft (Yards 3033 and 3036), ex GRSE, were launched on March 13, 2024. Further, 7th Craft (Yard 3032), ex GRSE, was launched on October 25, 2024. As regards ships contracted to M/s CSL, 4th and 5th Craft (Yards 526 and 527) were launched on September 09, 2024



Launching of Yard 3033, ex-GRSE



Launching of Yards 526/527 ex-CSL

- **02 x Additional P1135.6 Follow-on Ships (GSL):** 9th Ship/ Yard 1258 of P1135.6 Additional Follow-On ships, was launched at GSL, Goa on July 23, 2024.
- **02 x Multi Purpose Vessels (L&T).** 1st Multi-Purpose Vessel (MPV) (Yard 18001) ex-L&T, was launched on October 14, 2024.



Launching of Yard 1258 (Triput)



Launching of Yard 18001 (Samarthak)

- **11 x Ammunition Cum Torpedo Cum Missile Barge (ex-Suryadipta):** 4th, 5th, 6th and 7th Ammunition Cum Torpedo Cum Missile barges were launched on January 24, 2024, February 28, 2024, April 29, 2024, and September 05, 2024, in that order, by M/s Suryadipta Projects Pvt Ltd, Thane.



Launching of LSAM 20



- **08 x Missile Cum Ammunition Barge (ex-SECON):** 5th and 6th Missile Cum Ammunition Barges were launched on Jun 10, 2024 and October 10, 2024 respectively, by M/s SECON Engineering Projects Pvt Ltd, Visakhapatnam.

Naval Aviation

Induction of Drishti-10 MALE RPAs: Induction of Drishti-10 MALE RPAs marks an important addition to the Indian Navy's RPA inventory. This technologically advanced aircraft would significantly bolster Indian Navy's surveillance capabilities and augment Maritime Domain Awareness (MDA) efforts.

Induction of Naval Shipborne Unmanned Aerial System (NSUAS): Rotary Naval Shipborne Unmanned Aerial Systems (NSUAS) have been inducted in the *IN* in early 2024.



Drishti-10 MALE RPA



NSUAS Landing Onboard a Ship

Commissioning of MH 60R Squadron: The first MH 60R squadron INAS 334 was commissioned at INS Garuda, Kochi on March 06, 2024.

RECRUITMENT AND TRAINING

IN undertakes recruitment of personnel to efficiently operate ships, submarines, aircraft and shore establishments. The recruitment system of *IN* is well streamlined, transparent, expeditious and candidate friendly. Recruitment is carried out on all India basis, and no distinction is made on the basis of religion/ caste/ creed during recruitment or at any point of time thereafter.

Recruitment of Officers in the Indian Navy

Induction of officers in the various branches of the Indian Navy is undertaken through one of the following modes/ schemes:

- **UPSC Entry:** The UPSC conducts exams twice a year for induction into the National Defence Academy (NDA) and Indian Naval Academy (INA) as Permanent Commission (PC) entries. Candidates are eligible after completing 10+2 (PCM) or while in the 12th standard. Selection is

made through written exams followed by interviews at Services Selection Boards (SSBs) across multiple locations. Candidates who pass the SSB and medical tests are appointed to NDA/INA, after which they undergo afloat training at Kochi. For graduates, the Combined Defence Services Examination (CDSE) is held twice a year.

- **10+2 B.Tech Entry Scheme:** This scheme offers a Permanent Commission into the Executive, Engineering, and Electrical branches of the Indian Navy. Candidates with a 10+2 (PCM) qualification are shortlisted based on their JEE (Main) rank. After clearing the SSB, they are sent to the Indian Naval Academy for a B.Tech course. Upon completion, they are granted a Permanent Commission in the Navy's specified branches.
- **Recruitment through NCC:** The vacancies for Naval Wing Senior Div NCC 'C' certificate holders with BE/BTech degree are published along with CDSE advertisement. No written test is conducted for this entry. The eligible candidates are required to forward their application directly to NHQ through DGNCC, following which the candidates are deputed for SSB interview. Shortlisted candidates are inducted into the Indian Navy on the basis of all India merit.
- **Direct Entry - Permanent Commission for Graduate Level Entries:** This entry caters to both Permanent and Short Service Commissions for graduates, including musicians and sports entries. Eligible unmarried candidates apply through advertisements published in leading newspapers and Employment News. After initial screening, selected candidates attend SSB interviews, and those who clear the medical exams are inducted into the Navy based on merit.
- **Indian Navy Entrance Test (INET):** The INET is a computer-based exam conducted twice a year for both Permanent and Short Service Commissions. NHQ shortlists candidates based on their INET rank and preferences. Candidates must qualify all sections of the exam to be eligible for the SSB interview. The final merit list is based on a 50% weightage of INET scores and 50% from SSB performance.
- **Opportunity for Widows of Deceased Service Personnel:** Widows of deceased Service personnel, who die in harness are granted age relaxation up to 35 years of age for officer's entry schemes.
- **Passing out Parade - INA:** Passing out parade for 220 trainees at INA for Spring Term 24 was conducted on May 25, 2024. The parade was reviewed by the Chief of the Air Staff, Air Chief Marshal VR Chaudhari, PVSM, AVSM, VM, ADC.



Passing Out Parade - INA

Recruitment of Sailors

- **Agnipath Scheme:** Post the implementation of the Agnipath Scheme, several initiatives have been introduced to ensure smooth recruitment, training, and career transitions for Agniveers. In the Indian Navy, Agniveers undergo 34 weeks of training, which includes both basic and professional training. Throughout their four-year engagement period, Agniveers earn academic credits in line with the New Education Policy (NEP). These credits can be used for higher studies after their tenure. Additionally, 25% of Agniveers may be re-enrolled based on merit.
- **Method of Recruitment:** Number of personnel recruited from a particular state depends on the number of eligible applicants, who qualify in the computer based examination, Indian Navy Entrance Test (INET), physical fitness test and medical examination, and their relative position in merit.
- **Passing Out Parade of Agniveers:** Passing out Parade of Agniveers (batch 01/24) was conducted on August 09, 2024. The parade was reviewed by the Chief of the Naval Staff, Admiral Dinesh K Tripathi, PVSM, AVSM, NM.



Passing Out Parade – Agniveers 01/24

Ab-Initio Training for Officers

Indian Naval Academy (INA), Ezhimala: Indian Naval Academy, Ezhimala is the largest military academy in India and one of the largest in the world. The INA Campus covers an area of 2580 acres, of which 40% is mandated reserve forest. INA has world class facilities in terms of infrastructure, for both academic pursuits as well as outdoor activities.

INA conducts four types of courses for the Navy, Coast Guard and the maritime forces of Friendly Foreign Countries. In addition to the flagship INAC course, INA conducts Naval Orientation Course (NOC), NOC (Ext) and Short Naval Orientation Course (SNOC), which comprises trainees from IN & CG, including women officers. Commencing December 2015, cadets from friendly countries are also being trained at INA. In addition to technical training, the Academy provides its cadets with a healthy mix of training in humanities and Naval History.

Ab-Initio Training for Sailors

INS Chilka: INS Chilka is the premiere *ab-initio* Sailors Training Establishment of the *IN*. Over the years, Chilka has witnessed a significant growth. Starting with an annual throughput of 1,235 trainees, the training capacity has expanded to over 6,000 trainees annually. Post commencement of *Agnipath* Scheme, INS Chilka is undertaking training of women *Agniveers* as well.

Chilka conducts various courses which include Senior Secondary Recruit Course, Matric Recruit Course for *Agniveers* of Indian Navy. The base also conducts basic training for Coast Guard recruits, viz. Navik (General Duty), Navik (Domestic Branch) and Yantrik courses. In addition, basic familiarisation courses are also conducted for personnel from the Border Security Force (BSF), the Central Industrial Security Force (CISF) and the State Marine Police.

Overseas Training

The Indian Navy (IN) has made training cooperation a key element of its foreign engagement initiatives, aligning with the government's policy to engage Foreign Friendly Countries (FFCs) across the Indo-Pacific and beyond. This cooperation allows the IN to expand its global presence. Additionally, to adopt best practices, stay updated with niche technologies, and enhance capacity building, the IN is sending personnel for technical, domain-specific, and doctrinal courses in developed nations. Participation in courses in countries within the Indian Ocean Region (IOR), which are strategically significant, also fosters stronger relationships and provides valuable insights into the operational philosophies of other nations' Armed Forces.

Professional Training

Naval War College: The aim of Naval War College (NWC) is to prepare officers of the Indian Navy and Joint Forces for leadership at strategic and operational levels by developing critical thinking, analytical ability, strategic vision and proficiency in Operational Art. The college has emerged in a pre-eminent institution facilitating higher education, war gaming and cutting-edge research on maritime security and warfare at strategic and operational levels. The new admin-cum-training building – 'The Chola Bhawan' - at NWC, Goa was inaugurated on March 05, 2024 by the Hon'ble RM.



Inauguration of Chola Building by Hon'ble RM

Courses/ Training at NWC: NWC conducts courses on Naval Higher Command Course (NHCC) for officers of the rank of Captain/ Commanders, Naval Staff and Technical Management Course (NSTMC) designed to prepare officers of the rank of Cdr/ Lt Cdr in contemporary leadership and management techniques, Maritime Security Course (MSC) for officers of the rank of Captain/ equivalent of maritime security agencies from Friendly Foreign Countries (FFCs), and Doctor of Philosophy Programme (PhD).

Maritime Security Course (MSC) at NWC: The Indian Navy started MSC at NWC, Goa for participants from nations of the IOR and beyond *wef* 2016. It also provides an opportunity for *IN* officers undergoing the NHCC to interact with foreign participants and understand perspectives of regional navies on issues of common concern. The module includes International Relations Theory, International Maritime Law, UNCLOS, Energy and Natural Resources Security, Information Sharing, MDA, International Politics, Economy, Indian Ocean Studies, as well as Table-Top HADR/ OOAC exercises.

COOPERATION BETWEEN ARMED FORCES AND CIVIL AUTHORITIES

SAR Assistance at Chandil Dam, Jharkhand: *IN* provided SAR assistance from August 22 to 27, 2024 at Chandil Reservoir (approx 100 Km South East of Ranchi), on request of the District Administration, Seraikella-Kharsawan, Jharkhand for two seater training aircraft (Cessna VT-TAJ, with two pilots), which had reportedly crashed on August 20, 2024. Mortal remains of both the pilots were recovered and aircraft debris/ wreck were salvaged by *IN* team and handed over to District Administration on August 27, 2024.



SAR Ops at Chandil Dam, Jharkhand

SAR Assistance at Nuziveedu (Eluru), Andhra Pradesh: On September 01, 2024, *IN* teams were deployed at Nuziveedu town (approx. 60 km from Vijayawada and 280 km from Visakhapatnam) for SAR efforts based on the request from District Collector, Eluru District, Andhra, post-incessant rains. A total of 751 civilians were rescued and 4537 Kg of relief material.

Disaster Relief Operations at Wayanad, Kerala: On July 30, 2024, *IN* personnel were deployed to Wayanad to render SAR assistance in the aftermath of massive landslide near Meppadi in Wayanad District, Kerala. The deployed *IN* personnel provided medical aid, undertook extensive SAR operations and distribution of relief material. They also assisted affected people in rehabilitation efforts, reinforcement of disaster relief spots and establishment of help centres.



HADR Assistance at Wayanad

Food Relief at Vijayawada: During floods at Vijayawada from September 01 to 04, 2024, two ALH, two Chetak and one Dornier aircraft were deployed to the affected areas. 22 stranded individuals were rescued and more than 1000 Kg of food aid was air dropped. Ten Flood Relief Teams (FRTs) were also deployed to rescue citizens stranded in the flooded areas.



Flood Relief Operations at Vijayawada

Food Relief at Koyamadaram: During floods at Koyamadaram, Andhra Pradesh, IN launched extensive SAR operations with seven aircraft including P8I, Dornier, Sea King, and ALH helicopters on June 29, 2024. Despite challenging weather, IN team rescued 28 stranded individuals from Koyamadaram to a safe location.



Flood Relief Operations at Koyamadaram

Assistance to FV *Infan Dhas*: An *IN* corvette provided technical assistance to *FV Infan Dhas* on June 07, 2024, which had experienced engine failure and was adrift 75 Nm east of Sri Vijaya Puram. The ship's technical team undertook defect rectification, thereby making the boat operational.



Assistance to FV Infan Dhas

Digital Initiatives for Enhanced Cooperation

Coastal Security Dashboard: *IN*'s Research and Development organisation, WESEE, has developed a Coastal Security Dashboard application, which serves as a coordination solution for coastal security agencies. The system has been demonstrated to all State Security Coordinators, including Coastal Police and Coast Guard during the 8th meeting of Multi Agency Maritime Security Group (MAMSG) meeting in June 2024. At present, modalities of hosting the application on cloud and subsequent deployment is being examined in conjunction with NSCS.

Savior Net: WESEE has developed a browser-based application 'Savior-NET', that can be used over low bandwidth network, intended for coordination between naval ships and merchant vessels. The salient features of the application include user friendly single window, sharing of notifications, event layer (optional GIS) and chat window.

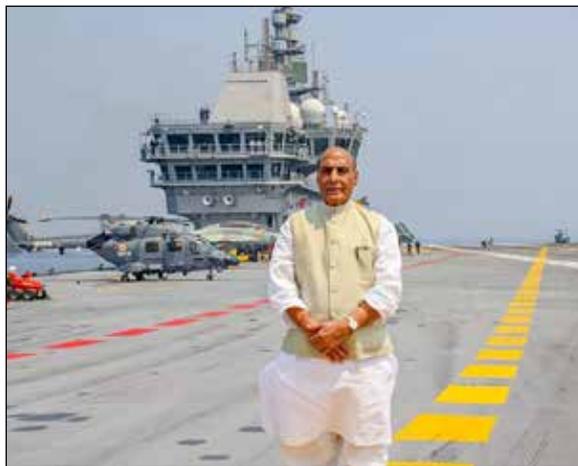
CEREMONIAL, ACADEMIC AND ADVENTURE ACTIVITIES

President's Day at Sea: The Hon'ble President of India, Smt Droupadi Murmu attended the 'Day at Sea' event off Goa on December 07, 2024. During the visit, the Hon'ble President witnessed several naval operations, including missile firing drills, and fighter aircraft operations from the deck of *Vikrant*, and was also briefed on the role of Indian Navy and the naval Concept of Operations.



Hon'ble President onboard INS Vikrant

Hon'ble Raksha Mantri Day at Sea: As part of first edition of Naval Commanders' Conference 2024, the Hon'ble RM interacted with the Naval Commanders on the inaugural day of the conference on March 05, 2024 and witnessed the naval Operational Demonstration, including twin carrier operations.



Hon'ble RM onboard IN Carrier

Visit of Hon'ble Raksha Rajya Mantri: Hon'ble Raksha Rajya Mantri, Shri Sanjay Seth, visited *Rajali* on June 20, 2024. The dignitary was provided an insight into naval air operations, and the visit included interaction with the men and women appointed to the air station.



Visit of Hon'ble Raksha Rajya Mantri

Operational Demo 2024: As part of Navy Day celebration, an Operational Demo by frontline naval ships and aircraft, to demonstrate Indian Navy's preparedness to respond to maritime threats and challenges, was conducted off Puri (at Golden Beach), Odisha on December 04, 2024. The event is in consonance with the Government of India policy to celebrate Service Days in various cities apart from Delhi. The Hon'ble President presided over the event as the Chief Guest.



Naval Operations Demo off Puri, Odisha

Decommissioning Ceremony of IN Ships: IN Ships Cheetah, Guldar and Kumbhir were decommissioned on January 12, 2024. The events included sunset ceremony, *Barakhana* and dinner, with Hon'ble LG (A & N) as the Chief Guest.



Decommissioning Ceremony of LSTs(M)

Har Ghar Tiranga and Meri Maati Mera Desh: On the occasion of 78th Independence Day, to instill pride and nationalism, the National Flag was hoisted at various locations as part of 'Har Ghar Tiranga' campaign.



Har Ghar Tiranga Campaign

Sports/ Awards

Olympics Games 2024: Nine naval sportspersons participated in Olympics 2024 held from July 26 to August 11, 2024 in Paris, France.

Indian Navy Polo and Equestrian Contingent (INPEC) Activities: Following Polo and Equestrian events were conducted in 2024:-

Ser	Event	Dates/ Location	Result
1	National Equestrian Championship	February 09-16, 2024 Chandigarh	Runners up in the overall team event
2	Major Randhir Singh Memorial Trophy	March 15-17, 2024 Chandigarh	Runners up
3	Bangalore Polo Season	August 05-25, 2024 Bangalore	Won two Polo Cups (Wadiyar Cup and Gyan Jyoti Cup)
4	Sapta Shakti Horse Show	August 11-19, 2024 Jaipur	Team Silver in Tent Pegging

Mountaineering and Adventure: Salient mountaineering and adventure activities undertaken by the Navy are as follows:

- **Chadar Trek:** Chadar trek was conducted at Leh on Zaskar river from February 10 to 18, 2024. 25 naval personnel, including a woman officer, participated in the activity.
- **Kuari Pass Trek:** Kuari pass trek was conducted at Uttarakhand from March 09 to 16, 2024. 30 naval personnel, including dependents, participated in the trek.
- **Mount Nun Expedition (7135M):** Mount Nun expedition was conducted from August 06 to September 02, 2024 at Ladakh. 15 naval personnel including two women officers, participated in the expedition.

Medal Tally for Sports Achievements: The medal tally for International and National level championships for the year 2024 are tabulated below:

Event	Players Participated	Gold	Silver	Bronze
International	62	07	04	04
National	78	17	05	16

ACTIVITIES OF VIGILANCE UNITS

Anti-Narcotics Operations (ANO): Since 2021, 15 Anti-Narcotics Operations (ANO) have been undertaken by the *IN*, resulting in seizure of narcotics worth about Rs 35,000 Cr. The details of operations undertaken in 2024 are as follows:-

- In February 2024, an *IN* ship seized the largest ever consignment (by quantity) amounting to 3300 Kg of narcotics (including 3110 Kg Hashish/ Charas, 158.3 Kg Methamphetamine and 24.6 Kg

suspected Heroin) in northern Arabian Sea. Subsequently, the dhow with crew (five personnel) and contraband were handed over to Law Enforcement agencies ashore at Porbandar for further action.



Anti-Narcotics Operations in Feb 24

- In April 2024, *IN* ship deployed for Focussed Operations (FO) Crimson Barracuda, under the aegis of CTF 150, seized about 940 Kg contraband from Fishing Vessel in South Western Arabian Sea.
- In November 2024, two *IN* ships, in separate incidents, apprehended vessels carrying narcotics and seized over 600 Kg and 500 Kg narcotics, respectively.



Anti-Narcotics Operations in Nov 24

INITIATIVES TOWARDS INDIGENISATION/ ATMANIRBHAR BHARAT AND ENHANCING THE EASE OF DOING BUSINESS

Indian Navy's track record and future trajectory augurs well with the national vision for self-reliance. Indian Navy is committed to its vision of being a 'Combat-Ready, Credible, Cohesive, and Future-Ready' force, with its modernisation programme centered on *Atmanirbharta*.

Indigenisation Schemes: Indian Navy is a major stakeholder and frontrunner in flagship indigenisation schemes of Government of India namely, 'Make in India', 'Technology Development Fund (TDF)' and 'Innovation for Defence Excellence (iDEX)'. More than 120 new start-ups and MSMEs are now engaged with the Navy towards indigenous development of novel technologies and products, many of them potential 'global firsts'.

Projects under R&D Route: DFPDS-2021 provisions under R&D Head are being effectively utilised to engage with industry and Academia to leverage their potential to develop products and to undertake problem solving. *IN* is working on a number of projects with industry, IITs and academic institutes of repute. Of the 156 cases being progressed, 101 contracts amounting to approximately Rs 154 Cr have already been concluded.

Make Scheme: *IN* is pursuing 42 Make projects *iaw* DAP 2020. Presently, 29 projects are being steered under Make-II category, 11 projects under Make I category and two projects under Make III Category, which are at various stages of development/ approvals/ processing. In addition, nine Make II, three Make III and one Make I joint projects are being steered with IA and IAF as lead Services.

Technology Development Fund (TDF) Scheme: In order to introduce cutting edge technology onboard *IN* platforms, 26 projects are being pursued under the 'Technology Development Fund (TDF)' scheme. Contract has been concluded for 11 projects at a cost of Rs 42.48 Cr. One project is at contract conclusion stage, two projects are at CNC stage, EOI evaluation is in progress for four projects, and eight projects are at pre-AoN stage.

Induction of Niche Technologies: A wide range of niche technologies are being inducted to enhance long range surveillance and precision attack capabilities. Also, Loitering Munitions in land and sea based versions are being inducted to enhance targeting capabilities, and containerised missile systems are being inducted to enhance operational capability/ flexibility in operations.

Digital India

In consonance with Digital India initiative, various measures have been undertaken by *IN* to leverage technology towards Ease of Doing Business (EoDB), as follows:

- **INGRAMS:** Indian Naval Grievance Redressal and Monitoring System (INGRAMS) application is hosted on Internet and is being utilised by veterans for registering/ tracking grievances. The system gives a single window functionality to the grievance redressal authority to track, monitor and redress the grievance in a transparent and time-bound manner.
- **eVigam:** Towards enabling easy workflow for retiring officers, an application called eVigam has been developed. The version 2.0 of the application has been launched, which integrates with Directorate of Personnel (DOP) database for pre-fetching information with respect to Retiring Officers, automates generation of all retirement forms, generates an XML file for importing into SPARSH, and has also been integrated with PKI (Public Key Infrastructure) to enable digital signing of forms.

- **Video Conferencing Solution – Ekaayan:** Ekaayan version 2.0 supports end-to-end hop encryption and is more bandwidth efficient compared to other similar platforms.
- **Hawk Secure:** An indigenous AI based traffic analysis solution called 'HawkSecure' has been deployed pan-Navy over the Naval Enterprise Wide Network (NEWN) network. It is used for monitoring the network traffic and does a behavioural analysis to detect anomalies and has got the ability to learn and improve the traffic analysis using AI/ ML.
- **Ayupravidha (e-AME/PME):** Ayupravidha is an *IN* intranet based application which has been developed by DIT and DGMS (Navy) for digital processing of Annual Medical Examination (AME)/ Periodic Medical Examination (PME) and documents thereof. Ayupravidha PLUS application to include AFMSF-15 (Cat/Re-Cat/Sick Leave) and AFMSF-16 (Release Medical Board) has also been developed. The AFMSF-15 module was launched in September during Commanders Conference 2024.
- **Indian Defence Resource for Weather Analysis (INDRA):** INDRA provides real-time access to comprehensive weather forecasts, meteorological/ ocean parameters, cyclonic tracking, real-time satellite images embedded with real-time lightning sensor data, and interactive charts for any global location. Notably, it offers unique features such as sea state, thermal inversion etc., which are not available in Commercial Off-The-Shelf (COTS) applications.

Artificial Intelligence

Leaps of advancements have been undertaken in the domain of Artificial Intelligence by *IN*. Major projects implemented are as enumerated below:

- **Antarbashi.AI:** An offline language translator solution capable of detecting and translating eight IOR and eight coastal languages has been developed with BEL as partner. The solution is extensively used by ships deployed for Anti-piracy and Gulf of Aden patrol.
- **Prashikshan.AI:** To reduce the communication barrier between the instructor and foreign students, an AI application has been developed to translate the speech of instructor in near real time to the text of native language of foreign student and vice versa. The application is trained on Sinhalese, Vietnamese, Bangla and French. Presently, one full system is deployed at Signal School, at Kochi.
- **Satyapan.AI:** A portable facial recognition system has been developed to recognising pirates encountered at sea and to build the database of pirates' facial features at MOC. The solution is deployed at Western Naval Command and is used by the ships deployed for Anti-Piracy.
- **Drishti.AI:** An AI based MOB and upper deck monitoring software for tracking movements of personnel on upperdeck has been developed. The prototype trials have been completed onboard INS Visakhapatnam using one IR camera and existing M CCTV Cameras.
- **Naval AI Response for Advanced Dialogues (NARAD):** WESEE has developed an advanced private and offline custom large language model, tailored for querying and summarisation of information from official documents over a naval network. The solution known as Naval AI Response and Advanced Dialogues (NARAD) will enhance information retrieval, comprehension, and decision-making in a secure and controlled environment. The solution has been integrated with e-pehchan id and hosted over NUD, allowing seamless access and utilisation across units.

INDIAN AIR FORCE

The Indian Air Force (IAF) is a vital component of India's national security, providing significant aerospace power that plays a key role in deterring conflicts and maintaining peace. The key highlights are as below:

- **Strategic Role:** Aerospace power is crucial for national defence, offering the ability to strike critical enemy targets without entering enemy territory. The IAF has demonstrated its importance in past conflicts, including the 1965 and 1971 Indo-Pak wars and 1999 Kargil wars.
- **Strength & Capabilities:** The IAF's strength lies in its modern air capabilities, supported by aviation research and development. Key characteristics of aerospace power include reach, flexibility, mobility, and offensive capabilities. The IAF also plays a major role in humanitarian missions globally.
- **Space & Defence:** The IAF's role extends into space, with satellite-based assets providing intelligence, surveillance, and secure communications. The growing use of technologies like ballistic missiles and hypersonic vehicles increases the need for robust air and space defence.
- **Future Preparedness:** The IAF is preparing for future, technology-driven conflicts by enhancing capabilities in areas like drone technology, artificial intelligence, and space-based systems. Its rapid response capacity was evident in the Eastern Ladakh situation.
- **Prominence:** The IAF's role in national security has grown, with modern aircraft and integrated defence systems. The force is adapting to the evolving nature of warfare and positioning itself as a key player in India's defence strategy.
- **Military Technology Advancement through Integration and Procurement:** The IAF has kept pace with developments in air power with induction of aircraft and weapon systems over the years (S-400, Rafale, Apache, Chinook, C-17, C-130J, C-295). Further, integration of existing weapons on new platforms like the Tejas aircraft and new weapons on existing platform like the BrahMos and Astra Missiles on the Su-30MKI, has been successfully achieved.

Modernization of Armed Forces

Transport Aircraft

Procurement of C-295: This is the first initiative of GoI in defence private sector towards 'Make in India' programme under 'Buy and Make' procedure. This would be the first time when a world class tactical airlift transport aircraft will be manufactured by private industry in India. This project will give impetus to aviation sector and act as a catalyst in the growing ecosystem towards generating direct and indirect employment opportunities. The first aircraft to be manufactured in India will be delivered in 2026.



C-295

Procurement of Flight Refuelling Aircraft (FRA): The IAF has been pursuing enhancing its Flight Refuelling aircraft capability, considering an increased number of receivers. Towards this, a case for FRA has been recommended by DPB in Nov 2023 for fielding in DAC. RFP was floated in Jul 2024.



Flight Refuelling Aircraft (FRA)

Weapons/ Weapon Systems

Shaurya (MRSAM): MRSAM is being jointly developed by IAI, Israel and DRDO. The MRSAM contract for development and delivery of Firing Units (FUs) by DRDO in collaboration with IAI, Israel was signed in Feb 09.



Shaurya (MRSAM)

Akash Missile System: Trials for upgraded Akash missile with indigenous RF seeker which ensures higher accuracy of missiles were successfully conducted during the annual Ex-Astrashakti in Dec 2024.



Akash Missile System

New Generation Anti-Radiation Missile (NGARM): AoN was accorded by DAC on Jan 24, 2023. Currently the project is under D&D with DRDL as lead Lab. RFP will be issued to DCPD post conversion of PSQR to ASQR.



New Gen Anti-Radiation Missile (NGARM)

Smart Anti-Airfield Weapon (SAAW): Case for procurement of Sat SAAW + EO SAAW bombs along with Sat SAAW for *IN* was accorded AoN by DAC in Oct 2020. The weapons once inducted, will greatly enhance our capability to accurately target enemy airfields. Presently, SoC for amendment to AoN has been concurred by all stakeholders and will be fielded in upcoming DPB.



Smart Anti-Airfield Weapon (SAAW)

Long Range Land Attack Cruise Missile (LRLACM): First live firing trial of indigenously developed Long Range Land Attack Cruise Missile (LR-LACM) has been successfully carried out in 2024.

Close in Weapons System (CIWS): Contract for procurement of CIWS which is a Buy & Make (Indian) project, has been signed in Mar 2024 with M/s L&T Pvt Ltd. It is planned to be inducted shortly thereby further enhancing safety and security of VA/VPs against conventional and sub-conventional Air Defence threats.



Close in Weapons System (CIWS)

Atmanirbharta/ Indigenisation

Indian Air Force is committed towards self-reliance and is providing full-fledged support to the national objectives. In order to spearhead innovation and indigenisation, the Indian Air Force has formed a new directorate, named Directorate of Aerospace Design (DAD). This directorate actively interacts with industries, R&D institutions and academia to ascertain niche technologies in aerospace domain and evolve modus operandi to convert them into tactical and strategic war fighting solutions utilising indigenous resources.

- **Technology Development Fund (TDF):** TDF has been established to promote self-reliance in Defence Technology as a part of the 'Make in India' initiative. This programme is executed by the Defence Research & Development Organisation (DRDO) to meet the requirements of the Tri-services, defence Production and DRDO. The scheme encourages participation of public/private industries, especially MSMEs and start-ups, so as to create an ecosystem for enhancing cutting edge technology capacity in the defence sector.
- **Innovation in Defence Excellence (iDEX):** It is an initiative of GoI to encourage and nurture innovations in the Indian Defence sector. The IAF has connected with innovators to 'hand-hold' selected start-ups on the principle of co-creation and co-innovation in product development. Presently, there are more than 42 cases of iDEX being processed by IAF under various stages of which two are at procurement stage.
- **'Make' procedure:** Under the 'Make' procedure, IAF has accorded AIP for 52 cases. Out of these Project sanction orders for design and development has been accorded for 07 cases. These cases have generated business opportunity of Rs 3729.22 Cr for Indian Industry.

Indigenisation of Aircraft Tyres and Batteries: Indigenisation of aircraft tyres and batteries has been initiated as self-reliance efforts. At present, ac tyres for seven fleets have been indigenised and indigenisation for 10 fleets is under progress, Similarly, ac batteries for 22 fleets have been indigenised and for four fleets is under progress.

Indigenisation of FOL: Indigenisation of 146 Lines of FOL stores has been undertaken. HPCL, BPCL, IOC and CSIR-IIP have been approached for undertaking indigenisation.

Innovations/ Developments

- **Light Weight Man portable HF Sets:** Indian Air Force has signed contract with M/s Bharat Electronics Limited, Bengaluru in Feb 2024 for procurement of 216 Light Weight Man Portable HF Sets. These indigenous Software Defined Radio (SDR) technology based HF sets with enhanced security features will provide a boost to the Air Defence communication network of IAF in line with Govt policy on Atmanirbhar Bharat.
- **Innovative Projects Undertaken by IAF:** The following innovative and path breaking projects have been under taken by IAF towards embracing niche technologies, cleaner environment and reclamation of FOL:
 - **Additive Manufacturing:** Additive Manufacturing (AM) is a game changer technology, which utilises powder bed fusion and directed energy deposition. The IAF has successfully manufactured 233 items such as brackets, casing of valve, manifold, panel etc through 3D printing. Initial efforts were channelised towards manufacture of non-critical parts. IAF has gone one step ahead and procured a high-grade metal powder AM machine. A total of 47 unique lines have been printed.
 - **Sustainable Aviation Fuel:** Bio-jet fuel project is a technology demonstrator project to develop 8,700 litres of bio-jet fuel through CSIR IIP Lab Dehradun. The significant milestones achieved in the project are An-32 Republic Day parade fly past in Jan 2019, landing at Leh airfield in Jan 2020 & formation flying by two Do-228 ac with Dakota ac in Republic Day parade fly past in Jan 2024. As on date, bio-jet fuel has been cleared on An-32 & Do-228 ac. IAF is planning to utilise and certify bio-jet fuel in a phased manner on specific platforms (Mi-17, MiG-29 Upg and LCA).
- **Development of e-Maintenance Management System LITE (e-LITE):** The IAF has implemented Project e-Maintenance Management System (e-MMS), one of the largest Maintenance Repair Overhaul (MRO) solutions in the world, across all units to digitally record its maintenance activities. In order to enhance the exploitation of e-MMS, a mobility version of the application (e-LITE) was developed and rolled out in March, 2024 to facilitate recording of maintenance activities while operating from non-IAF bases, including foreign exercises. The efficacy of the application was also ratified during various exercises conducted in 2024 by IAF.
- **Static HF Transreceiver Sets:** The Indian Air Force signed a contract with M/s Bharat Electronics Limited, Bengaluru in Aug 2024 for procurement of 124 Static HF Trans-Receiver Sets. Based on Software Defined Radio (SDR) technology, these sets are indigenously designed and developed with enhanced security features. This procurement provides a boost to the Air Defence communication network of IAF, further bolstering IAF's commitment for Atmanirbhar Bharat.

Gaganyaan Programme

- IAF is the lead agency for selection of Astronaut Designates (ADs). The IAF additionally, is actively involved in physical training of ADs, Integrated Crew Recovery Operations (ICRO), Crew Module design & testing, life support and maintenance of human life in space. The IAM is responsible for aerospace medicine training and periodic evaluation of ADs. After rigorous selection process only four ETPs were selected. They are Gp Capt PB Nair, Gp Capt Ajit Krishnan, Gp Capt Angad Pratap and Gp Capt Shubhanshu Shukla.
- All four underwent a generic spaceflight training in Russia in 2019 and post completion, undergoing Indian leg of training. On 27 Feb 24, Hon'ble PM had awarded them 'Space Wings'. Gaganyaan manned space flight is expected to take place in 2026, post launch of two un-manned missions.
- **Axiom-4 Mission:** ISRO signed a contract with Axiom (Private Company), with NASA in front for Space Mission to International Space Station. The Apex Board selected one main and one stand by based on various inputs and recommendations. The selected Astronauts have proceeded to NASA in Aug 24, for a mission likely in mid-2025.

Aero India 2025

The 15th edition of Aero India was held at AFS Yelahanka from Feb 10 to 14, 2025. It was a grand showcase of India's aerospace capabilities, highlighting the Indian Air Force commitment to innovation, self-reliance (Atmanirbharta) and international cooperation. Key highlights of the event are as follows:

- The IAF exhibited five key projects in the India Pavilion, reinforcing its dedication to technological advancements and self-sufficiency. Additionally, 126 indigenisation stalls and 17 success stories were showcased, demonstrating progress in indigenous defence manufacturing.
- The Inaugural ceremony featured a 42 aircraft flypast and a static display of 27 aircraft including platforms from Russia, Brazil, the USA and Germany, reflecting global participation and collaboration.
- IAF Seminar on 'Navachar Utkrishttam Bhavishyam' (Innovation is Path to Better Future) was organised, aimed towards promotion of synergy among defence forces, industry and R&D agencies to foster a robust innovation ecosystem. Following milestones were achieved through this event:
 - Release of IAF's "Samarthya Margdarshika" compendium of Challenges and Opportunities for the Indian Industry.
 - Declaration and felicitation of Mehar Baba-II competition winners and the launch of Mehar Baba-III.
 - Launch of "Vayu Vitt" a digital commerce platform between IAF and HAL.
 - A panel discussion on "Manned-Unmanned Teaming (MUM-T) Concept to Targeting".



IAF Seminar on 'Navachar Utkrishttam Bhavishyam

- **Air Chiefs' Roundtable:** This prestigious event saw participation from the CDS of Eswatini and Burkina Faso, 17 Air Chiefs and 32 other delegations. Discussions focused on the impact of UAVs and UCAVs on future conflicts, reflecting global concerns and strategic advancements in aerial warfare.



Air Chiefs' Roundtable

- **India-Africa Air Forces Dialogue:** A landmark initiative by the IAF witnessed the participation of one CDS, nine Air Chiefs and seven other African delegations. Discussions revolved around aerospace cooperation, covering areas such as air exercises, HADR operations, air domain awareness, training, industry collaboration and air infrastructure development. The dialogue fostered active engagement and strategic partnerships between the IAF and African Air Forces.



INDIA-AFRICA AIR FORCES DIALOGUE - 2025

- **Bilateral Engagements:** The IAF conducted bilateral dialogues with 38 countries, strengthening India's defence partnerships and fostering international collaboration in aerospace technology and security.
- **Technological and Strategic Exposure:** Aero India 2025 provided an excellent platform for global aerospace advancements, facilitating knowledge exchange and industry collaborations.
 - Aero India 2025 reaffirmed India's leadership in aerospace innovation, defence collaboration and military diplomacy, positioning the IAF as a key enabler of national and global security.
 - IAF was tasked for conduct of Flying Display, Static Display, Security, Disaster Management within the Station, Medical Services and the fire prevention measures in coordination with State Govt.
 - Air display was conducted once during the business days (10 to 14 Feb 25) and twice during public days (13 & 14 Feb 25).



CAS & COAS after Sortie of Tejas during Aero India 2025



SKAT formation during Aero India 2025



HJT taxiing during Aero India 2025



Tejas formation Air Show during Aero India 2025

Humanitarian Aid and Disaster Relief (HADR)

In 2024, the Indian Air Force (IAF) responded swiftly to numerous natural disasters and emergencies across the country, providing critical humanitarian assistance and disaster relief (HADR). Key operations and efforts are summarised below:

- **Forest Fire Operations:** IAF Conducted aerial firefighting in Tamil Nadu and Uttarakhand. Over 134,500 litres of water dispensed through Bambi Bucket operations.
- **Flood Relief Operations:** IAF provided major flood relief in Assam, Kerala, Uttarakhand, Tripura, Bihar, Andhra Pradesh, Telangana, and Tamil Nadu. Rescued 700+ people and airlifted over 150 tonnes of relief material across multiple missions and conducted 200+ sorties including mass airlifts and airdrops.
- **CASEVAC / Medical Evacuation:** Conducted medical evacuations in Ladakh, Arunachal Pradesh, J&K and Tamil Nadu and deployed helicopters and transport aircraft for urgent patient and organ transfers.
- **Aerial Search and Firefighting:** Carried out search operations in Northeast for missing railway official and supported firefighting in J&K with troop and material airlifts.

Nation Building and Internal Security

- **IAF Outreach Program:** After a gap of 16 years, Sarang team carried out a display at Marine drive, Mumbai from Jan 08 to Jan 15, 2024, to motivate the youth of Mumbai to join Indian Air Force. Approximately five lakh citizens drew to witness this magnificent show of grit and precession.
- **Manipur (Imphal) Contingency:** IAF lent its support by air lifting of 1756 Manipur Police personnel from Imphal to Jorhat by IAF C-130J aircraft from Jan 15 to Jan 18, 2024. Additionally, on Jan 18, 2024 ALH airlifted 2100 Kg of ammunition, five personnel and one mortal remains. Further, 492 tonne of load including 2288 personnel of CAPF were airlifted at short notice from Bagdogra/ Guwahati/ Kalaikunda to Imphal & Silchar as on Nov 22, 2024.
- **Airlift of HAL-228 Aircraft to Guyana:** The IAF C-17 aircraft were provided to airlift two "Made in India" HAL-228 aircraft to the Republic of Guyana from Mar 30, 2024 to Apr 06, 2024.
- **Airlift of BrahMos Missiles to Philippines:** The IAF provided C-17 ac for delivery of BrahMos missiles to Republic of Philippines on Apr 19 to Apr 20, 2024.
- **Op Swarn Kuber (UK):** The IAF aircraft were tasked towards airlift of Gol load from UK. The operation 'Swarn-Kuber' was carried out from Jamnagar to UK and return to Nagpur between Aug to Oct 2024.

International Cooperation & Exercises with FFCs

The IAF aircraft have been frequently involved in operations abroad. The operations involve participation in international exercises, induction/ de-induction of Indian contingents, AAR ops for staging of fighter aircraft abroad, and tasks related with national interests. The details of international exercises carried out by the transport fleet since the beginning of this year are as mentioned below:

International Cooperation

- **Ex Southern Discovery:** Three C-17 crew of IAF participated as observers for familiarization flight to Antarctica on board Royal Australian Air Force (RAAF) C-17 aircraft for Operation Southern Discovery from Feb 16 to Feb 24, 2024. Induction was undertaken on Feb 15, 2024 by civil airlines.
- **Ex-Milan:** The C-17 undertook airlift of 46 media persons from Hindan to Vizag and 160 foreign military officers from Vizag to Agra and back on Feb 20, 2024 towards Ex-Milan (Indian Navy). On Feb 23, 2024, one A-321 ac undertook the airlift from Vizag to Gaya and back for the cultural visit of foreign military officers.
- **Airlift of Lord Buddha Relics:** One C-130J aircraft was utilised for airlift (induction/ de-induction) of relics of Lord Buddha to/from Bangkok, Thailand in two separate shuttles. The induction to Bangkok, Thailand was undertaken on Feb 23, 2024. The inbound airlift from Bangkok, Thailand was undertaken on Mar 19, 2024. The relics were accompanied by Hon'ble Governor of Bihar and a Ministerial team.
- **Sarang Display - Air Show:** The IAF helicopter aerobatic display team Sarang participated in international Singapore Air Show - 2024 at Changi Exhibition Centre, Singapore from Feb 20 to Feb 25, 2024. Five ALH heptrs participated in the display. These aircraft were inducted and de-inducted

by IAF heavy lift (3x C-17) ac. In addition, the Sarang team participated in Egypt International Air Show - 2024 from Sep 03 to Sep 05, 2024 and in Bahrain International Air Show - 2024 from Nov 13 to Nov 15, 2024.

- **ALH Display of HAL - Egypt Air Show:** Two ALH of Hindustan Aeronautics Limited (HAL) participated in Egypt International Air Show - 2024 as part of static display from Sep 03 to Sep 05, 2024. Two ALH heptrs were inducted by one C-17 ac on Sep 03, 2024 and de-inducted on Sep 09, 2024.
- **Bahrain International Air Show (BIAS)-2024:** Sarang Helicopter display Team participated in Bahrain International Air Show 2024, from Nov 13 to Nov 15, 2024 at Sakhir Air Base, Bahrain. Three C-17 ac were utilised for induction and de-induction of five ALH MK-I of Sarang.
- **Airlift of IN Small Arms and Ammunition (SAA) Load to Morocco:** The airlift of SAA for INS Tushil to Kaliningrad, Russia was carried out on Dec 26, 2024 from Mumbai to Casablanca, Morocco by one IL-76 aircraft.
- **Ex Harimau Shakti:** One IL-76 aircraft was utilised to airlift IA contingent comprising of 78 personnel and 7 T load to Subang, Malaysia on Dec 01, 2024 as part of induction of IA team participating in Ex Harimau Shakti. De-induction was carried out on Dec 16, 2024.

Exercises with Friendly Foreign Forces

The IAF continued to train vigorously this year exercising not only with sister services for enhancing jointness, but also with Air Forces of friendly foreign countries to be future ready. Listed below are a few international exercises:

- **Red Flag Alaska-24-2:** IAF participated in Ex Red Flag Alaska-24-2 in USA from May to Jun 14, 2024. This was the longest ferry undertaken by IAF for an international exercise showcasing the reach of the IAF.
- **Hop Ex (Greece & Egypt):** During de-induction from Ex Red Flag-24 in USA, IAF participated in Hop Ex with Greece and Egypt from Jun 20 to Jun 25, 2024, undertaken en-route.
- **Ex Pitch Black-24:** IAF participated in Ex Pitch Black-24 in Australia from Jul 12 to Aug 02, 2024. The event witnessed a collaborative spirit that has led to a better understanding of each other's capabilities & a bonhomie that will lead to enduring ties between the participating nation



Ex Pitch Black-2024

- **Ex Udara Shakti-24:** IAF participated in Ex Udara Shakti-24 at Malaysia from Aug 05 to Aug 09, 2024. The exercise was the second edition of the bilateral engagement with Malaysia and undertaken enroute from Australia after Ex Pitch Black-24.
- **Air to Air Mission with ITS Cavour (IN) (Oct 05, 2024):** IAF participated with Italian aircraft carrier ITS Cavour on Oct 05, 2024 in IOR (off Goa coast). The IAF engaged aircraft on-board ITS Cavour (advance aircraft including F-35B and 8B Harrier-II plus) with our assets. This was a first time engagement of IAF with Italian aircraft carrier.
- **Ex JMT-24 with RSAF (IN):** The IAF hosted exercise JMT-24 for Republic of Singapore Air Force (RSAF) at Air Force Station, Kalaikunda from Oct 21 to Dec 06, 2024. Bilateral phase of this exercise was conducted from Nov 13 to Nov 22, 2024.



Ex JMT 2024

- **Ex Desert Knight 24.2 (In situ) (Dec 11, 2024):** The IAF conducted the in-situ multinational Ex Desert Knight-24.2 along with French Air and Space Force (FAF) and UAE Air Force and Air Defence Force (UAEAF) on Dec 11, 2024 in Indian Ocean Region (IOR).



Ex Desert Knight 24.2

Pan IAF Exercises

- **Ex-Vayushakti-24:** Ex Vayushakti-24 was conducted on Feb 17, 2024 at Pokhran Range near Jaisalmer. 121 aircraft, including the indigenous Tejas, Prachand and Dhruv. Other participating aircrafts were Rafale, Mirage-2000, Sukhoi-30 MKI, Jaguar, Hawk, C-130J, chinook, Apache and Mi-17. Indigenous Surface to Air Weapon systems Akash and Samar also demonstrated IAF's capability to deliver weapons with long range, precision capability as well as conventional weapon accurately, on time and with devastating effect, while operating from multiple air bases.



Ex-Vayushakti-2024

- **Ex Gaganshakti- 24:** IAF conducted Exercise Gaganshakti-2024 as a pan India tri-services exercise from Apr 01 to Apr 10, 2024. Besides live exercise, to carry out detailed review of our operational plans, the exercise constituted various op level discussions as well as a war-game with participation from all the three services. The live exercise encompassed full spectrum of operations through all domains, in a Joint environment, which involved execution of well-coordinated flying missions with IA and IN.
- **Ex-Tarang Shakti-24:** IAF hosted a multinational air exercise Ex Tarang Shakti-24 during Aug-Sep 24 in two phases. **Exercise Tarang Shakti** was a first of its kind and the largest air exercise conducted in India. The first phase of the exercise was planned at AF Stn Sulur from Aug 06 to Aug 14, 2024. UK, Germany, France and Spain participated in the exercise with assets. The second phase of Ex Tarang Shakti-24 was planned from Aug 29 to Sep 14, 2024 at AF Stn Jodhpur. Australia, Greece, Japan, Singapore, Sri Lanka, UAE and USA participated in this phase of the exercise with assets, and 19 FFCs participated in the exercise as observers.



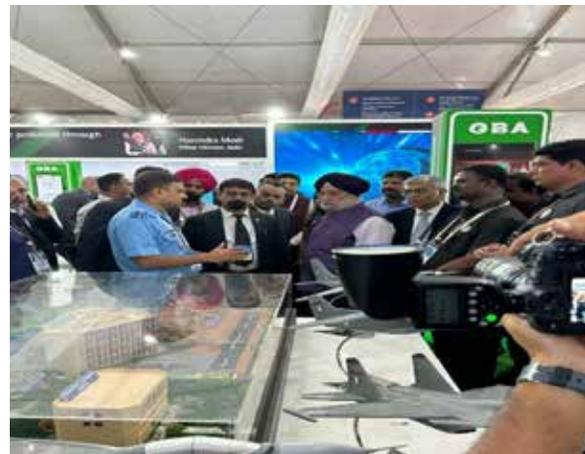
Ex Tarang Shakti 2024

New Acquisitions and Trials

- **Combat Expendable Platform(CEP) & Combat Free Fall (CFF) Drops Off Arabian Sea:** Operational Airborne Insertion of MARCOs was undertaken by C-130J ac through Combat Expendable Platform (CEP / CRRC) drop in tandem with CFFs in Arabian Sea on Feb 26, 2024. The mission augmented the deployed MARCOs with additional Prahar in support of ongoing antipiracy ops.
- **Trial Requirements – Captive and Release Flight Trials of Gaurav Long range Guided Bomb (LRGB):** Hepr effort was provided for ASSR duties during trials of CFT and RFT at 5 Wg, ITR Balasore from Mar 11 to Mar 20, 2024.
- **Trials for Carriage and Release of Reusable Launch Vehicle (RLV):** IAF has been extending support for all the ISRO experiments through ASTE for conducting the Integrated Navigation Test (INT), Engineering Model Tests (EMT) and the Landing Experiment (LEX) missions. The IAF provided Chinook hepr for RLV LEX2 trials which were successfully carried out from ATR Chitradurga in Mar 2024.
- **Arogya Maitri Disaster Brick:** The airdrop of Arogya Maitri Disaster Brick (HE airdrop with 16 ft platform weighing 6202 lbs) was validated by C-130J ac. The trial aides in providing swift disaster relief to affected regions which are unreachable by other means. The trial was undertaken in coordination with IA Para field regiment and Arogya Maitri Task Force.
- **Project BHISM:** The airdrop of Arogya Setu health module was carried out on Aug 10, 2024 as a part of Project BHISM showcasing the enhanced operational capability of IAF to support ground forces in inhospitable terrain.

Industry Outreach Events

- **Participation in India Energy Week-2024 at Goa:** Indian Oil Corporation (IOC) had invited IAF to participate in India Energy Week - 2024 organised at Goa from Feb 06 to Feb 09, 2024. IAF based on the invite, setup its Sustainable Aviation Fuel (Bio jet fuel) project stall in the Biofuel pavilion offered by organisers under the patronage of Ministry of Petroleum and Natural Gas (MoPNG).



Biojet Fuel Stall in IEW-2024 at Goa

- **Participation by IAF in Maharashtra Defence Expo-2024 at Pune:** The event was organised by Industries Department, Govt of Maharashtra at Pune International Exhibition Convention Centre, Moshi, Pune from Feb 24 to Feb 26, 2024. IAFs internal capability was showcased through success stories, innovations, Bio-jet fuel and AI based projects. Over 100 Items requiring indigenisation were on display for MSMEs/ Industry partners to evince interest.



Maharashtra Defence Expo-24

- **International Defence Aviation Exposition (IDAX-24):** The International Defence Aviation Exposition (IDAX-24) was conducted at AFS Sullur (Aug 13 to Aug 15, 2024) and Jodhpur (Sep 12 to Sep 14, 2024) on the sidelines of Ex-Tarang Shakti. The events were inaugurated by Hon'ble Governor of Tamil Nadu at Sullur and Hon'ble Raksha Mantri at Jodhpur. The event had been attended by senior dignitaries of various Friendly Foreign Countries (FFC), prominent organisations like DRDO, CSIR Lab - NAL, DPSU's like HAL, BEL & BDL, 48 major private industry partners, 13 start-up firms and five European industry firms participated in first phase of the event and 68 Indian exhibitors including DPSUs, PSUs, DRDO, Tier-I, Tier-II, MSMEs and Start-ups participated in the second phase of the event respectively. Few of the photographs of the event are appended.

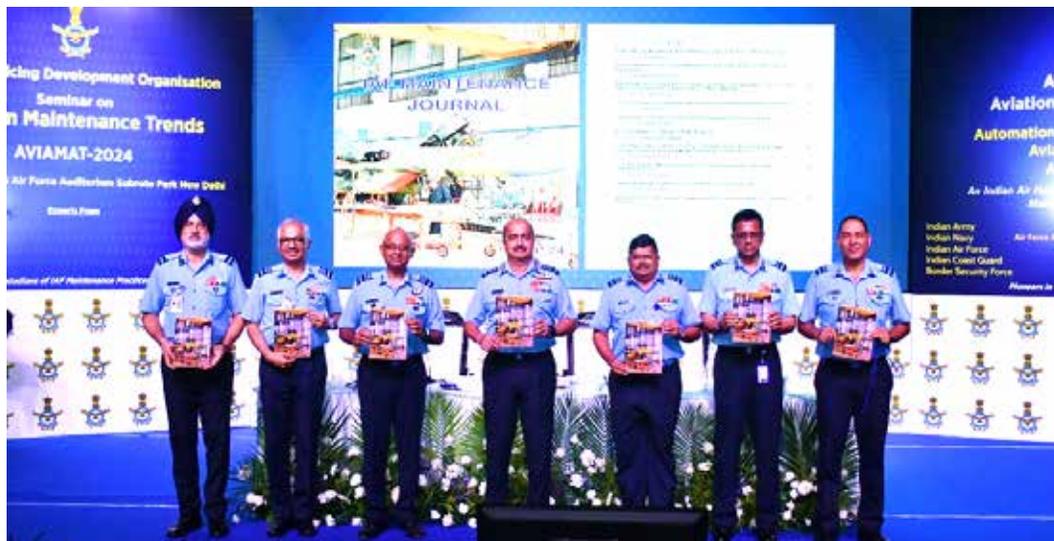


Photographs of International Defence Aviation Expo (IDAX-24) Sullur



Photographs of International Defence Aviation Expo (IDAX-24) Jodhpur

- **AVIAMAT 2024:** A seminar on “Automation & Artificial Intelligence in Aviation Maintenance a New Paradigm: AVIAMAT 2024” was conducted by CSDO on Sep 17, 2024 at Air Force Auditorium, Subroto Park, New Delhi. Discussions on AI assisted maintenance of aviation assets and futuristic technologies in aviation maintenance took centre stage offering a potential for a technological shift for real time analysis, accurate diagnostics and safe operations.



Seminar on Automation & Artificial Intelligence in Aviation Maintenance a New Paradigm

Ceremonial and related Activities

- **Air Force Day Parade 2024:** Commemorating 92 years of valour, excellence and unflinching efforts in service of the nation, the Indian Air Force celebrated its 92nd anniversary on Oct 08, 2024 at Air Force Station Tambaram (Chennai). The annual celebration was themed at ‘Potent, Powerful, Self-Reliant’ IAF. On this momentous occasion, a ceremonial parade along with aerobatic show was displayed at Air Force Station Tambaram.



Air Force Day Parade 2024

- **Republic Day 2025:** On Republic Day 2025, the Indian Air Force displayed its might with four officers and 144 personnel marching in perfect formation. The IAF aircrafts thundered through the sky leaving the spectators in awe. The IAF Band, featuring 72 musicians including 22 Agniveers, played 'Sound Barrier', a powerful tribute to our Nation's strength and resilience.



Republic Day 2025

Honours and Awards

- A total of four Unit Citations were conferred during the Air Force Day Parade 2024.
- The President of India conferred a total of 86 Gallantry awards on 26th January 2024, 8 awards on 15th August 2024, and 81 awards on 26th January 2025 to IAF personnel during the year 2024-25.

Vigilance Mechanism and Cyber Security

- **Vigilance Mechanism in IAF:** As per the guidelines issued by DoPT and Central Vigilance Commission (CVC), IAF has a well-defined vigilance mechanism. In IAF, vigilance organization has been created as per CVC guidelines. Vigilance activities directed towards ensuring efficient mechanism to prevent, detect and minimize undesirable activities.
- **Cyber Security and Awareness Measures:** Numerous cyber security advisories and instructions are periodically issued on pertinent matters to all personnel in the organisation for compliance and awareness. The analysis by National Cyber Crime Reporting Portal (NCRP), MHA, had revealed that 60% of cybercrime complaints are related to online financial frauds. Hence, MHA has submitted that the key action for preventing cybercrimes is to generate sustained awareness amongst the public.

Skilling of Agniveervayu

- IAF has been given dual recognition as Awarding Body and Assessment Agency by National Council for Vocational Education and Training (NCVET) for award of 'Kaushal Pramanpatra' to Agniveervayu on completion of four years of tenure with IAF.
- Based on these skill qualifications gained in IAF, credits will be assigned for award of Academic Certificates/ Diploma/ UG Degrees through credit sharing provisions of NEP-2020, wherein 50% credits to 974209 AGV are obtained from IAF Training and testing and the remaining 50% shall be obtained by clearing academic subjects of Indira Gandhi National Open University (IGNOU), as opted by the Agniveervayu. (Total 120 credits are required for award of Bachelor's Degree).
- The IAF has taken the lead in suitably maximising the provisions of NEP-2020 and National Credit Framework (NCrF) and obtained approval of National Skill Qualification Committee (NSQC) for IAF Qualifications up to level 5.5 in order to facilitate award of skill based Bachelor's Degree to the Agniveers (Agvs).
- MoU has been inked between IAF and IGNOU for facilitating award of Skill based Certificate/ Diploma/ UG Degree based on the NSQF level and subject to clearing IGNOU academic examinations. Agniveervayu Non Combatant will be facilitated for award of Class 12th certificate from National Institute of Open Schooling (NIOS).

Progressive use of Hindi

The First Sub-Committee of Parliamentary Committee on Official Language carried out inspections of various Commands/ Stations/ Units of Indian Air Force to check the implementation of Hindi. Official Language inspection of Air Force Station Pune was successfully carried out by the Parliamentary Committee on Official Language on Jan 18, 2024. Assurance report has also been sent to the Committee within stipulated timelines. The Hon'ble Members of Parliamentary Committee on Official Language have appreciated all the efforts made by Indian Air Force towards the progressive use of Hindi.

Campaigns

- **Ek Ped Maa Ke Naam:** 'Ek Ped Maa Ke Naam' campaign was launched on the occasion of World Environment Day. IAF has been tasked to achieve a target of 7.5 lakhs by Jan 26, 2025. Target was achieved on Dec 31, 2024.
- **Har Ghar Tiranga:** The campaign was undertaken as part of Independence day celebration from Aug 13 to Aug 15, 2024. The enthusiastic participation by air warriors and their families reflected the spirit of nationhood and commitment of taking our nation forward as per GoI direction.
- **Special Campaign 4.0:** As per GoI directions, special campaign 4.0 for swachhata in Govt Offices and disposal of pending matters from Oct 02 to Oct 31, 2024 on the lines of special campaign 1.0, 2.0 & 3.0 held in 2021, 2022 and 2023 respectively. IAF has achieved disposal of 8,23,403.95 Kg quantity of scrap consisting of 12 MT vehicles and 1527 Old batteries. Total Value of scrap disposed is ₹ 21,97,78,604.93.

- **Swachhata Hi Seva:** 'Swachhata Hi Seva' (SHS) fortnight was observed from 14 Sep to Oct 01, 2024 with the theme of 'Swabhav Swachhata: Sanskaar Swachhata' as a prelude to Swachh Bharat Diwas on Oct 02, 2024. As a part of SHS 2024, three activities namely "Swachhata Ki Bhaagidari, Sampoorna Swachhata" including Swachhata Lakshit Ekayi and Safai Mitra Suraksha Shivir were carried out.

Sports/Tournaments

- **21st Asian Men's Handball Championship:** Championship was conducted at Bahrain from Jan 11 to Jan 25 2024. A total of nine air warriors participated in subject championship including six players, two coaches and one head of delegation.
- **Moscow Star Wushu Tournament 2024:** Tournament was conducted at Moscow, Russia from Feb 29 to Mar 03, 2024. Sgt Karnajeet Sharma won Silver Medal and JWO Anjul Namdeo won Bronze Medal.
- **2024 IAU 24 Hr Asia & Oceania Championship:** Championship was conducted at Canberra, Australia from Apr 06 to Apr 07, 2024. Cpl Amar Singh Devanda, Ultra Marathon runner, won Gold Medal covering a distance of 272.537 Km in 24 Hr and created New National Record by breaking his own record of 256.4 Km. Cpl Saurav Kumar Ranjan, Ultra Marathon runner, secured 4th position covering a distance of 240.13 Km in 24 Hr.
- **BRICS Games 2024:** Games were conducted at Kazan, Russia from Jun 12 to Jun 16, 2024. Sgt Karnajit Sharma Hanjabam of AF Wushu team won Bronze Medal in Taolu-Taijiquan Men's event with a score of 9.820 points.
- **Participation for Paris Olympics Games 2024:** JWO Abdullah Aboobacker N and Sgt Mijo Chacko Kurian, member of AF Athletics team have participated in Paris Olympics Games 2024 in Triple Jump and 4X400 M Men Relay respectively.
- **10th Asian Wushu Championship 2024:** Championship was conducted at Macao, China from Sep 09 to Sep 16, 2024. JWO Kushal Kumar won Gold Medal in subject championship.
- **Agniveervayu Musicians:** A total of 23 Agniveervayu Musicians made their debut with a captivating band and drill performance at Ambedkar Stadium during the closing ceremony of Subroto Cup International Football Tournament 2024 on Sep 11, 2024.



Agniveervayu Musicians during closing ceremony of Subroto Cup International Football Tournament 2024

“Vayu Veer Vijeta” - IAF-Uttrakhand War Memorial (UWM) Joint Car Rally from Thoise to Tawang

IAF and UWM jointly conducted a mega-car rally named “Vayu Veer Vijeta Car Rally” from Thoise (Ladakh) to Tawang (Arunachal Pradesh) from Oct 08, 2024 to Nov 30, 2024. Rally was ceremonially flagged-off by Hon’ble RM from National War Memorial on Oct 01, 2024 to Thoise and formally commenced from there on Oct 08, 2024 to Tawang covering more than 4300 Km road distance. A total of 55 participants including serving personnel, air veterans and members of UWM in 12 Maruti Jimny made approx 16 en-route halts at different locations, visited War Memorials enroute to pay tribute to the fallen heroes and interacted with youths in Colleges/ Universities enroute to motivate them to join armed forces. The rally was flagged-in at Tawang on Oct 30, 2024 by the Hon’ble Chief Minister of Arunachal Pradesh.

HEADQUARTERS INTEGRATED DEFENCE STAFF

HQ Integrated Defence Staff (HQ IDS) continued to play a crucial role in enhancing jointness and integration among the Indian Armed Forces through formulation of joint doctrines, conduct of integrated training and exercises; and development of unified operational strategies. Salient achievements of HQ IDS in year 2024 are enunciated in succeeding paragraphs.

Foreign Defence Cooperation

Exercise Cobra Gold: 'Exercise Cobra Gold', a large scale, multinational military exercise between USA, Thailand and allied partners in the Indo-Pacific region was conducted in Thailand from February 09 to March 09, 2024. 15 staff officers from HQ IDS and Andaman and Nicobar Command participated.



Representatives from Indian Armed Forces in Ex Cobra Gold

Exercise Tiger Triumph- 24 (TT-24): 'Ex Tiger Triumph' is a bilateral, Tri-Service exercise between India and USA focused on Humanitarian Assistance and Disaster Relief (HADR). The annual exercise was conducted from March 18 to March 31, 2024 at Visakhapatnam. Approximately, 1200 Indian troops and equal number from US side participated in the exercise onboard INS Jalashwa, INS Airavat, USS Helsey and USS Somerset.



Opening Ceremony of Ex Tiger Triumph in Visakhapatnam aboard INS Jalashwa

ASEAN Defence Ministers' Meeting Plus (ADMM-Plus) Experts Working Group (EWG) on HADR with Indonesia: The ADMM-Plus is a platform for ASEAN and its eight Dialogue Partners viz Australia, China, India, Japan, New Zealand, Republic of Korea, Russia and USA (Plus countries) to strengthen security and defence cooperation for peace and development in the region. EWGs have been established to facilitate cooperation in seven areas. The Handing over Ceremony of the chairmanship of EWG on HADR from India to New Zealand was held at Manekshaw Centre, New Delhi on March 20, 2024. Delegations from Indonesia, Singapore and New Zealand participated in the event while representatives from balance 14 member countries attended on Virtual Conference.

Orientation of Defence Attache (Designates): An Orientation Programme for Defence Attache (Designates) was conducted by Defence Intelligence Agency with an aim to empower and prepare the attendees through multi-faceted cum multi-agency exposure while comprehensively covering contemporary National Security issues. The programme was conducted for a duration of four weeks from April 01 to April 26, 2024 at New Delhi.



Orientation of Defence Attache (Designates)

Planning and Conduct of Joint Staff Talks: Joint Staff Talks with various Friendly Foreign Countries were conducted to steer the roadmap for Defence Cooperation.



12th Italy - India Military Cooperation Group meeting held in March 2024 at New Delhi



7th India Maldives Joint Service Talks (JST) conducted in June 2024 at Male, Maldives

Events Conducted

Joint Commanders Conference (JCC) -2024: The maiden JCC which was held at Lucknow from September 04 - September 05, 2024 under the theme '**Sashakt and Surakshit Bharat: Transforming Armed Forces**'. The event served as the pivotal platform for undertaking internal 'process reforms' within the Armed Forces. The event was attended by the CDS, Service Chiefs, Vice Chiefs, Cs-in-C and Secretary of MoD. During the conference, detailed deliberations and discussions were carried out amongst the Cs-in-C, Service Chiefs, CDS and the Hon'ble RM on various strategies against adversaries, multi domain capability development, and force modernization. The Hon'ble RM exhorted the Armed Forces to be a future ready force to ensure 'fail proof deterrence'.



Hon'ble Raksha Mantri presiding over the Joint Commanders Conference - 2024

Combined Operational Review and Evaluation (CORE) Programme 2024:

CORE Programme - 2024 was conducted from September 09, 2024 to September 13, 2024 at New Delhi, 23 Officers from the three Services and JS level officers from MoD and MEA participated. The key focus areas were Emerging Threats and National Security, Force Integration and Capability Development, Synergy with Whole of Government Approach, Strategic Leadership and Technical Infusion.



Participants of CORE Programme - 2024

Joint Doctrine Review Conference-2024:

The second edition of Joint Doctrine Review Conference (JDRC-24) was conducted on September 11, 2024. The conference focussed on harmonising efforts between HQ IDS and the three Services in formulation of Joint Doctrines. The conference provide a collaborative platform for all key stakeholders involved in Doctrine Development to engage in discussions, share best practices, and deliberate on doctrinal issues. Two doctrines namely Joint Doctrine for Cyberspace Operations and Joint Doctrine for Amphibious Operations were released.



Release of Joint Doctrine on Cyberspace Operations

Parivartan Chintan - I & II: 'Parivartan Chintan' is a pioneering Tri-Services Conference aimed at generating novel ideas, initiatives and reforms to propel Jointness and Integration efforts. The conferences were conducted in April and May 2024 and were presided over by the CDS with the Heads of Tri Services Organisations and Commandants of Armed Forces Training Institutes in attendance. Discussions were conducted on requisite steps towards creation and operationalization of joint structures with firm action plans being formulated to further the objective of Tri Service integration.



Gen Anil Chauhan, CDS addressing Parivartan Chintan-I

Future Warfare Course: The Pilot Future Warfare Course was conducted from September 23 to September 27, 2024. The aim of the course was to provide a common foundation for tenets of future warfare with special focus on implications of emerging and niche technologies, thereby enhancing strategic understanding, adaptability and cognitive skills of the participants. 30 officers (Army-14, Navy-08, IAF-08) of three services with diverse exposure from Major to Major General and equivalent ranks attended the course.



Participants of Future Warfare Course - 2024

Jointness & Integration: A concerted effort is being put in to bring in commonality in procedures, enhance interoperability and optimize resources. 196 integration initiatives have been identified within all branches of HQ IDS, under the verticals of Operations and Intelligence, Capability Development, Communications & IT, Op Logistics, Training, Maintenance Support, Human Resources and Admin and Legal. Progress is at various stages of completion.

Smriti Sthal at New Delhi: The National War Memorial near India Gate in New Delhi has been dedicated to honour the soldiers of our Armed Forces who fought valiantly and laid their lives in armed conflicts of independent India. A Smriti Sthal for the Next of Kins (NoK) visiting the National War Memorial for homage ceremonies was inaugurated by Mrs Anupama Chauhan, President Defence Wives Welfare Association (DWWA). 314 NoK Ceremonies were conducted from 01 Jan 24 to 31 Dec 24.



Smriti Sthal at National War Memorial, New Delhi

Integrated Medical Station (IMS), Campbell Bay: With an aim to provide highest standards of medical facility to the Armed Forces personnel & dependents located at far-flung islands of Union territory of Andaman & Nicobar, an integrated medical station has been established at INS Baaz, Campbell Bay in Andaman and Nicobar's southernmost island. The facility has a staff of three Specialist Officers (Surgeon, Anaesthetist & Medical Specialist) and 20 other ranks to provide round the clock medical assistance in case of any emergency.

Operations and Exercises

Humanitarian Assistance and Disaster Relief (HADR): Concerted efforts have been made for synergizing and coordinating HADR response of the Armed Forces towards rescue/ evacuation of personnel, delivery of disaster relief aid, provisioning of medical facilities, avalanche rescue mission and flood relief operations.

Annual Joint Humanitarian Assistance and Disaster Relief Exercise (AJHE)-2024: 'Sanyukt Vimochan - 2024' which is an Annual Joint HADR exercise, was conducted by Indian Army from November 18 to November 19, 2024, at Ahmedabad and Porbandar, Gujarat. The multi-agency capability demonstration featured various agencies practising coordinated logistics, rapid response and effective disaster management strategies in simulated cyclone scenario.

Details of Operations conducted

S.No.	Date	Incident	Rescue / Relief Details
National HADR Effort			
(a)	May 26-31, 2024	Severe Cyclonic storm 'Remal' over coastal Bangladesh and adjoining Coastal West Bengal	<ul style="list-style-type: none"> Armed Forces deployed in Mizoram, Manipur & Assam following Cyclonic storm 'Remal'. Columns deployed - 21. Engineer Task Force (ETF) deployed - 03. Medical Team - 01 Total civilians / people rescued - 6672. Distribution of relief material - 7480 people. Medical aid provided-50 people.
(b)	Jun 06, 2024	Rescue Op : Sahastra Tal	<ul style="list-style-type: none"> 02 Cheetah helicopters and 01 MI-17 were deployed to rescue trapped trekkers on Sahastra Tal. 13 trekkers were rescued & 09 mortal remains were recovered.
(c)	Jun 30, 2024	Siyang River Op	<ul style="list-style-type: none"> Incessant rain caused flood in certain parts of Assam. 9 SDRF personnel were stranded in District, Dhemaji in the river Siyang as their boat capsized while rescuing the flood affected people on 30 Jun 24. They were rescued by IAF helicopters.

(d)	Jul 02-08, 2024	Op Jal Rahat : Eastern Command (Assam & Arunachal Pradesh)	<ul style="list-style-type: none"> Due to heavy rains and floods across multiple NE states on 02 Jul 24, IA, & IAF were deployed for relief and rescue ops. Summary of rescue ops are as under: <table border="1"> <thead> <tr> <th>SHQ</th> <th>Column deployed</th> <th>Civilians rescued</th> <th>Load (MT)</th> </tr> </thead> <tbody> <tr> <td>IA</td> <td>11</td> <td>3470</td> <td>-</td> </tr> <tr> <td>IAF</td> <td>02xac</td> <td>62</td> <td>12</td> </tr> <tr> <td colspan="2">Total</td> <td>3532</td> <td>12</td> </tr> </tbody> </table> 	SHQ	Column deployed	Civilians rescued	Load (MT)	IA	11	3470	-	IAF	02xac	62	12	Total		3532	12
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(e)	Jul 08, 2024	Flood Relief: Tanakpur & Banbasa	<ul style="list-style-type: none"> 100 civilians were evacuated/ rescued. 																
(f)	Jul 09, 2024	Flood Relief: Pilibhit	<ul style="list-style-type: none"> Due to heavy rains and floods in Pilibhit district, IAF helicopters deployed and 07 civilians rescued. 																
(g)	Jul 16, 2024	LPG Tanker Crisis : Uttar Kannada Distt	<ul style="list-style-type: none"> Incessant monsoon rains triggered a landslide at Shriur on Ankola-Kumta road, in Uttar Kannada Distt Karnataka. Two Diving teams & Two Sonar teams of IN deployed. Total 08 x bodies recovered. Sonar Radar of IN could detect the buried goods truck in the river. 																
(h)	July 29, 2024	Wayanad Landslides	<ul style="list-style-type: none"> Incessant rains created landslides in multiple places at Wayanad. Multiple columns of Armed Forces consisting of 550 personnel of Engineers, Medical and River rescue trained specialist from Kannur, Kozhikode, Ezhimala, Bengaluru and Trivandrum were moved by road and by aircraft. Six helicopters of IAF & IN were employed for Search and Rescue operations including food and water dropping to affected villagers. Three dog rescue teams and 110 feet Bailey bridge stores (approximately 28 trucks load) moved from Hindan by C-17 to Kozhikode. Two sets of 110 feet Bailey bridge stores with three JCBs moved by road from Bengaluru to Wayanad on 31 July 24. Bridge construction completed on 02 August 24. Two helicopters were deployed with State Govt till 29 August 24 for search and rescue operations. 																

(i)	Aug 01, 2024	Cloud Burst : HP	<ul style="list-style-type: none"> • Cloudburst at Samej Vill (Jakhri): Approximately three were dead and 40 persons were missing due to cloudburst. Three columns of Indian Army (05-10-110), one Engineer Task Force (01-02-18) and one medical team (01-02-11) were deployed and undertook search and relief operations along with three SAR dogs.
(j)	Aug 05, 2024	Girna River, Nashik	<ul style="list-style-type: none"> • Two ALH were flown ex Nashik airbase to evacuate 15 fishermen from Girna River.
(k)	Aug 24	HADR : Uttarakhand (Kedarnath)	<ul style="list-style-type: none"> • IAF deployed one Chinook & one Mi-17 V5. Total of 288 persons were rescued and approx 13 tonnes of load dropped. • Engineer Task Force of IA mobilized and constructed a 500 feet aerial cable way and two improvised foot bridges to assist in relief operations and evaluation of standard pilgrims
(l)	Aug 21, 2024	Update on Op Jal Rahat : Eastern Command (Tripura, Manipur & Agartala)	<ul style="list-style-type: none"> • Heavy rains and floods occurred across multiple NE states. • IA deployed 04 x columns and IAF deployed eight helicopters. Total of 145 personnel were rescued and approx two tonnes of load dropped.
(m)	Sep 02, 2024	Update on HADR Ops : Andhra Pradesh & Telangana	<ul style="list-style-type: none"> • Heavy rains and floods occurred across Andhra Pradesh and Telangana states. • HADR operations were carried out by deploying assets of all three services from 02 Sep to 08 Sep 24 in Guntur and Krishnapatnam area.
(n)	Sep 12, 2024	Update on HADR Ops : MP & Rajasthan	<ul style="list-style-type: none"> • Heavy rains and floods occurred across multiple MP & Rajasthan districts. • Three Indian Army columns along with one Helicopter were deployed with State Govt for Rescue ops at Gwalior, Lodhipur & Datia in MP and Dholpur in Rajasthan.
(o)	Oct 06, 2024	Evacuation of Trekkers	<ul style="list-style-type: none"> • Two Cheetah helicopters of Air Force were deployed to Chaukhamba III, Chamoli Distt, Uttarakhand from 04 Oct 24 to 06 Oct 24 for evacuation of two trekkers (one from USA & one from UK). The trekkers were rescued on 06 Oct 24.

(p)	Dec 02, 2024	Cyclone FENGAL, Puducherry, Tamil Nadu	<ul style="list-style-type: none"> • Three IA columns & one Mi-17 V5 of IAF were deployed for relief and evaluation support to the civilians. • 1000 civilians were rescued by IA. • Four additional IA columns were maintained as reserve.
International HADR Effort			
(a)	May 09-15, 2024	HADR Aid to Kenya	<ul style="list-style-type: none"> • /N Ship Sumedha delivered 1.5 Tons of HADR relief material to Mombasa, Kenya on 09 May 24. • One AC (C-17) delivered 40 Tons of medicine & essential supplies on 14-15 May 24.
(b)	Jun 12, 2024	Transportation of Mortal Remains Ex-Kuwait	<ul style="list-style-type: none"> • On 12 Jun 24, forty five Indian nationals died in a fire accident in the labour accommodation facility in Kuwait. • One IAF C-130J transported their mortal remains from Kuwait to India on 13 Jun 24.
(c)	Aug 24, 2024	Transport of Victims of Road Accident in Nepal to Jalgaon	<ul style="list-style-type: none"> • A bus accident occurred in Marshyandi in Ambukhereni region in Tanahu District of Nepal. • A special Air Force flight was deployed from India to Chitwan, Nepal for transportation of 25 mortal remains of the deceased.
(d)	Sep 15, 2024	Transportation of HADR Aid to Hanoi, Vietnam and Laos	<ul style="list-style-type: none"> • IAF C-17 aircraft delivered 35 Tonnes of HADR aid to Hanoi, Vietnam and 10 Tonnes of HADR to Laos in the aftermath of Typhoon Yagi.
(e)	Sep 17, 2024	HADR to Myanmar	<ul style="list-style-type: none"> • The delivery of HADR aid to Myanmar was undertaken by IAF & /N. Summary of Ops is as under: <ul style="list-style-type: none"> (a) IAF: One IAF IL-76 aircraft delivered approximately 32 Tonnes of HADR aid from Hindon to Myanmar. (b) IN: One ship of IN (INS Satpura) delivered 21.5 Tonnes of HADR aid material to Myanmar on 17 Sep 24.

Defence Research and Development Organisation



MINISTRY OF DEFENCE
Government of India

DEFENCE RESEARCH AND DEVELOPMENT ORGANISATION

DRDO was established in 1958 by combining Defence Science Organisation with Technical Development Establishments. As it evolved, new laboratories were created to take-up indigenous development of technologies and systems. The laboratories are broadly classified into System Design, Technology Development, Science & Technology and Testing ranges. DRDO has developed many weapon systems and war fighting platforms for the Services. DRDO has created expertise in the development of fighter aircrafts, missiles, radars, sonars, torpedoes, artillery guns, multi-barrel rockets launchers and tanks.

The policies of the government encouraging indigenous system development by the Indian industry as well as creation of the two defence corridors has opened the doors to the industries to venture into defence sector. DRDO has published two lists highlighting the systems or technology products that could be developed directly by the Indian industries and DRDO will not take up new projects for the same. It is thus the right time and opportunity for DRDO to focus on technologies to realize futuristic systems that would be game changers in the battlefield.

DRDO's mission essentially covers the following broad activities:

- Design and develop state-of-the-art sensors, weapon systems, platforms and allied equipment in defence and security domains of land, air, sea, space and cyber.
- Facilitate production and induction of Systems and Technologies developed through Department's R&D ecosystem.
- Provide technological solutions to the Services to enhance combat effectiveness.
- Nurture and strengthen Defence R&D capability in Indian industry, Science and Technology (S&T) institutions and academia through collaboration.
- Development of infra-structure and test and evaluation facilities; design certification; skill development; and strengthen human resources.

Budget

During the financial year 2024-25, Deptt. of Defence R&D (DDR&D) was allocated ₹23,856 Cr, about 5.25 % of the total defence services estimates budget of India (₹4,54,773 Cr). ₹13,208 Cr was allocated under Capital head and ₹10,648 Cr under Revenue head.

Programmes and Projects

During the period (Jan 1, 2024 – Dec 31, 2024), 44 new projects were sanctioned at a total cost of ₹22,463.86 Cr. DRDO as on Mar 31, 2025, has 360 ongoing projects amounting to ₹1,20,459 Cr. This includes 11 major programmes approved by Cabinet Committee on Security (CCS) amounting to ₹78,928 Cr.

Production Orders

The production value of DRDO developed systems which are manufactured by Indian industries, inducted and approved for induction into the three wings of the Armed Forces and the Paramilitary

Forces, as on date stands approximately at ₹5.56 Lakh Cr. During year 2024, AoN was accorded by Defence Procurement Board (DPB) and Defence Acquisition Council (DAC) for induction of 16 DRDO developed systems worth ₹1.10 Lakh Cr.

Major Systems Under Induction / Handed over to Users

Akash Weapon System

Akash is the first state-of-the-art indigenous surface to air missile system which has been with Armed Forces for nearly a decade. It is DRDO's first tactical missile system which is successfully developed, produced and delivered to Indian Air Force and Indian Army. Currently, Akash has been deployed in combat areas by IAF and IA for national security. During the year, a number of Sqns have been delivered to IAF and are operational. Defence Public Sector Undertakings (DPSUs) have also provided training to reps of Friendly Foreign Country (FFC) and first Battery / Firing Unit has been flagged off for export to FFC by BEL.

MRSAM (ARMY & AIR FORCE)

DRDO is developing Medium Range Surface to Air Missile (MRSAM) weapon system jointly with M/s Israel Aerospace Industry (IAI), Israel for Indian Air Force and Indian Army Air Defence (AAD). MRSAMs are advanced, all weather, 360°, mobile, land based, medium range Air Defence Surface to Air Missile system for the protection of our own territories and ground forces from air attacks by enemy aircraft and guided weapons. Two different Programmes for two different end users (Army & Airforce) have been taken up. This Joint Development Programme between DRDO & IAI is not only for development, but also for production of Medium Range Surface to Air Missile (MRSAM) for associated end users. A number of firing units of MRSAM (IAF) and MRSAM (IA) have been delivered to User in the year 2024.

NETRA

DRDO has taken up a project for delivery of Airborne Early Warning & Control (AEW&C) aircraft system to Indian Air Force with all mission systems. The AEW&C System consists of sensors mounted on an aircraft, for locating and providing early warning of air-borne & sea surface targets and hostile emissions. The system also provides comprehensive information to the controllers on-board of the aircraft as well as to the ground stations.

The mandate was to develop three AEW&C systems, one engineering prototype and two operational AEW&C system with Mission Avionics systems installed & integrated on board EMB-145 AEW&C platforms. As per the above mandate, mission systems have been integrated on all the three aircrafts and systems have been handed over to Indian Air Force (IAF).



Autonomous UAV for Search and Report Operations in Enclosed Environments

The project is focused on development of Indoor UAV integrated with autonomous navigation stack, on-board object detection module and localized fall back mechanism integrated with flight control firmware.



Integration with autonomous navigation stack includes 3D mapping, exploration algorithm, AI/ML engine, and localization. The success of the project opens avenues for various applications including search and rescue operations, surveillance, industrial inspections, environment monitoring as well as hazardous environment exploration, contributing significantly to technological advancements in unmanned aerial systems. The project was successfully completed and handed over to the User in presence of Hon'ble Raksha Mantri Shri Rajnath Singh on October 18, 2024.

Military Combat Parachute system (MCPS)

MCPS is a mode of insertion of Special Forces to penetrate with combat load into designated area of operations. MCPS allows paratroopers to jump from an aircraft and deploy their parachutes at pre-determined altitude, navigate and land safely. It is designed & developed as per Joint Staff Qualitative Requirement (JSQR) issued by Directorate of Standardization. Military Combat Parachute System is required by Indian Armed Forces for Combat Free Fall Operations. After successful qualification and certification from CEMILAC, MCPS was offered to Paratroopers Training School (PTS), Agra, one of the major and most competent users of the Combat Free Fall Parachute Systems. PTS, Agra conducted more than 110 jumps in covering all the technical requirements and now it has been recommended for induction into services.



Multi-Mode Hand Grenade (MMHG)

The Multi-Mode Hand Grenade (MMHG) has been designed with positive safeties and to get reliable performance. MMHG can be used in Offensive and Defensive mode. The documentation work of MMHG with Controller of Quality Assurance (Armament), Pune, for production by Defence PSU has been completed. The LAToT with Industry for production of MMHG has also been signed.



Advanced Towed Artillery Gun System (ATAGS)

ATAGS (155mm/52 Caliber) is designed to meet higher ranges using in-service Extended Range Full Bore-Based Bleed (ERFB-BB) shell and to meet lower ranges using Bi-Modular Charge System (BMCS) at Zone-7. It is integrated with Auto-frettaged Barrel, Double Baffle type Muzzle Brake and Hydro-Pneumatic type recoil system. It is equipped with all electric drive for gun laying and Ammunition Handling System (AHS) to ensure operation in extreme and harsh climate conditions and is equipped with integrated Fire Control System (FCS) consisting of INS based Automatic Gun Alignment and Positioning System (AGAPS), Muzzle Velocity Radar (MVR) and Ballistics computer to carry out online computation for laying. The gun has successfully cleared all the user trials and AoN has been accorded by Defence Acquisition Council (DAC).

Machine Pistol

Machine pistol (9X19mm) is a self-loading pistol capable of single shot & fully automatic fire. It fires in-service 9 mm Parabellum round manufactured in India. The weapon is compact and can perform

roles of both pistol and Submachine Gun (SMG). This weapon is compact, robust and reliable and provides higher accuracy and effective range than normal pistol due to incorporation of longer barrel and collapsible butt stock or arm brace. User trials of this weapon have been successfully completed. Machine Pistols have been successfully inducted after detailed Pre Dispatch Inspection and Joint Receiving Inspection. Two industries have been declared as Development cum Production Partner (DcPP).

Assault Rifle

Assault Rifle (7.62x51mm) is a light weight, compact and effective weapon for use in close combat Counter Insurgency/Counter Terrorism operations. MHA trial of the assault rifle has been successfully completed and Development cum Production Partner (DcPP) has been selected. User trial for Indian Army was conducted for Field and High Altitude Area. Induction of Assault rifle to services and ToT to industry is underway.



Guided Pinaka Rocket System

Design and Development of Guided Pinaka rocket along with upgraded launcher system have been successfully completed as per PSQR. After successful completion, of Stage-I, Stage -II & Stage III trials, all PSQR parameters (range, accuracy, consistency, multiple engagements, rate of fire) were met successfully. Pre Validation Trials (PVT) in three stages was successfully completed and trial team has recommended induction of Guided Pinaka Rocket into service. MET of upgraded in-service launchers are in progress.



Minefield Marking Equipment Mk-II (MFME Mk-II)

DRDO has developed advanced Minefield Marking Equipment Mk-II for automatic driving of pickets into the ground with minimal human intervention. It is capable of marking a large distance of mine field in one go. This system has completed the GSQR trials and contract agreement has been placed with Production agency by MoD in Jan 2024.



Unexploded Ordnance Handling Robot (UXOR)

Unexploded Ordnance Handling Robot (UXOR) is a remotely operated platform capable of handling and defusing unexploded ordnance from a distance. Three Prototypes of UXOR System have been realized. Each system includes skid steer mobile platform and vehicle based master control station cum carrier vehicle. System has undergone technical trials and evaluations. The production is under progress and few sets have been delivered to IAF in 2024.



Laser Ordnance Disposal System (LORDs-N)

DRDO has developed state of the art system LORDs-N which marks a significant step forward in India's indigenous defence technology development. LORDs-N system can be utilized for safe, efficient and quick disposal of unexploded and life expired ammunition. Its laser based technology minimizes risk to personnel and enhances precision in neutralizing potentially hazardous materials. DRDO has delivered vehicle mounted LORDs-N to Indian Navy.



Digital Radar Warning Receiver (DR118)

DR118 is a state-of-the art Digital Radar Warning Receiver (RWR) that would exploit modern Electronic Warfare (EW) techniques and technologies developed in-house as well as with Industry partners. This system is designed and developed to overcome the limitations of the Analogue RWR and to enhance system specifications. This system is currently under production by DPSU and these systems are being produced to complete the upgrade of the fighter squadrons.



Compact Trans-horizon Communication System (CTCS)

DRDO has designed and developed C-Band men-portable Troposcatter communication system providing communication Beyond Line of Sight (BLOS). The system has been indigenously developed based on the requirement of Indian Army. It provides high data rate, low latency digital communication link in difficult hilly terrain. Indian Army has formulated the QR for induction and Industries are in the process of signing the ToT for production.

Shakti System

SHAKTI System is an indigenous modern Integrated Electronic Warfare (EW) system for installation on capital ships. The system has ESM segment with an integrated Radar Finger Printing System (RFPS) for inter and intra pulse analysis of intercepted emitters and Electronic Attack (EA) segment. Indian Navy has placed production orders with M/s BEL, Hyderabad and few of which have already been delivered in 2024.

Nayan System

NAYAN System is an indigenous COMINT System for installation on capital ships. It consists of Scan DF (SDF) System and Monitoring & Analysis Receiver (MRx). This is the first Indigenous COMINT System designed and developed for Naval ships. Indian Navy has placed production order to DPSU and few of which have already been delivered in 2024.

Low Level Transportable Radar (LLTR) Ashwini

Low Level Transportable Radar (LLTR) Ashwini is a ground based, vehicle mounted, 4D active phased array radar for air space surveillance to detect and track air targets under hostile Electronic Warfare (EW) operational environment. The Radar is fully programmable through an efficient Man-Machine interface from the local Operator Work Station (OWS). The Production order is in advanced stage.

Hull Mounted Sonar Advanced (HUMSA) Upgrade (UG) Limited Series Production (LSP)

HUMSA UPGRADE project is an upgrade program for the already inducted sonar HUMSA. This sonar is being installed onboard ships since 2000 and has three major components. The requirement for upgrade has come from Indian Navy due to obsolescence of electronic components and resulted in maintenance and support issues. Sea Acceptance Trials (SATs) of all systems have been completed for both High & Low Frequency versions.

Drone-Detect, Deter and Destroy (D4) System

The D4 system is a collaborative development of four labs of DRDO which can detect, identify and neutralize different types of Drones including small Hybrid Unmanned Aerial Vehicles (UAVs), Micro and Nano UAVs using complementary technologies. The radar is semi-distributed active phased array radar for detection and tracking of micro and nano drones at short ranges. After multiple demonstrations to the Users, production orders have been placed to DPSU. This system was deployed for major national events during Republic Day and Independence Day 2024 as part of security arrangements.

Technologies for Torpedo Defence Systems (TTDS)

Project TTDS was taken up to develop advanced technologies required for future torpedo defence systems for Indian Navy. Some of the Technologies developed under TTDS are used in advanced torpedo defence system 'MAAREECH' for performance improvement and managing technology obsolescence. Development and testing of various technologies were completed as per project schedule. Factory Acceptance Trials (FATs) of production systems are progressing by DPSU.

Microwave Obscurant Chaff Technology

Based on QR received from Indian Navy (IN), the design of Medium Range -Microwave Obscurant Chaff Rocket (MR-MOCR) and its validation has been completed. Phase-I Trials for visual expansion measurement of MOC cloud has been successfully carried out by DRDO team along with Indian Navy (IN) from Indian Naval Ship (INS) platforms. Phase-II trials of MR-MOCR has been successfully carried out in presence of Reps from IN. MR-MOCR have been handed over to IN.



Gamma Radiation Aerial Surveillance Systems (GRASS)

The system is capable of aerial gamma radiation monitoring at different altitudes and can measure a wide range of Gamma radiation levels. GRASS System has been handed over to IN and the process of DcPP nomination of the industries is under process.

Bullet Proof Jacket (BPJ) against 7.62x54 R API

DRDO has successfully developed Bullet Proof Jacket which provides protection against 7.62x54 R API ammunition as per level 6 of BIS 17051-2018. This jacket is based on new design approach where novel materials along with new processes have been used. The front Hard Armour Panel (HAP) of BPJ defeats multiple hits of 7.62x54 R API (Sniper rounds) in both ICW (In-conjunction with) and Standalone design. The ergonomically designed front HAP is made-up of monolithic ceramic plate with polymer backing which enhances the wear ability and comfort during the operation. ToTs have been awarded to two industries.



Advanced Riot Protection Suit (ARPS)

Advanced Riot Protection Suit is a modular and formidable impact resistant full body suit providing complete safety to the forces during low intensity conflicts. It helps to absorb the impact/shock loads from stone or any other hard objects in riot condition. This is also used to protect chest, shoulder, back, thigh, groin and pelvis against 9 x 19 mm ammunitions.



Mobile Autonomous Launcher (MAL)

Indian Navy has signed a contract with M/s BrahMos Aerospace Pvt. Ltd. (BAPL) for refurbishment of existing MAL and supply of new MAL and recovery vehicles. The refurbishment of MAL has been completed and a new MAL has been delivered along with set of documents and training has been imparted to Indian Navy (IN) crew.

Air crew Helmet

DRDO has developed the Russian and Euro series of integrated light weight aircrew helmet and Pressure Breathing Oxygen Mask as per the requirements of IAF. The Su-30 Helmet is equipped with twin visor internally retractable Polycarbonate visor and has a provision to mount Helmet Mounted Sighting Display (HMSD). It provides protection against impact and penetration resistance. The Helmet-Mask assembly has withstood the windblast test conditions (600 KEAS) at DGA France in six different profiles. The Helmet meets noise attenuation characteristics and is equipped with Electromagnetic Interference / Electromagnetic Compatibility (EMI/EMC) complied Preamplifier. It is intended to be used for aircrew operating fighter aircraft of Russian origin. The operational clearance has been obtained for Su30 aircrew Helmet and Pressure Breathing Oxygen Mask and IAF is initially procuring limited quantity for reconfirmation of the accepted item at field units.



Automatic Chemical Agent Detector & Alarm (ACADA)

Automatic Chemical Agent Detector & Alarm System is developed to detect Chemical Warfare Agents (CWA) and programmed Toxic Industrial Chemicals (TICs). It works on the principle of Ion Mobility Spectrometry (IMS). ACADA contains two highly sensitive cells for continuous detection and simultaneous monitoring of biological agents along with TICs and produces audible and visual alarm. ACADA is a compact, rugged fixed point man portable CWA detector. This can be mounted on vehicle, ship, building and shelters. It can be networked for larger area perimeter monitoring of CWA. The Detector has remote alarm unit for receiving data at central monitoring station. The RFP has been placed and Cost Negotiations have been completed in 2024.



KADAM

Kadam is a poly-centric Prosthetic Knee Joint for persons with Trans-femoral amputation and is an indigenous and affordable above-knee prosthesis complying to ISO 10328 standards. It is developed by Society of Biomedical Joint (SBMT- coordinated by DRDO) in collaboration with IIT Madras. ToT to Industry has been completed and product was launched on Dec 3, 2024 by the Minister of Social Justice, Govt. of India, at Vigyan Bhawan, New Delhi.



Psychological Screening Tool (PsySHOT)

DRDO has handed over a Psychological Screening Tool (PsySHOT) to Infantry School, Mhow on Oct 3, 2024. PsySHOT will aid in identifying right fit for specialized roles in Infantry. It is conceptualized and scientifically validated through a collaborative process involving subject matter experts, field trials, and on-site evaluations with support from Infantry School, Mhow and Army Training Command (ARTRAC).



Pru-Decorp-TM and Pru-Decorp-MG

Pru-Decorp-TM is a 500 mg hard gelatine capsule containing a dark blue coloured powder having Prussian blue insoluble excipients. This Capsule is an antidote for radioactive Cs/Tl in Nuclear Emergency situations. Pru-Decorp-MG is a 1000mg hard gelatine capsule that contains Prussian blue insoluble and binding efficacy enhancer agents along with pharmaceutically acceptable excipient. Pru-Decorp-MG is a capsule developed for rescue responders. It is a one-time use capsule for rescue responders or subjects entering a zone that is known or suspected to be contaminated with radioactive isotopes of Caesium / Titanium (Cs/Tl). This drug has been approved by Central Drug Standard Control Organisation (CDSCO) and Services have initiated the induction of Pru-Decorp-TM and Pru-Decorp-MG in Jun 2024.

Army Air Defence (AD) Deployment Simulation System (A2D2S2)

Army AD Deployment Simulation System evaluates the effectiveness of Ground Based Air Defence Weapon Systems (GBADWS) against enemy air threats. 05th version of the system has been developed with enhanced functionalities such as optimal deployment of radar systems, auto AD layout, effective coverage analysis of GBADWS & integrated 3D visualization. It has been handed over to operational units of Indian Army during Oct 2024 and it has been made operational.

Airspace Management (ASM) Software

Airspace Management Software aids users in the detection, identification and resolution of Corps Air Space conflicts in the Tactical Battlefield Area (TBA). DRDO has designed and developed Corps Airspace Control Center (CACC) software to meet their operational requirements. The ASM-CACC software has been installed at user site in Nov 2024.

Secure Storage Media Solutions

Secure storage media devices are specialized hardware designed to store sensitive data with robust protection against unauthorized access, tampering, and data breaches. Its robustness towards extreme variation in environment, electromagnetic interference and physical attacks has offered wide application areas including storage of cryptographic keys, mission-critical software, operational data logs and real-time tactical information. Production agency cum industrial partner has been designated and same has been successfully delivered to the User in the year 2024.

Major Systems under User Evaluation

Dhruvastra - Air-to-surface Missile

Dhruvastra is a 3rd generation helicopter launched Anti-Tank Guided Missile (ATGM) with Lock-on-before-Launch (LOBL) capability with Imaging Infrared Seeker (IIR) seeker for integration on Advance Light Helicopter (ALH). During 2024, flight trials for IIR seeker assessment and firing of Dhruvastra missile in limited envelope from Advanced Light Helicopter (ALH) MK-IV helicopter in desert and in high altitude trials were conducted successfully.



Quick Reaction Surface-to-Air Missile (QRSAM)

Quick Reaction Surface to Air Missile (QRSAM) System is an Advanced Air Defence system, indigenously developed by DRDO for Indian Army. It provides tactical land based air defence coverage for static and on-the-move assets. The weapon system is capable of engaging multiple targets coming from multi directions. During the year 2024, successful firing of missile against Unmanned Aerial Vehicle (UAV) was also demonstrated destroying the target with a combined profile of receding and crossing target. The Army and Airforce are processing combined AoN and General Staff Qualitative Requirement (GSQR) has been issued in June 2024.



Akash-New Generation (NG)

AKASH-NG Surface-to-Air Missile weapon system is being designed and developed by DRDO for IAF for providing Air defence cover against fighter aircrafts, helicopters, unmanned aerial vehicles (UAVs), Anti-Radiation Missile (ARM) and Sub-sonic cruise missiles. The weapon system is designed with the capability of engaging multiple targets simultaneously and with 360° coverage. During the year 2024, AKASH-NG guided missions were flight tested at ITR Balasore. The mission was aimed to intercept at low flying altitude and during this mission target was successfully destroyed by proper explosion of warhead.



Long Range Glide Bomb (LRGB)

Long Range Glide Bomb (LRGB) is being developed in two different classes with different warheads called Pre-Fragmented blast (PF) and Penetration Cum Blast (PCB) war heads. The stores are designed for integration at different Stations of SU-30 MKI. The Carriage Flight trial of Air launched Long Range Glide Bomb – Gaurav with PCB warhead from Su-30 Mk1 platform have been successfully completed during May 2024. All the test points were covered and thereafter Release Flight Trial (RFT) of Gaurav-PCB was successfully completed in Aug 2024.



Very Short Range Air Defence System (VSHORADS)

Very Short Range Air Defence System (VSHORADS) is a fourth generation system compared to contemporary Man Portable Air Defence System (MANPADS) which is a third generation systems. This indigenously developed VSHORADS weapon is technically superior to MANPADS as it employs state of art uncooled imaging infrared seeker. During the year 2024, flight trial was carried out successfully at Pokhran Field Firing Ranges (PFFR) in Rajasthan during Oct 2024



Electro-Optical-Smart Anti Airfield Weapon (EO-SAAW)

Electro-Optical-Smart Anti Airfield Weapon is a long range, stand-off autonomous air to surface guided bomb with IIR seeker for terminal guidance. During the year 2024, three EO-SAAW with Cooled Seeker Mk1 have been flight tested and seeker guidance has been demonstrated successfully. Design of Cooled Seeker Mk2 with new onboard Cooling system & uncooled seeker has been completed.



RUDRAM-II

Rudram-II is an Air to Surface weapon system, configured to meet the quick reaction tactical strike requirements. The missile has a Passive Homing Head and Millimeter Wave active radar seeker in the Anti-radiation role and for ground attacks, the missile utilizes the Imaging Infrared seeker. Air to Surface missile RudraM-II was successfully flight tested from Su-30 Mk-I fighter aircraft off the coast of Odisha on May 29, 2024. The flight test met all the trials objectives, validating the propulsion system along with control & guidance algorithms.



Parachute System for Gaganyaan

Gaganyaan Programme of Indian Space Research Organisation (ISRO) is proposed for sending Astronauts to Low Earth Orbit (LEO) to conduct space experiments and bring them back safely to the earth after completion of the mission. Safe landing of crew carrying re-entry module on earth surface will be achieved by a parachute system. During 2024, Rail Track Rocket Sled (RTRS) tests were conducted with Drogue parachutes. Aerial Drop Tests were conducted with Drogue & Main parachutes. The environmentally controlled storage facility for textiles and parachutes was realized.



Heavy Drop System (HDS) for C-130 & C-17 Aircraft

DRDO is developing an integrated Heavy Drop system for C-130 and C-17 aircrafts to paradrop payloads of Indian Armed Forces in compliance with international standards of design and safety. The system consists of three parts namely platform system, parachute system and hydraulic platform loader. Various sub-systems have been designed, fabricated, tested, integrated and finally subjected to flight tests during the development. During 2024, the Technical Trials have been completed. The user payload paradrop from C17 aircraft was conducted and all project objectives have been achieved.



Heavy Drop System-16T (HDS-16T) for IL-76 Aircraft

16 Ton Heavy Drop System has been developed with an objective of creating an indigenous capability of Para drop of military stores/equipment's from IL-76 Aircraft. The trials were conducted successfully by Users on Aug 29, 2024 and the user validation trial was also successfully completed. The maintainability evaluation trial of platform and parachute systems was completed in Jan 2024 by DGQA. The Bulk production is to commence after clearance.



Extended Range Anti-Submarine Rocket (ERASR)

DRDO has taken-up the project 'ER-ASR' with the objective to design, develop and manufacture ERASR rocket propulsion system. ERASR is an anti-submarine rocket in Ballistic-2 mode (long range mode) and Ballistic-1 mode (short range mode). ToT of high explosive, motor composite propellant and Igniter compositions have been completed. Licensing Agreement for Transfer of Technology (LaTOT) has been signed by both Production Agencies (Pas). During the year 2024, ship trials and dynamic trials to evaluate Electronic Time (ET) Fuze functioning were conducted successfully. Range Table Validation Trials at Balasore were evaluated successfully to assess range performance, accuracy and consistency of ERASR rockets in different modes.



CBRN RV (Tr) Mk-II

DRDO is developing CBRN Reconnaissance vehicle (Tracked) Mk-II, which is a reconnaissance platform capable of detecting, identifying, monitoring and marking of areas, contaminated with CBRN agents and transmit this information speedily to the supported formations. During the year 2024, ToT to DPSU was signed.



Trawl Assembly for T-72/T-90 Tanks

Trawl assembly is an equipment designed to create a Vehicle Safe Lane (VSL) through a mine field using four number of trawl tanks in tandem. This system is a combination of Roller assembly, Mine Plough and EMD (Electro Magnetic Device). The passage in the minefield is created as a result of pressure applied to mine detonators by the roller sections, followed by unearthing of undetonated mines and then pushing off the path by the Mine Plough. The EMI/EMC trials were successfully completed in Feb 2024 and Director General Quality Assurance (DGQA) trials in Sep 2024.



Laser Ordnance Disposal System (LORDS) MK-1

LORDS for standoff disposal of unexploded/obsolete/unserviceable naval ordnance is under development as per Naval Staff Qualitative Requirement (NSQR). Laser Ordnance Disposal System Mark-1 (LORDS Mk-1) is under development to meet requirements of Army as per Preliminary Staff Qualitative Requirement (PSQR). Army has accorded AoN from Services Procurement Board (SPB) for acquisition of LORDS Mk-1 in the year 2021. The System has been developed and internal trials have been conducted successfully in the year 2024. A DPSU has been nominated as Production Agency (PA).



EO Sensor Suite for Jammer Anti UAV Entity of Ground Based EW System

Electro-Optical (EO) Suite for Jammer anti UAV comprises of EO Sensors having Micro Wave Infra Red (MWIR) Thermal Imager, Colour Day Camera, Laser Range Finder, Digital Interface Unit and Control Unit. EO payload is slewed towards detected target for recognition and target tracking. EO tracker continuously tracks the target and it provides the tracking data to Electronic Support Measures (ESM) / Electronic Counter Measures (ECM) for possible soft-kill of tracked threat. The field evaluation trials by users have been conducted in various phases and EO has met the tracking and range requirements for the small size UAVs.

Coastal Surveillance Radar (CSR)

Coastal Surveillance Radar (CSR) is a part of the Integrated Coastal Surveillance System (ICSS) which comprises of chain of ground based microwave radar, EO sensor, Electronic Support Measures (ESM) and optical sensors. Coastal Surveillance Radar (CSR) is a dual band Radar capable of detecting small boats at sea that is likely to be a security threat, by providing 24x7 surveillance. It is used by Indian Coast Guard/ Indian Navy for littoral surveillance of small boats, dinghies & other small vessels. The ToT for CSR was signed off with three Industry Partners. During the year 2024, CSR has been demonstrated for Integrated Under-water Harbor Defence and Surveillance System (IUHDSS) for Indian Navy.

Air Defence Fire Control Radar (ADFCR) Atulya

Air Defence Fire Control Radar in conjunction with Anti-Aircraft Guns, forms a Ground Based Air Defence system whose main purpose is effective point defence against all air threats at short and very short ranges during day and night and under all weather conditions in the presence of jamming. AoN has been accorded for ADFCR in Sep 2024.

Submarine Fired Decoy (SFD)

Submarine Fired Decoy can be launched from Submerged Signal Ejector (SSE) of any Submarine with a sleeve. It works as preferred target against any Passive Torpedoes and is effective as Range gate stealer against Active Torpedoes. It also slowly sinks to take Torpedo to lower depths. Phase III trial of SFD was successfully conducted in Apr 2024.

26 mm & 50 mm Chaff Cartridges

Based on the Qualitative Requirements (QRs) provided by IAF, DRDO undertook a Mission Mode project for indigenization of 26 mm & 50 mm Chaff Cartridges for MI-17 Helicopter and Su-30MK Aircraft respectively. Design and development of indigenous 26 mm and 50 mm Chaff Cartridges has been successfully completed with two DcPP partners. DRDO has successfully delivered indigenous 50 mm Chaff Cartridges as project deliverables to IAF. The user trials of indigenous 50 mm Chaff Cartridges were conducted by IAF and found to be satisfactory.



Individual Under Water Breathing Apparatus (IUWBA)

The IUWBA is a closed circuit based Individual Breathing Apparatus, capable of providing breathing support under water. It regenerates oxygen from exhaled carbon-dioxide and supports two modes breathing i.e. from atmosphere and from apparatus. DGQA trials and MET evaluation were successfully completed. During the year 2024, three ToT holder Industries have qualified in the User evaluation.



Passive Exo-Skeleton for Augmentation & Rapid Logistics (PEARL)

DRDO has developed the wearable exoskeleton systems that augment the capability of the soldier to carry more weight and enhance the endurance. These structures are coupled with the human and move synchronously and transfer the loads carried by an individual directly to ground. The aim is to reduce the load in the spine and lumbosacral joints during walking on even & uneven terrains at faster speeds or for longer distance, reducing risk of musculoskeletal injury. During 2024, successful trials of passive exo skeleton with ITBF, CRPF and Indian Army were completed at various locations.



NBC (Nuclear, Biological & Chemical) Respiratory Mask MK-II

DRDO has developed NBC Respiratory Mask Mk II for respiratory protection in the CBRN contaminated area against chemical warfare agents. With a shelf life of 10 years it gives five points harness system for proper fitment which has provision for drinking water facility, electronic voice enhancer, provision for dual canister attachment and twin visor system with field vision of more than 75%. It is developed in three different sizes with less than 750 gms of weight. During 2024, the User trials have been completed and ToT awarded to three firms.



Fitment/Leak Tester (Mk-II)

The Leak Tester is an equipment developed to test the fitment of NBC respiratory masks before issuing them to soldiers. The tester is provided with digital display which indicates within 40 seconds whether a mask has passed/failed. In the event of failure, the reason is also indicated as suction fail or flow fails. User trials have been completed in 2024 and ToT awarded to three industries.



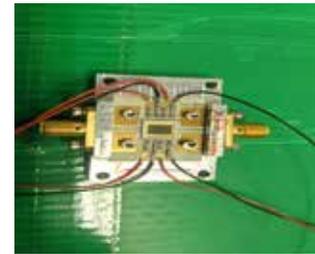
CBRN Water Purification System (WPS) Mark-II

DRDO has developed CBRN (chemical, biological, radiological and nuclear) Water Purification System Mark-II. It is targeted for use during natural and manmade disasters, CBRN emergency, war and terrorist activity. The PSQR evaluation trials of a unit of CBRN WPS Mk-II were conducted against simulants/surrogates of chemical and biological warfare agents in Oct 2024 and its performance was found to be satisfactory and meeting all the requirements of PSQR.



X- band GaN Power Amplifier Monolithic Microwave Integrated Circuit (MMIC)

X-Band Power Amplifier have been designed and developed for Active Electronically Scanned Array (AESA) Radar with Power Added efficiency better than 35% over the complete band. These Power amplifiers have been packaged and RF characterised to demonstrate the desired performance. This amplifier in ceramic Quad Flat No-lead (QFN) package has been delivered by production agency in March 2024 for trials and its production is under progress.



Major Systems under Developmental Trial Stage

PRALAY

PRALAY is an indigenously developed low cost conventional surface-to-surface quasi ballistic missile powered with solid propellant rocket motor and many new technologies. It can be launched from a mobile launcher and has a capability to strike different types of targets by carrying different types of warheads. Acceptance of Necessity (AoN) from both the Indian Air Force and Indian Army has been received. Two DcPPs has been identified for production and Joint User trial directive issued by Indian Air Force (IAF).



Submarine Launched Cruise Missile (SLCM)

Submarine Launched Cruise Missile (SLCM) is an encapsulated cruise missile launched from Submarine. It is designed to engage both land targets and Ship targets. Encapsulated missile is pushed with sufficient exit velocity such that during forward movement, missile attitude changes due to its buoyancy. Underwater booster is fired at appropriate angle such that encapsulated missile comes out of water near vertical. After this the missile takes its air trajectory including the cruise phase, locks on to the target and finally hits the target depending on the configuration. During the year 2024, two full range missions were conducted from under water platform to prove the ejection mechanism, underwater dynamics, Capsule separation above water, Air phase booster trajectory, Cruise phase mechanisms and waypoint based trajectory.

Vertical Launch Short Range Surface to Air Missile (VL-SRSAM)

Vertical Launch Short Range Surface to Air Missile (VL-SRSAM) a ship borne weapon system being developed for Indian Navy, is a vertical launch short range surface to air missile against fighter aircrafts, helicopter, UAVs etc. The missile has been developed for neutralizing various aerial threats at close ranges including sea-skimming targets. The complete chain of VL-SRSAM Weapon system was validated during flight trials carried out in Sep 2024 at Balasore meeting all objectives satisfactorily.



Multi-Function Radar for Vertically Launched SRSAM

Multi-Function Radar (MFR) for VL SRSAM is a ship mounted, X band active array radar for surveillance and fire control of the VL SRSAM System. It is a four walled active phased array based radar with electronic beam stabilization for seamless azimuth coverage. During the year 2024, Multi-Function Radar has completed the developmental trials. These radars are under Production by a DPSU for Indian Navy Next Generation Missile Vessels ships.

TAPAS MALE UAV (Rustom II)

TAPAS-BH, a multi-mission UAV is being developed to carry out intelligence, surveillance and reconnaissance roles for the Armed Forces. TAPAS UAV has multi-channel/multi-sensor data link system with Line of Sight (LOS) & Beyond Line of Sight (BLOS) capability for large area, high end ISR operation. Expression of Interest has been given for IUAS (Indigenous Unmanned Aerial System) by the Indian Air Force and Indian Navy for utilization in Pre-operational role. During the year 2024, flight trials of TAPAS variant - SETB (Single Engine Twin Boom) and TAPAS AF6A & AF11 / AF12 were carried out.



Diesel Engine from Conversion of Automotive Engine for Rustom-II UAV

The high specific power airworthy diesel engine is being designed and developed for Tactical Airborne Platform for Advanced Surveillance (TAPAS) Unmanned Aerial Vehicle (UAV). Indigenously developed engine is capable of producing takeoff power of 180 hp and is expected to replace the imported engine which is currently integrated with TAPAS UAV. During 2024, 650 Hrs Beta Engine Design Validation testing was completed and Integration of Engine on R-II AF-9 Airframe & Engine Ground run through Ground Control Station (GCS) was successfully conducted.



Indigenous Technologies Cruise Missiles (ITCM)

Indigenous Technology Cruise Missile (ITCM) is a new generation 'Long Range Land Attack Cruise Missile' being developed for land and sea platforms. The objective of ITCM project is to integrate indigenous Engine



and Indigenous terminal guidance system with NIRBHAY missile and evaluate through flight trials. During the year 2024, launch was conducted from ITR, Chandipur with indigenous Small Turbo Fan Engine (STFE).

Small Turbo Fan Engine (STFE)

Small Turbo-Fan Engine (STFE) is an indigenous propulsion system. STFE successfully powered the Indigenous Technology Cruise Missile (ITCM) in Apr 2024 from ITR, Balasore. The engine demonstrated flawless performance and operability throughout the mission. With this achievement India joins the elite League of Nations who has indigenous cruise missile powered by indigenous gas turbine engines.



Long Range - Land Attack Cruise Missile (LR-LACM)

LR-LACM is the Nirbhay configuration with requirements of canisterisation and deployment from land and ship based launcher. The users of this project are Indian Navy and Indian Air Force and two Development cum Production Partners (DcPP) M/s BDL, Hyderabad and M/s BEL Bangalore had been identified for Project LR-LACM. During the year 2024, first flight of LRLACM-01 was conducted in Nov 2024 from ITR, Chandipur.



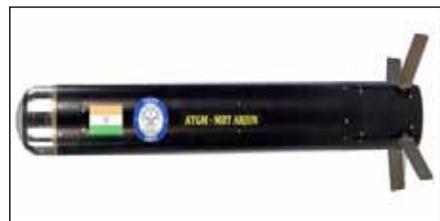
Dormant Tunnel Detection System

Dormant Tunnel Detection System is operated from a seismic streamer based vehicle mounted system, capable of detecting dormant tunnels. It uses various technologies such as seismic sensors, ground penetrating radar and acoustic detection to identify various tunnels. During the year 2024, Ministry of Home Affairs (MHA) Board of Officers (BOO) User trials have been completed and the validation is being carried out based on the specifications.



ATGM for MBT Arjun Mk IA

DRDO is developing a Laser seeker based Anti-Tank Guided Missile that can be launched from rifled gun of MBT Arjun. During the year 2024, Instrumented Development Flight Trials (IDFT) integrated with Laser Target Designator (LTD) were conducted by Indian Army in two phases for different ranges. All the objectives of the project have been met successfully.



Light Tank (LT)

DRDO has taken-up design & development of a light weight versatile weapon platform with enhanced tactical, operational, strategic mobility with greater option for deployment in High



Altitude Areas and for amphibious operations. The tank will have weapon systems and protection of adequate capacity with suitability to operate in current and futuristic threat spectrum. During the year 2024, first prototype was realized and automotive performance evaluation was completed. The Desert and High Altitude Area (HAA) Automotive firing trials were also completed.

600 hp Engine

DRDO has taken initiative to develop indigenous engine to power futuristic combat vehicles. The engine is being designed to be compact, efficient and light weight making it suitable for future combat vehicles. The development testing of Gen 1 engine has completed 250 hours and the targeted power and torque output in test bed has been achieved. During the year 2024, 675 hp power output from the engine at 3200 rpm has been conducted.



WhAP-CBRN Platform

DRDO has developed paramilitary variant of Wheeled Armoured Platform (WhAP) based on the operational requirement initiated by Indian paramilitary forces. It has wheeled 8x8 configuration, 600 hp engine, fully automatic transmission and instruments for detection of chemical, biological and nuclear warfare agents. During the year 2024, extended trials and running including floatation trials, weapon firing, communication between CBRN vehicle and command station have been carried out. The vehicle was exhibited in Maharashtra Def Expo-2024.



70T Tank Transporter for MBT Arjun Mk-1A

DRDO has designed & developed a trailer of 70t as tank transporter, especially for transportation of MBT Arjun Mk -1A by road. It is quite useful for transportation of MBTs or other equivalent payloads upto 70t capacity quickly into the places of requirements/ operation by road. Factory Acceptance Test (FAT) and DRDO internal trials have been completed & the transporter has successfully covered a distance of 23,000 km during these trials. During 2024, ToT has been transferred to Industries.



Self Propelled Mine Burier (SPMB)

DRDO has developed Self-Propelled Mine Burier which is a mine laying equipment designed to lay types of anti-tank mines. The Equipment can operate in plains, deserts and semi-deserts. GSQR based Field evaluation trials were completed in Sep 2024 and EMI/EMC trials were completed in Dec 2024.



Internal RWJ System for Jaguar DARIN-III Upgrade (DJAG)

The Integrated Radar Warner and Jammer system encompasses Radar Warning Receiver (RWR), Electronic Countermeasure (ECM), Electronic Support Measure (ESM) and uses Microwave Power Module (MPM) based transmitters for jamming. During the year 2024, Software update to clear observations of multi-emitter trials, Rig testing, Ground Acceptance Testing and confirmatory sortie have been completed. DJAG system is recommended for operational use in DARIN-III upgrade aircraft.

Sahastra Shakti

DRDO has developed a system based on Multi Channel Beam Director Technology system with Gyro Stabilized EO System. The trials for same have been conducted successfully during August 2024. The DRDO Evaluation of Multi-Channel Beam Combination using Six Channels has also been completed successfully.



Data Links for Airborne Platforms

DRDO is working on design and development of Line-of-Sight (LOS) and Satellite Communication (SATCOM) data links for Airborne platforms, with technology utilization in data link for AEW&C Mk-II. Various technology sub systems have been realized under this project and qualification has been completed. Flight trials of C Band LoS link have been conducted in December 2024.



Laser Beam Rider Guidance (LBRG) System

This system generates spatially modulated beam for guidance of precision guided munitions. This technology is very less prone to counter measure. In this technology, the projectile rides within the laser beam. During the year 2024, two units of LBRG with Eye Safe Laser Range Finder (ELRF) have been realized and desired spatially modulated pattern has been achieved for missile guidance.

Advanced Gunner's Main Sight (AGMS)

Gunner's Main Sight (GMS) is the key subsystem of the Integrated Fire Control System for MBT Arjun tank to engage ground targets. AGMS is a primary engagement sight for Gunner of the Arjun Main Battle Tank. It enables the gunner to engage and fire the target during day or night in static and dynamic modes. AGMS consist of gyro Stabilized Head Assembly which houses 3rd gen thermal imager, Day Vision Optics and Eye Safe Laser Range Finder. During the year 2024, AGMS was integrated and tested on Arjun MBT at Chennai successfully.

Long Range Radar (LRR)

LRR is an L-Band active electronically scanned phased array Radar for detection of small cross section and high speed targets at long ranges. The system uses Transmit Receive Modules having Gallium Nitride Power Amplifiers. During the year 2024, subsystems of the radar have been designed and realized indigenously. Radar Integration has been completed at test site.

Surface Wave Over-The-Horizon Radar (SWOTHR)

SWOTH-Radar in a Bi-static configuration can detect and track targets over the sea surface, beyond the horizon, using high frequency signals. It is operated in a Bi-static configuration with the transmitter and receiver antennas physically separated by a considerable distance. It can also be used for detection of Stealth targets. During the year 2024, system integration and testing at project site has been completed.

High Endurance Autonomous Under water Vehicle (HEAUV)

High Endurance reconfigurable Autonomous Under water Vehicle (HEAUV) is for operating the vehicles in missions related to Intelligence, Surveillance and Reconnaissance (ISR), Mine Counter Measure (MCM), Bathymetry & Oceanography (B&O) and Anti-Submarine Warfare (ASW). During the year 2024, surface free running trial of HEAUV has been conducted and established control law.



Personal Radiation Dosimeter for Aerospace Application (PERDAA)

This activity is for development of Radiation Dosimeter named as PERDAA (Personal Radiation Dosimeter for Aerospace Application) for measurement of gamma radiation inside the crew module of ISRO's Gaganyaan Mission. The PERDAA prototype has been successfully developed & demonstrated to the ISRO team. During the year 2024, Qualification testing on the model has been carried out and successfully completed. Acceptance testing of flight model has also been completed.



Portable Dose Rate Meter (PDRM) MK-II

PDRM MK-II is a compact, handheld, battery operated instrument used for measuring Initial Nuclear Radiation (INR), Gamma & Neutron radiation dose and Residual Nuclear Radiation (RNR) Gamma dose & dose rate. It displays the measured dose and dose rate on a panel display. During the year 2024, Qualification testing of PDRM MK-II has also been completed.



Non-lethal rubber ball based Hand Grenade (NLHG)

DRDO conducted trial for Non-lethal Hand Grenade shell filled with rubber balls by integrating Multimode Fuse on May 28, 2024. Trial rubber balls travel up to the distance of 10-12 meters from the point of detonation and dispersed in all the directions. The delay time recorded is approx. 3.94 seconds.

Individual Chemical Agent Detector (ICAD)

DRDO is developing Individual Chemical Agent Detector, which is a lightweight, belt/ harness wearable chemical warfare agent detector having weight less than one kg without batteries. During the year 2024, prototype has been developed successfully and its functional testing is under progress.

Enzyme less Electrochemical Biosensor for Biological warfare agents (BWAs)

The enzyme less electrochemical biosensors technology has been developed for the sensitive and fast detection of BWAs. This technology requires the use of functional nonmaterial for the electrochemical signal generation and amplification. The key components of electrochemical biosensors are Nanomaterial as labels, Sensor chips, Bio reagents and Electronic circuit & software. During the year 2024, Biosensor lab prototype has been developed & evaluated.

New Generation Psychological Screening Test for Selection of Airmen in IAF

DRDO is developing the New Generation Airmen selection system for the selection of Airmen in the Indian Air Force. The test would assess the suitability of the candidates for joining as Airmen in Indian Air Force. The test would assess the candidates on certain psychological parameters decided by the users. The preliminary trials of the test have been conducted in Oct 2024 at the Airmen Training School, Belgaum.

Major Systems under Design & Development

Enabling Technologies for Long- Duration Hypersonic Cruise Missiles (ET-LDHCM)

ET-LDHCM (Enabling Technologies for Long Duration Hypersonic Cruise Missile) is sanctioned for development of critical technologies for design and development of long duration Hypersonic Cruise Missile. During the year 2024, design of active cooled scramjet engine was completed; sub-scale combustor was fabricated and tested for 60 seconds successfully.



Advanced Turbo Gas Generator (ATGG)

ATGG Engine is being developed to meet the propulsion requirement of unmanned aerial vehicle. Industry partner for the manufacturing and engine assembly has been identified. Proof of Concept (POC) engine is being manufactured using Additive Manufacturing (AM) technology. During the year 2024, a prototype of the engine's high speed permanent magnet alternator has been developed and tested up to full speed.

Advanced Full Authority Digital Engine Control (A-FADEC)

A-FADEC is an advanced digital engine control unit. This unit is qualified & inducted into the Kaveri Dry Engine program. It has completed close to 300 hours of testing with Kaveri Dry Engine and more than 1300 cumulative hours of rig testing. 75 hours of altitude testing of Kaveri Dry Engine is completed with the unit. In the year 2024, flame-out & auto-relight logics were evolved and tested in Bangalore.

Single Crystal Blades and Vanes in ready-to-fit condition for high pressure turbine

Objective is to develop technologies for single crystal high pressure turbine blades and vanes comprising of single crystal casting, high temperature brazing, creep feed grinding, drilling of film cooling holes and thermal barrier coating. In 2024, delivery of single crystal HP turbine blade castings has been completed. Casting of single crystal HP turbine vanes is under progress.

ULPGM Missile Penetration-cum-Blast Warhead

DRDO is in the process of conducting trials of UAV Launched Precision graded missile (ULPGM) making a leap forward in unmanned aerial warfare capability. During the year 2024, Modular Warheads configuration has been completed successfully. The complete warhead system has been tested and integrated in the missiles successfully.

1000kg General Purpose Bomb

IAF projected a requirement for the development of a 1000 kg Class (Mk-84) General Purpose Bomb along with suitable initiation mechanism. During the year 2024, Structural analysis of Lug-1000 has been completed.

Electro Magnetic (EM) Railgun

Objective of the project is to develop a packed EM Railgun system which can be transported on road and can fire projectiles to hypervelocity using Capacitor bank. A number of critical technologies are being developed under the project including battery based compact power source, compact capacitor bank and railgun barrel. Prototypes of high energy density capacitor and semiconductor switch have been developed and tested successfully. During the current year, the railgun launcher has been upgraded and successfully test fired multiple times.



1500 hp Engine

DRDO is developing 1500 hp engine for Armoured Fighting Vehicles (AFVs). During 2024, manufacturing of components, assembly and firing of first engine prototype have been completed. One Prototype engine has been cranked and fatigue / endurance testing of engine components have been completed. The cooling system components have been developed and assembly of two Prototypes is under progress.

Advanced Armoured Platform (Wheeled & Tracked) - VIKRAM-21

DRDO has taken up the Project for Design & Development of Tracked and Wheeled Advanced Armoured Vehicles. The state of the art technologies have been incorporated in the area of hull, power pack, running gear drive line, turret, ammunition & sighting system, amphibian capability, protection and ergonomics. During the year 2024, detailed design of AAP-Wheeled, Tracked platforms and crewless turret has been completed. Crewless turret is being developed first time in the country and its configuration and design have been finalized.

System & Technologies for Advanced Robotics (STAR)

DRDO is developing technologies for Advanced Robotics in the areas of surveillance, logistics support, combat engineering and combat support for military robotics application. Advanced robotics will be a machine that can do jobs that require way more intelligence, adaptability and precision. Realization of Quadruped Robotic System and Biped Robotic System was completed in Mar 2024 and Oct 2024.



Ground Based Integrated EW Systems (DHARASHAKTI)

DRDO is working on providing IntraCom radios for Ground Based Integrated EW Systems for plains and deserts for Army. The successful limited entities field evaluation trials have been carried out. First Off Production Model (FoPM) version of IntraCom have been realized and bench level testing has been completed successfully for interoperability, point to multi point and repeater functions. During the year 2024, successful evaluation of IntraCom system by 'DRDO Internal Evaluation Committee' has been completed.

Kshitij Radar for Shyen project

DRDO is the nodal organization for development of the sensor suite for the Dornier Mid Life Upgrade program of the Indian Navy. The Radar uses an X band active array antenna with Transmit Receiver (TR) modules in a tile configuration. The development flight sorties for radar were conducted & Synthetic Aperture Radar (SAR) imagery for planned test points was obtained. During the year 2024, User Lab Evaluation has been completed in two phases for Electronic Support Measures (ESM) system. The ESM System is being installed in the Aircraft at a DPSU.

Digital Active Phased Array Radar (DAPAR)

DAPAR is an S-band active phased array radar with digital TR modules enabling digital beam forming in Transmit and Receive. It is multi-function 4D radar capable of automatic detection and tracking of aerial targets ranging from fighter aircraft to slow moving air targets. During the year 2024, the Element level waveform digital synthesis and array calibration completed in transmit and receive mode.

Photonics Radar

DRDO has taken up realization, incorporation and demonstration of the following photonics technologies for radar applications: viz. Photonics Signal Generation (PSG), Wavelength Division Multiplexing (WDM) based distribution of RF, data & control signals and multi-channel photonics receiver. The Photonics Distribution Network and Ultra Narrow band RF filter realization has been completed. Proof of concept has been established for Photonic based Multiband radar Transmit signal generation. During the year 2024, preliminary testing of Photonics transmitter and Receiver using Mode Locked Laser (MLL) has been completed.

Navigation Radar for Integrated Combat Suite for Submarines (NRICS)

It is a conventional X band radar to detect and track boats, buoys and ships at sea to aid in the navigation of submarines. During the year 2024, one radar has been realised, integrated and tested on Radar Test Platform at Bengaluru.

Primary Radar for AEW&C Mk II System

The project aims at developing a dorsal mounted S band active array antenna based radar and a nosecone mounted X band active array antenna based radar for installation on Airbus aircraft for long range airborne early warning applications. During the year 2024, PDR and design of the system has been completed.

Missile Approach Warning System (MAWS) for AEW&C Mk-II

DRDO is developing Missile Approach Warning System (MAWS) for AEW&C Mk-II. M/s BEL (Machilipatnam) is the DcPP for realization of the product. During the year 2024, design of Line Replaceable Units (LRUs) of MAWS has been finalized and structural/thermal analysis of design is under progress for optimization.

Ground based High Power Microwave (HPM) Directed Energy Weapon (DEW) system

The Ground based HPM DEW system is being developed to deliver Radio Frequency (RF) power to disable electronics of UAVs up to a long range. Field trials of the system have been conducted during July 2024.



Integrated Combat Suite (ICS) Programme for Submarines

ICS programme is for design, development and integration of an Indigenous Integrated Combat Suite for Submarines. Phase-I is to prove the prototype at the Shore Integration Facility at NPOL, Phase-II is the production-grade on a Sub-Surface Killer (SSK) submarine and fitment of ICS on P-76 class of submarines will be taken up in Phase-III. In addition, Defence Acquisition has cleared Installation of ICS on-board P75 submarines. The activities pertaining to trials and integration are in progress. Factory Acceptance Test (FAT) and user evaluation are in progress.

Air Independent Propulsion (AIP) System

Realization of energy modules for AIP for P-75 class submarines along with detailed design of AIP plug is under progress. During the year 2024, the energy module including its sub-systems has been designed. Detailed Design Review (DDR) of mechanical system and Vetting of AIP design documents including the energy module/liquid oxygen module is in progress with submarine designer.

Technologies for Theatre Level Sonar (TTLS)

TTLS aims to develop and demonstrate critical systems and technologies required for realizing a Theatre Level Sonar. The main subsystems envisaged are the low frequency transmitter array, faired tow cables for transmitter & receiver arrays, handling systems for deployment & retrieval of transmitter array, power amplifiers & transmitter systems, twin-line towed receiver arrays, winch & handling systems for towed arrays and signal processing techniques for theatre level sonars. The first prototypes of the low frequency projector elements were realized and tested at both element level and at array level at the newly commissioned Submersible Platform for Acoustic Characterization and Evaluation (SPACE) platform at the Underwater Acoustic Research Facility (UARF). During the year 2024, all subsystem technologies for realizing the twin-line towed array were developed and proven at the lab. The bottom-reflection loss measurement experiments were conducted and the loss at various frequencies was estimated.

Wide Area Sea Surface and Sub-Surface Surveillance Network (WAS4 Net)

WAS4NET is for detection of submarines that cross a linear barrier of sensor nodes. 2-ring prototype array structure fabrication, Assembly of transducers and Integration of electronics has been completed. The Preliminary performance evaluation trials have been conducted successfully and Lead System Integrator has been identified. During the year 2024, system software development has been completed and performance also tested as part of prototype trials.

Electrical Heavy Weight Torpedo (EHWT) for P-75

The aim of the project is, development of EHWT for Deployment on P-75 platforms, proving of production version torpedoes as per Naval Staff Qualitative Requirements (NSQRs) and Identification of DcPP. During the year 2024, combat configuration has been realised and successfully demonstrated the controllability and stability of the torpedo in dynamic trials. The firing of thermal battery & recovery of combat version torpedo has also been demonstrated.

Adaptive Add-on System for Visual Camouflage (AVIS)

Technology for Visual Adaptive Camouflage has been developed to camouflage the military objects in dynamic background by generating visual colour patterns dynamically onto the vehicle to match the deployment background features. The camouflaged vehicle merges with the background and makes it difficult to be identified. Functional prototype of the Visual Adaptive System have been developed, tested and demonstrated for its functionality on ground vehicle in laboratory environment as well as in field area.



Field Evaluation of variants of TTS

The variants of Thermal target system (TTS) viz. 3 dimensions (3D-TTS), High fidelity (HF-TTS) and low cost (LC-TTS) has been developed and field evaluated. 3D Thermal Target System (TTS) represents thermal signatures of a military vehicle in front, broad, rear and top side views as a single entity. The field evaluation of 3D-TTS was carried out at Pokhran. To control the thermal signature of target, remotely controlled RF based Multi- Channel Temperature Controller (MCTC) has been developed. During the year 2024, field based remote operation, temperature control, test and evaluation of MCTC has been successfully carried out.



Drone based buried minefield remote detection technology

Buried landmines are tactically important as they slow down the convoy movements. It is specially challenging in desert conditions due to dynamic surface nature. An aerial remote mine detection from a safe altitude in a speedy manner is under development under the project Desert Warfare & Operation Support Technologies (DOST) to detect anti-personal (AP) mines and anti-tank (AT) mines. During the year 2024, System Design Review (SDR) has been conducted.

Damage Tolerant Design Methodology (DTDM)

DRDO has taken up a project to enhance the current safe life design approach to a more reliable and cost-effective approach. This method, apart from overcoming the limitations of the safe life approach, will also ensure the structural integrity of the critical components by the way of incorporating safe inspection intervals. The method works based on the principles of Fracture Mechanics wherein the assessment of Stress Intensity Factor and Fatigue Crack propagation life are the important features. In the year 2024, full scale fatigue test of representative aero engine disc with crack was carried out and crack growth prediction methodology was validated. Fracture parameters of the selected materials were generated under various temperatures and stress ratios. Two more representative discs are being tested.

Automated field detection Kit (AFDK)

AFDK based on embossed colorimetric sensor array chip is being developed for the detection and identification of chemical warfare agents in vapor phase. Data generation of Chemical Warfare Agents (CWAs) and possible interference device was completed with first integrated device. In-house functional testing of the first integrated device was completed. Thereafter, industrial partner for the functional testing purpose as per ATP has submitted first industrial prototype of the AFDK. During the year 2024, first Industrial Prototype of the AFDK has been designed and fabricated.

PMN-PT (Lead Magnesium Niobate- Lead Titanate) single crystals Transducer Elements for Naval Applications

PMN-PT single crystals are required for next generation high performance transducers for various Naval applications. Crystallographically oriented and poled PMN-PT single crystal transducer elements have been successfully fabricated from the initial grown PMN-PT single crystal. These crystals have demonstrated highly encouraging piezoelectric response showing typical Piezoelectric Charge coefficient. These transducer elements will impart more than two fold enhancement in sensitivity and range of naval sonars devices.

Major Infrastructure & Unique Test facilities created

Up gradation of Supersonic wind tunnel (HDPSWT)

DRDO established a High Dynamic Pressure Supersonic Wind Tunnel facility at Hyderabad to test actuator with control surface in flight condition and to conduct wind tunnel testing on missile models in complete flight envelop. As on date there was no wind tunnel facility to conduct this type of tests, particularly simulating the flight condition in India. The test facility has two tunnel circuits to support conventional & high dynamic pressure requirements, in addition to three flow regimes – subsonic, transonic & supersonic. During the year 2024, realization of the all tunnel subsystems has been completed and major subsystems have been erected in the facility.



Establishment of Scramjet Connect Pipe Test Facility (SCPT)

Scramjet Connect Pipe Test (SCPT) facility is being set-up at Hyderabad for scramjet testing up to 1000 seconds duration. Installation and commissioning of several feed systems, large storage facilities and vitiated air heaters is the major requirement. Successive development activities were carried out to enable successful installation and commissioning of various facility sub-systems. Test bed and control room has been successfully established at site and further trial runs are under progress.

Centre for Electromagnetic Launch Technology (CEMaLT)

CEMaLT was taken up to build civil infrastructure and test facility at Pune to facilitate futuristic development of rail gun technology. This Centre will be able to house capacitor bank and large caliber rail gun to develop a weapon grade rail gun. It also has a Design Centre, Instrumentation hub and a range.



Barrel Manufacturing Facility for Small Arms

Barrel manufacturing facilities have been established at Pune for small arms of 5.56, 7.62 and 9 mm caliber. Specialized raw materials, gun drilling & honing machines, cold forging machine, chrome plating facility, bore & chamber gauges, non-destructive and proof testing facilities for barrels have been established. The developed infrastructure facilities, mellowed in the form of gun barrel technologies and 100 prototype barrels of 5.56 and 7.62 mm were realized for Close- Quarter Battle (CQB) Carbines and Light Machine Gun (LMG), respectively.



Infrared Thermography System

This facility is being set-up at Hyderabad and consists of uncooled micro bolometer thermal camera, activation source, controller and imaging software. This system is best suited for inspecting delamination, disbonds, porosity, matrix cracking, porosity in composite case as well as the delamination and disbond in insulators. It is useful for detection of disbonds, delamination at multiple interfaces as well as for inspection of rocket motors with steel casing.



Airborne Radar Integration & Test Facilities (ARITF)

Airborne Radar Integration and Test Facilities (ARITF) are intended to carry out integration, test and evaluation of the radars which can save a lot of time, effort and cost needed to prove the radar performance in intended platforms. The scope of the project is to build the Airborne Radar Integration and Test facility which includes Test Rigs, Simulators, Radio Frequency (RF) level test jigs & Line Replaceable Unit (LRU) level Automated Test Equipment (ATEs), 6 Degree of Freedom (DoF) Motion Simulator with Anechoic chamber. The establishment of infrastructure for installation of test rigs for testing Active Electronically Scanned Array (AESA) Radars for fire control in fighter aircraft, Simulators, RF level Test Jigs and LRU level ATEs is in progress at Bengaluru.

Submersible Platform for Acoustic Characterization & Evaluation (SPACE)

Submersible Platform for Acoustic Characterization & Evaluation is a test facility at UARF, Kulamavu (Kerala) for integrated testing, characterization and evaluation of Sonar systems and technologies in submerged conditions in controlled environment. It was inaugurated by Secretary DDR&D and Chairman DRDO in Apr 2024.

Shore Integration Facility (SIF)

The Shore Integration Facility (SIF) was inaugurated in Sep 2024 at Kochi. Thereafter fabrication of the Submarine Hull, Fin and compartments including outer Hull and decks has been completed. The submarine compartments are being prepared for installation of equipment. After the installation of all equipment is completed, full scale integration and trials of Integrated Coastal Surveillance (ICS) sensors will be undertaken in early 2025 to prove the functionality of the ICS system.

Land Based Test Facility (LBTF)

A Land Based Test Facility (LBTF) has been established at Visakhapatnam for demonstrating the performance of Li-ion battery module to Indian Navy. Submarine battery compartment, charging and discharging facilities for battery module have been established. The facility has been inaugurated in Oct 2024.



Test Facility for Endurance Testing of Lube Oil Pump & Scavenge Unit (LOPSU)

Lubrication Oil Pump (LOP) unit, used in Small Turbo Fan Engine (STFE) is one of the critical LRUs meant to supply oil to bearings and gearbox and scavenge out oil from bearing sumps. These units are required to undergo Environmental Qualification Testing to ensure operability in all the environmental conditions. The test facility which was built to specifications and established at Bengaluru is intended to carry out functional and qualification tests namely- cold start at -40°C, high temperature endurance at 300°C, room temperature endurance and altitude performance test. The facility is equipped with vacuum pump to simulate the altitude conditions up to 10 km and an oil heater & cooler, which maintains the temperature of oil (up to 300°C) during the test.



R&D Centre at Tawang (Arunachal Pradesh)

R&D Centre (RDC) at Tawang (Arunachal Pradesh) was completed and inaugurated by Dr. Samir V Kamat, Secretary, DD R&D and Chairman, DRDO on 24 May 2024. The facility created at Tawang will be a boost for DRDO Scientists for conducting research activities related to problem areas in the high altitude & low temperature areas while being close with the Users in the border cum forward areas in North East sector.



BRAHMOS

New state-of-the-art BRAHMOS manufacturing centre in Lucknow, Uttar Pradesh as part of the UP Defence Industrial Corridor (UPDIC) Project is being established. The weapon system is being upgraded continuously to improve the operational capabilities such as range, lethality and accuracy. "The Complete Solution" being provided to the user includes provision of specialized Missile handling and testing equipment, state of art infrastructure facilities, on-site maintenance, training, continuous capability enhancement, up-gradation, obsolescence management, Life extension for missiles, creation of specialized and dedicated repair facilities for ground systems and Missiles including seeker.

Shock Tube Test Facility

DRDO has established Shock Tube Test Facility of Diameter 500 mm at DRDO Skill Development Centre, Pilkhuwa (UP) for evaluation of blast resistant materials and structures. The facility was inaugurated by Secretary DDR&D and Chairman DRDO in Aug 2024.

Unique Test Facility for MEMS Devices

Semiconductor Technology and Applied Research Centre (STARC) has established a state-of-the-art and NABL-accredited test facility to evaluate the performance and reliability of Micro Electro Mechanical Systems (MEMS) devices at Bengaluru. This enables to simulate and test extreme environmental conditions such as high temperatures, shock, vibration, and replicating the demanding scenarios resulting in its applications in defense and aerospace. Facility for Security Testing of Hardware and Facility for Security Testing of Android based Smart Devices have been created.

Corporate Initiatives

Training & Development

Directorate of HRD at DRDO HQ has taken proactive steps for knowledge & skill development of DRDO manpower through extensive training programmes conducted in the year 2024.

- **Compulsory 3-stage training for DRDS:** Approximately 550 Scientists have undergone training in this year in 'Post Induction Training School (POINTS)', 'Mid-Career Training Augmentation (MITRA)' and 'Specialized Training on Essential Management Skills' as a part of 3 stage training programme for DRDS Cadre employees.
- **Continuing Education Programme (CEP) - 78** courses conducted in various technical domains.
- **Management Development Programme (MDP):** Programmes have been organized by IIM, ASCI, ESCI and MDI for senior level scientific officers.
- **WYAS (Widening your Administrative Skills)** for newly appointed Directors.

Grievance Redressal

DRDO has implemented the revised version of Centralized Public Grievances Redress and Monitoring System (CPGRAMS) 7.0 to review and redress the grievances received on the portal. During 2024 a total of 876 grievances were received in DRDO, out of which 830 have been resolved. DRDO has been ranked at 27 as per Grievance Redressal Index.

Industry Interface

During the year 2024, 256 LAToTs have been signed with Indian industries for the transfer of DRDO-developed technologies. However, till Mar 2025, 1950 LAToTs have been signed with the industry. More than 5,000 tests were carried out by Indian industries utilizing DRDO test facilities. DRDO has also facilitated the on boarding of labs onto the Defence Testing Portal, a platform of MoD for offering the Ministry's test infrastructure to defence industries in a more transparent manner.

Further to promote the export of defence products, the issuance of 91 'No Objection Certificates' and 15 'In-principle approvals' for exporting defence products to friendly foreign nations (FFN) were also facilitated. As a special effort to reach out to the industry in collaboration with industry chambers, DRDO organized more than 25 industry meets across the country with the objective of promulgating organisation's Policy to support industries' participation in defence R&D and manufacturing. "Guidelines for Creation of Industry Interaction Groups (IIGs) with Laboratories" were released. The group ensures a single-window solution for industries facing issues related to ToTs, handholding support, use of test facilities, DcPP/PA and TDF.

During 2024, More than 19 Development cum Production Partners (DcPPs)/Production Agencies (PAs) were chosen for DRDO's Mission Mode projects.

Rajbhasha

During 2024, 1st all India Rajbhasha Technical Conference (UNMESH-2024) was organised in Chennai. In-house magazine in Hindi named as 'Raksha Anusandhan Bharti' was published and awarded the '**Kirti Award**' by **Hon'ble Home Minister** on the occasion of all India Rajbhasha Conference on 15th Sep, 2024 at Bharat Mandapam, New Delhi.

Parliamentary Affairs

During 2024 'Committee on Estimate', 'Standing Committee on Defence' and 'Committee on Welfare of OBC' have selected DRDO for detailed examination on 'Performance of DRDO', 'Status of upgradation of various programmes and projects of DRDO', 'Assessment of Indigenous Defence Production both by public and private Sector including major Research Initiatives', 'Welfare & representation of OBC in the Organisation' and 'Demands for Grants (2024-25)'.

Swachhata Abhiyaan

As a part of Govt. of India Initiative, **Swachhata Hi Sewa campaign 2024** was conducted where multiple activities pertaining to Swachhata Campaign were organized in which all DRDO personnel contributed and participated. Swachhata Hi Seva (SHS) has been celebrated across DRDO focusing on "Ek Ped Maa Ke Nam" and health check-ups were organized and safety gears/kits were distributed to Safai Mitras.

DRDO Exhibitions & Republic Day parade 2024

As part of outreach activities, DRDO participated in Pan India 35 exhibitions and 05 International exhibitions in Paris, Victoria, Tshwane, Manila and Hanoi. These exhibitions provided large platform to DRDO to show its key products and technologies to the world. DRDO participated in Republic Day Parade 2024 and showcased its tableau. The tableau was on the theme "Women Power in protecting the nation by providing defence technologies in all five dimensions (land, air, sea, cyber & space)".

Intellectual Property Rights

A total of 132 IPR were filed and 238 IPR have been granted based on previously filed IPRs. With this, DRDO has now has a total patent portfolio of 1277 and a total of 2779 IPRs.

Academia Interaction

During 2024, 23 projects costing Rs 36.90 Cr were sanctioned to various academic institutes and currently there are 75 ongoing projects at a cost of Rs 107.99 Cr. Till now DRDO has funded 1292 projects for extramural research at a total cost of Rs. 1151.22 Cr and more than 45 Outreach programmes have been conducted during the year 2024 at various academic institutions across the country. Financial support was provided for 213 International and National conferences organised by various academic institutions. During the year 2024, 116 new projects have been sanctioned at a cost of Rs. 108.35 Cr to support research activities in academic institutes and R&D centres for development of technologies relevant to their technical thrust areas by 4 Research Boards in area of Armament, Naval, Life Science and Aeronautics. Currently there are 319 ongoing projects with a total cost of Rs. 249.97 Cr.

At present, there are 15 DIA-CoEs located in the premiere academic institutes of the country, which are steering translational research activities in nearly 82 identified research verticals. Till now, 279 projects have been sanctioned at the cost of Rs 1022.38 Cr of which 120 projects have been completed. A total of 49 academic institutes, 532 faculties, 930 researchers and 354 DRDO scientists have been engaged at these DIA-CoEs.

Engagement with Think Tanks

DRDO has been actively fostering collaborations between its strong technological foundation and the geopolitical expertise of esteemed Think Tank institutions i.e. Centre for Air Power Studies (CAPS), Manohar Parrikar Institute for Defence Studies and Analyses (MP-IDSA), Vivekananda International Foundation (VIF), Centre for Joint Warfare Studies (CENJOWS), Indian Space Association (ISpA) and United Service Institution of India (USI).

Technology Development Fund

During the year, total 09 Projects with a total cost of Rs. 42.84 Cr have been awarded to various Industry/MSMEs/Startups and at present a total of 79 Projects with a total Cost of Rs 334.10 Cr are under development under Technology Development Fund Scheme. The projects have also seen lot of successes with 26 technologies successfully developed and two of the projects system flown in Space as part of PSLV mission. In line with the budget announcement for 2024-25, a corpus of Rs. 500 Cr has been additionally sanctioned towards TDF Scheme with focus towards DeepTech & Cutting edge technologies.

Dare to Dream

The national innovation contest D2D 4.0 was opened in the year 2023. Approximately 4000 ideas and solutions were received from Indian Individual and Startups against 10 challenge areas of Defence and Aerospace technologies identified by various technology clusters of DRDO. A total of 31 winners, 13 from Startup category and 18 from Individual category were selected by Internal Evaluation Committee for award of certificate of merit by Hon'ble RM Shri Rajnath Singh on 18 Oct 2024 at DRDO Bhawan. A total of ₹ 146 Lakh award money was distributed to these Individuals and Startups.

The Hon'ble Defence Minister launched Dare to Dream 5.0 for innovators to come forward with transformative ideas for defence applications under the Technology Development Fund (TDF). An innovation contest for promotion/support to Innovators/Start-ups/MSEs against the defined challenge areas from Defence and Aerospace Technologies was also launched by Hon'ble Raksha Mantri. Deep-Tech challenges were unveiled to drive major advancements in areas critical to defence and the event further showcased the technologies developed under TDF Scheme and handing over of the same to users.

100 Days Key Action Plan

In the 100 days target set by Government to lay the foundation for Viksit Bharat @2047- a vision of a developed India, the following were the key agenda of DRDO which were taken up in 100 days action plan.

S.No	Agenda Point	Status
1	Commissioning & Operationalization of Multi-petaflop Computing Facility.	Facility has been commissioned and is operational 24X7 and its objectives have been achieved successfully.
2	Merger of Directorates of Extramural Research and 04 Research Boards into a single entity.	The Directorate of Extramural Research (ER) and four Research Boards have now been merged and are operating as single entity with effect from Jul 2024.
3	Simplification of Transfer of Technology Guidelines.	DRDO policy for Transfer of Technology 2025 was approved in Feb 2025.
4	Flying of Indigenous Medium Altitude Long Endurance Unmanned Aerial Vehicle (TAPAS and its variants) in pre-operational role	Till date 11 flights of AF6A have been carried out at ATR, Chitradurga, wherein the configuration independent payloads (SAR, MREO, IFF, UCR, SATCOM) are being evaluated. AF-11 has completed taxi trials up to 46 knots and based on CEMILAC & DGAQA clearance.
5	Procedures for enhancement of industry engagement through Development cum Production Partner (DcPP), DRDO Industry Academia Centres of Excellence (DIA-COE) and Technology Development Funds (TDF)	The Procedures have been approved.
6	Initiating New Channel of Recruitment in DRDO	The policies for implementation of new recruitment methods i.e. campus recruitment, project based manpower (Non CCS) and Vigyan Veer have been finalized and submitted for the consideration and approval.

Department of Ex-Servicemen Welfare



MINISTRY OF DEFENCE
Government of India

DEPARTMENT OF EX-SERVICEMEN WELFARE

The Department of Ex-Servicemen Welfare (DESW) formulates various policies and programmes for the welfare and resettlement of Ex-Servicemen (ESM) in the country. The Department has two Divisions viz. Resettlement and Pension, and it has 3 attached offices namely, Kendriya Sainik Board (KSB), Directorate General Resettlement (DGR) and Central Organisation, Ex-Servicemen Contributory Health Scheme (CO, ECHS).

PENSION REFORMS

The Government of India took a historic decision to implement One Rank One Pension (OROP) scheme for Defence Forces personnel and family pensioners, with the initial policy issued on November 7, 2015, effective from July 1, 2014. Under OROP, pensions are re-fixed every five years based on the average of the minimum and maximum pension of retirees in the same rank and length of service from the respective calendar year. Pensions above this average are protected, ensuring no disadvantage to pensioners.

The Union Cabinet approved pension revisions under OROP on December 23, 2022 effective from July 1, 2019. A subsequent revision was approved on July 03, 2024, effective from July 1, 2024, with detailed instructions and revised pension tables issued on September 4, 2024. This revision benefits around 24.36 lakh pensioners, including 3.54 lakh new beneficiaries. Over the past decade, OROP has led to an additional disbursement of approximately Rs. 1.24 lakh crore in pensions.

GRIEVANCE REDRESSAL SYSTEM

DESW makes concerted efforts to reduce grievances, bring down the disposal time, and promote dialogue and interaction with our Ex-servicemen as also to sensitize the Rajya Sainik Boards (RSBs)/ Zila Sainik Boards (ZSBs) for resolving the grievances of Exservicemen. D(Pension/Grievance) Section of Department of Ex-servicemen Welfare (DESW) receives online/offline grievances related to Ex-servicemen/ Pensioners. Throughout the calendar year i.e. January 1, 2024 to December 31, 2024, a total of 57,583 (Fifty seven thousand five hundred eighty three) grievances were received, out of which 54,539 (95%) (Fifty four thousand five hundred thirty nine) grievances were successfully disposed of with an average disposal time of 27 days.

WELFARE

Financial Assistance to States. KSB Secretariat is the apex body of the Government of India responsible for welfare of war-widows/disabled soldiers, ex-servicemen and their dependents. Financial assistance to States as Central share is given by the Department through KSB towards the establishment expenses of Rajya Sainik Boards/Zila Sainik Boards (RSBs/ZSBs). Funding pattern is 75:25 in respect of special category States/UTs, namely, Arunachal Pradesh, Assam, Jammu and Kashmir, Ladakh, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim, Tripura, Himachal Pradesh and Uttarakhand, and 60:40 in the case of other States/UTs. Govt of India also shares 50% cost of construction of Sainik Rest Houses (SRHs) out of the Defence Services Estimates (DSE) Budget. The SRHs are required to be maintained by State Governments/UT Administrations from their own resources/funds. A sum of Rs.179.84 crores (till 31 Mar 2025) has been disbursed to the States through KSB as Central share during FY 202425.

Armed Forces Flag Day Fund. Armed Forces Flag Day Fund (AFFDF) is meant for running schemes for welfare of Ex-Servicemen and their dependents. The fund is administered by KSB and donations to the fund are eligible for exemptions under section 80G of the Income Tax Act, 1961. The fund receives contributions from the tri-Services, corporates, PSUs and individual donors. The fund has a corpus of Rs 360.02 crore and a portion of the usable income accruing on the Corpus of the AFFDF is earmarked for the Raksha Mantri Ex-Servicemen Welfare Fund (RMEWF) Schemes.

Raksha Mantri Ex-Servicemen Welfare Fund (RMEWF) Schemes. Financial assistance under RMEWF is provided from AFFDF for identified personal needs of ESM/ their dependents e.g. Penury Grant, Children Education and Marriage Grant, Medical Grant etc. During the financial year 2024-25 (till 31 Mar 2025) financial assistance of Rs. 370.15 crore to 178091 beneficiaries has been disbursed in favour of the Ex-Servicemen/ their dependents. Besides these, an amount of Rs. 2.13 crore as financial grants to War Memorial Hostels and Paraplegic Rehabilitation Centre at Kirkee and Mohali has also been given. The periodic review of all the welfare schemes is being done.

Gaurav Maah. Armed Forces Flag Day is celebrated on 7th December every year across the country to commemorate the sacrifices made by the armed forces. During the month long campaign celebrated as “Gaurav Maah” from December 1 to 31, 2024 various activities were undertaken e.g. use of print/ social media and radio interviews of ESM and Veer Naris for creating awareness about the significance of the Flag Day.



Secy, KSB pinning AFFDF flag to Hon'ble Prime Minister on 7 December 2024



Secy (ESW) & JS (ESW) with officials of KSB during the pinning of AFFDF flag to Her Excellency the President of India on 13 December 2024

CSR Conclave. A CSR conclave was conducted on 03 Mar 2025 at Manekshaw Centre, New Delhi. During the conclave, major contributors of AFFDF were felicitated by Hon'ble RM for their generous contributions to various welfare schemes for ESM and their dependents. The increase in CSR contribution in last three years is as under :-

Ser No.	Financial Year	CSR Contribution (in Rs.)
(a)	2022-23	23.64 crore
(b)	2023-24	41.68 crore
(c)	2024-25	56.29 crore

Prime Minister's Scholarship Scheme (PMSS). A total of 5500 scholarships are awarded annually under this scheme to the wards and widows of Ex-Servicemen out of National Defence Fund which is administered by Prime Minister's Office. An amount of Rs. 55.06 crore has been disbursed to 16,380 beneficiaries during the FY 2024-25.

Veterans Day. The ninth Armed Forces Veterans' Day was observed on January 14, 2025. This year, the celebrations were up-scaled and major events were held at nine locations with Raksha Mantri Shri Rajnath Singh presiding over the main function in Akhnoor. The Veterans' Day event at Mumbai was presided over by Raksha Rajya Mantri, Shri Sanjan Seth. The officers of the Armed Forces, Next of Kin, Veterans and representatives of various Ex-servicemen organisations were honoured at these events.



Secy KSB interacting with veterans on Veteran Day 2025



KSB officials at Manekshaw Centre

Establishment of Additional RSBs/ZSBs. Five new ZSBs have been established in the districts of Porbandhar and Surendera Nagar in Gujarat, Kalimpong in West Bengal, Rajasmand (Bhim) in Rajasthan and Herbertpur in Dehradun, Uttarakhand.

Celebration of International Yoga Day. International Day of Yoga was celebrated on June 21, 2024 with the theme **"Yoga for Self and Society"**. Apart from practicing common yoga protocol, yoga related activities were also conducted and participated by DESW & its attached offices i.e. Kendriya Sainik Board (KSB), Directorate General of Resettlement (DGR) & Central Organisation, ExServicemen Contributory Health Scheme (CO, ECHS) including their field establishments.



KSB Sectt celebrating 10th International Day of Yoga at CSRH Naraina , Delhi

Government Achievements and Schemes Expo 2024. A stall was put up by Kendriya Sainik Board at Pragati Maidan, New Delhi in the 10th Govt Achievements and Schemes Expo 2024 from July 20, 2024 to July 22, 2024 with an aim to address/resolve the issues/queries of the veterans and to showcase the welfare schemes being extended to veer Naris/ Widows/ Ex-Servicemen (ESM) etc.



10th Government Achievements and Schemes Expo 2024 held at Pragati Maidan

Swachhata Campaign. Special Campaign was organized for “Swachhata Hi Seva 2024” from September 17 to October 02, 2024, with focus on reduction of pendency, overall cleanliness of office complex and efficient office space management. Monitoring and disposal of grievance, review of reference cases and special outreach programme at RSB/ ZSB level were organized. Further Swachhata Pakhwada Campaign was also organized during December 2024.



Swachhata Campaign at Kendriya Sainik Board and RSB/ ZSB

RESETTLEMENT

Directorate General Resettlement (DGR). DGR is mandated for re-settlement and rehabilitation of the Ex-servicemen (ESM), Disabled Soldiers, Widows and their Dependents. Due to operational and administrative reason, nearly 60,000 to 70,000 armed forces personnel retire/ are released from active service every year, most of them being in the comparatively younger age bracket of 35 to 45 years and need a 'second career' to support their families. Towards this, DGR is operating re-settlement schemes for these ESM/ Dependents.

Pre-Release/ Skill Development Course. DGR is mandated to organize and conduct Re-settlement Training / Skill Development Courses for retiring / retired Armed Forces personnel of all the three Services. These courses are aimed at enhancing their employability in civil/ corporate sector.

Pre-Release Course for Officers. For officers, courses are conducted at IIMs/similar premier management institutes. The duration of these courses varies from 02 weeks to 24 weeks. The fee for officers' courses is shared by the Government and the individual officers in the ratio of 60:40. Efforts are being made to widen the scope and reach of these courses by empanelling new institutes and evolving courses which meet the requirement of the industry and aspirations of the ESMs.

Skill Development Courses for JCOs/OR and their Equivalentents in IN & IAF. Skill Development and entrepreneurship development courses for JCOs / OR and their equivalentents in IN and IAF are conducted in various Government Institutes pan India for a maximum duration of up to one year. Entire expenditure of the course fee for the ibid courses is borne by Govt of India/ MoD.

Training During the FY 2024-25. A total of 277 Courses (including 20 Officers' Courses) have been conducted during the current FY 2024-25. These training initiatives benefited a total of 804 Officers and 10,783 Junior Commissioned Officers and Other Ranks (JCOs/OR). Notably, there has been a significant increase in the participation of JCOs/OR this year.

Employment Opportunities in Central Government for ESM. Central Government has provided following reservations quota in Government jobs for ESM towards their Resettlement:-

- (a) 10% of the vacancies in the posts up to the level of the Assistant Commandant in all Para-Military Forces (CAPF).
- (b) 10% of the vacancies in Group 'C' Direct Recruitment posts and 20% of the vacancies in Group 'D' Direct Recruitment posts in Central Government Departments.
- (c) 14.5% vacancies in Group 'C' posts and 24.5% vacancies in Group 'D' posts (*including 4.5% for disabled ESM/dependents of servicemen killed in action*) are reserved in Central Public Sector Undertakings.
- (d) 14.5% vacancies in Group 'C' posts and 24.5% vacancies in Group 'D' posts (*including 4.5% for disabled ESM/dependents of servicemen killed in action*) are reserved in Public Sector Banks.
- (e) 100% in Defence Security Corps (DSC).

ESM Sponsored for Employment. A total 3104 (01 Apr 2024 to 31 Mar 2025) ExServicemen were sponsored to the various organizations (Govt./Pvt/ PSUs) for permanent/ contractual jobs (*except self-employment schemes*) through DGR and RSB/ZSBs.

DGR Security Agency Scheme. This is a 'Flagship' project of DGR that offers maximum employment to ESM. ESM (officers) are the proprietors of the ibid scheme with JCOs/OR and their equivalent in IN/ IAF as Security Supervisor/ Guard. A total of 855 Security Agencies have been empanelled during the year 2024-25 and 33,858 ESM were provided employment under the scheme.

DGR Technical Service Scheme. DGR provides Ex-Servicemen manpower for 'Technical Services' to the Government Establishments/Complexes through empanelled State ESM Corporations. This scheme has been recently introduced. A total of 316 Technical Manpower and 8883 ESM have been provided employment under the scheme during the Financial Year 2024-25.

Schemes for Self Employment

Employment Opportunities through DGR. DGR operates re-settlement schemes for retired Officers, JCOs/OR and their equivalent in IA/ IAF, Disabled Soldiers, Widows and their Dependents for their employment and welfare. The major schemes and the number of beneficiaries through them in the year 2024-25 are tabulated below:-

Sl. No.	Scheme	No of Beneficiaries
(a)	Mother Dairy Milk Booth and Fruit & Vegetable (Safal) Shop	647
(b)	Management of CNG Station by ESM(Officer) in Delhi/NCR and Pune	16
(c)	Issue of DGR Eligibility Certificate for Allotment of LPG/ Retail Outlet (Petrol/Diesel) against 8% Reservation Quota	03
(d)	Management of Company Owned Company Operated (COCO) Retail Outlets	205
(e)	Management of Pradhan Mantri Jan Aushadhi Kendra	14

Ex-Servicemen Seminars/ Job Fairs. Twelve ESM Employment Seminars/Job Fairs were conducted Pan-India during the FY 2024-25. 520 Companies participated in the Seminar/ Job Fair and 15927 Ex-servicemen registered for seeking employment.

Pradhan Mantri Bhartiya Jan Aushadhi Pariyojna (PMBJP). PMBJP for Exservicemen with grant of special incentive (a one-time grant of Rs 2 lakh, in addition to normal incentives) has been implemented in collaboration with Pharmaceuticals & Medical Bureau of India (PMBI) w.e.f. Jun 2023. A total 14 ESM were benefited under the scheme during the Financial Year 2024-25.

HEALTH CARE

Ex-Servicemen Contributory Health Scheme (ECHS) was launched with effect from April 1, 2003. ECHS aims to provide quality healthcare to ESM and their dependents through a network of ECHS Polyclinics, Service medical facilities and civil empanelled/ Government hospitals spread across the country. The scheme has been structured on the lines of Central Government Health Scheme (CGHS) and is financed by the Government of India. Endeavour is to ensure cashless treatment, as far as possible, by utilizing the empanelled hospitals for the veterans and their dependents. The total beneficiaries of the Scheme are approximately 59 lakh. The scheme has also been extended to Gorkha Domiciles with six Polyclinics in Nepal.

Expansion of the Services. Sanction for construction of 23 new polyclinics and upgradation of 50 existing polyclinics along with enhance manpower has been accorded and same is under process of implementation.

Empanelment of Hospitals. A total of around 3000 hospitals are currently empanelled under ECHS. With an aim to empanel quality hospitals, empanelment of Tata Memorial Hospital (TMH) at Mumbai, Vizag, Varanasi, Guwahati and Sangrur has been completed. MoU for empanelment of Government Medical Colleges and Hospitals/Government Ayush Hospital has been also been approved. During the last five months, empanelment of AIIMS Bhopal, Raipur, Hyderabad, Gorakhpur, Allahabad, Rae Bareilly, Rishikesh and Jodhpur have been carried out.

Development of IT Infrastructure for ECHS. With an aim to digitally transform the healthcare service delivery ecosystem of ECHS and develop a unified IT system for seamless and end-to-end management of scheme operations by providing a comprehensive, integrated and automated platform which can efficiently drive the inputs, processes and scheme outcomes, an unified system based on Micro Service Architecture has been envisaged. The project is to be developed through an 'In-house Capability Development Programme'. The digitalization process will enable the ECHS eco-system to operate more efficiently, improve access and quality to healthcare services for ex-servicemen and their dependent families, and reduce the burden on the manual system.

Launch of Upgraded ECHS Mobile App. An upgraded ECHS mobile App was launched by Dr. Niten Chandra, Secretary, DESW on December 13, 2024 at ECHS Bhavan, Delhi Cantt. The new version of the app has been designed with a more user-friendly interface and offers a smoother registration process. It allows beneficiaries to pre-book appointments with doctors at polyclinics and provides access to essential information such as referral history and smart card usage. Through the app, users can also apply for annual validation, block a card, report a lost card, or change their parent polyclinic-all from their mobile phones.

In addition, the app enables users to check the status of their card applications, eligibility, and reimbursement claims. It also facilitates feedback submission regarding services received at hospitals and polyclinics, and helps users search for empanelled hospitals. An innovative feature includes the option to apply for ECHS SPARCH Volunteer Services, which is open to both ECHS and non-ECHS beneficiaries, as well as NCC volunteers. The app also sends push notifications from relevant authorities such as the parent polyclinic OIC and the CO, ECHS. For user convenience, a section of frequently asked questions and a help booth have been integrated. The upgraded app is now available for download on both Android and iOS platforms, marking a significant step towards better service delivery and increased accessibility for ECHS members.

On boarding E-SeHAT OPD Platform. An MoU between Central Organisation ECHS and CDAC, Mohali for on boarding E-SeHAT platform has been signed and certification of E-SeHAT module has been carried out. All Medical Officers (MOs) have been added on E-SeHAT tele-consultancy OPD Portal by Dir RCs and their training of Medical Officers (MOs), Polyclinics for tele-consultancy has been completed for Roll out of E-SeHAT module. A test pilot project of E-SeHAT was conducted on 27 Feb 2025 for PCs at Regional Centre Delhi-I & Regional Centre Delhi-II It would enable ECHS beneficiaries to obtain tele-consultancy from home.

Empowerment and Welfare of Women



सत्यमेव जयते

MINISTRY OF DEFENCE
Government of India

EMPOWERMENT AND WELFARE OF WOMEN

In recent years, the defence sector has witnessed a transformative shift as women continue to break barriers and redefine their roles within the military, law enforcement, and security forces. What was once a male-dominated domain is now increasingly characterized by the contributions of women who are not only serving in non-combat positions but also excelling in combat, leadership, and specialized roles. This evolving trend represents a significant step toward achieving gender equality in one of the most demanding and prestigious sectors worldwide.

The key initiatives and accomplishments aimed at empowering and supporting women in the Defence Sector are outlined below :-

Indian Army

Women are being provided equal opportunities including career courses, foreign exposures and posting to challenging appointments in difficult areas. Special Selection Board has been conducted for Women Officers (WO) from 1992-2008 batches and they have been given challenging command appointments. 507 WOs have been provided permanent commission through Special Selection Board. Commissioning of WOs into Corps of Artillery has led to an increase in their footprint across all arms and services, less combat arms. WOs are also being commissioned as Non-Departmental Territorial Army Officers and as on date nine such officers have been inducted.

Training of Women Officers: The participation of WOs in challenging Low Intensity Conflict Operations Course in Counter Insurgency Jungle Warfare School and Mountain Warfare (Basic) Course at High Altitude Warfare School marks a transformative moment in the IA. For the first time WOs have been included in physically demanding courses traditionally dominated by men, showcasing both their grit and resilience. This step aligns with IA's ongoing efforts to enhance gender neutrality. Both the courses known for their rigorous training and testing of mental and physical endurance, serve as a testament to the progressive, diverse and inclusive approach of IA.



'Nari Yodha' Skydiving Team: Raising of IA Women Skydiving team has commenced. As part of phase -I training, basic skydiving team course was conducted for 21 WOs/ Women Military Police personnel in September-October 2024.



Nari Yodha Skydiving Team

UN Peace Keeping Missions: Presently 23% of Staff Officers/ Military Observers in various missions are WOs, which is in accordance with UN Directives. In addition to three Female Engagement Teams (FET) which are already deployed in different missions, one FET has been inducted in UNMISS in July 2024. More such teams are planned to be deployed in United Nations Mission in South Sudan (UNMISS) and United Nations Interim Force in Lebanon (UNIFIL) by mid-2025, thereby ensuring FET with each UN mission. The increased representation of women Peacekeepers has translated into enhanced outreach to local



United Nations Military Gender Advocate of the Year Award: UN Headquarter constituted 'Military Gender Advocate of the Year Award' in year 2016. The award recognizes a military Peacekeeper who has best integrated a gender perspective into peacekeeping activities. Major Radhika Sen, FET Commander in MONUSCO, received the award for the year 2023, thus reflecting our steadfast commitment towards gender equality and promotion of rights of women and children in conflict torn areas.



Performance of Women Military Police (WMP) in Sports

- **Paris Olympics:** Havildar (now Naib Subedar) (WMP) Jaismine Lamboria of Corps of Military Police (CMP) participated in Paris Olympics 2024 in Boxing (57 Kg Category). She has been promoted to the rank of Naib Subedar in October 2024.



- **Under-23 Asian Wrestling Championship:**



Hav Sakshi won Silver Medal in Boxing (57Kg event) in the 2024 BRICS Games in Kaza.



Havildar (WMP) Priyanka won Silver Medal in Wrestling in Under-23 Asian Wrestling Championship held at Amman, Jordan

Indian Navy

Indian Navy has taken significant steps for becoming a true gender-neutral and inclusive force, both in letter and in spirit. *IN* has commenced induction of women into all branches, and all avenues for career progression are now available for women in the *IN*.

Women Agniveers: Indian Navy became the first Service to leverage *Agnipath* to tap into the vibrant '*Nari Shakti*' of the nation's workforce. Women *Agniveers* are subject to the same training curriculum, professional courses and enrolment criteria for selection as regular sailors, as their male counterparts. Women sailors will be employed across all trades for sailors, including on board front line operational units. As of December 2024, 1321 women *Agniveers* are borne in the Indian Navy.

Enrolment of Women Sportspersons: The direct enrolment of meritorious sportspersons in Armed Forces was announced by the GoI on August 17, 2023. Under this scheme, select candidates (both male and female) are eligible for enrolment as meritorious sportspersons in the ranks of Havildar/Naib Subedar and equivalent. Accordingly, for the first time, 12 women sportspersons have been inducted as sailors in the Indian Navy.

Women Officer being Awarded Wings: First woman helicopter pilot of *IN* has been awarded 'Wings' on June 07, 2024 and also first woman officer has qualified as 'P8I' aircraft pilot in July 2024.



Women Officer being Awarded Wings

Steps Taken to Enhance Intake of Women in Indian Navy

- **National Defence Academy (NDA):** With regard to NDA, entry of women cadets commenced in June 2022 batch and three vacancies were allocated to *IN*. Presently, the number of vacancies for women naval cadets at NDA has been increased from three to six.
- **Indian Naval Academy (INA):** At INA, women cadets are now eligible to join through '10+2 B-Tech' entry scheme. The first such batch of women cadets has commenced training from January 2024. Also, women induction through 'UPSC Entry' into INA has commenced from June 2024 batch.
- **Accommodation for Women Personnel Onboard Indian Naval Ships:** With induction of women as *Agniveers* and cadets, the requirement to cater for gender inclusivity in respect of accommodation in these ranks has become an important aspect. Indian Navy is the only branch of the government where the enhancement/ modification of accommodation spaces is a challenge, as the available volume within a ship remains constant. As a policy, Indian Navy has earmarked 30% of officers' accommodation and 20% sailors' accommodation onboard ships for women.

Indian Air Force

Recruitment of Women Agniveervayu: The IAF has inducted 655 women Agniveervayu since inception of Agnipath scheme in three batches. First two batches of women Agniveer have been posted to various IAF bases post their training. Women Agniveer are also being posted to aircraft sub-system. With the increase in induction numbers, more sub-systems and units/ locations are being opened for women Agniveer in a phased manner.

Agniveervayu Women Drill Team (AWDT): A total of 30 Agniveervayu Women were specially selected to form the Agniveervayu Women Drill Team at AF Station New Delhi in Feb 2024. In addition to performing their primary duties, these Agniveervayu Women were trained specially to perform drill in coordination with music. Within five months of training their first public performance was conducted at India Gate on the occasion of Rajat Jayanti of Kargil Vijay Diwas on Jul 26, 2024.



Agniveervayu Women Drill Team during Rajat Jayanti of Kargil Vijay Diwas

First Ever All Women Marching Contingent in Republic Day Parade: An 'All Women Tri-Services Marching Contingent' made history by marching on the 'Kartavya Path' for the first time in the history of independent India. In addition, an All-Women Marching Contingent of Armed Forces Medical Services also marched proudly to glory, being the first such contingent in the history. Their remarkable display showcased the strength, discipline, capability and dedication of the women officers.



All Women Marching Contingent in Republic Day Parade

Tri-Services All Women Circumnavigation Sailing Expedition: Showcasing India's Nari Shakti on the world platform and increasing visibility of their participation in challenging environment, IA conducted main land to island sailing expedition from Mumbai-Karwar-Lakshadweep and back from 23 March to 17 April 2024. 12 WOs from all three Services participated in the Expedition.



Indian Coast Guard

Indian Coast Guard (ICG) has provided numerous opportunities for Women to serve in Armed Forces since decades. Presently, total **82** Women Officers are on the active duty of service to shoulder responsibilities at each front in the administrative, logistics and combat role of ICG. The Service has taken proactive steps towards empowerment and welfare of women. Total **17** women officers have undergone courses in various specializations pertaining to CG charter of duties in the year 2024-25. Their experiences and skills are being effectively utilized in the domain of general administration and logistics, Information Technology (IT) services and CG aviation (as Pilots, Observers and Support Services).

Induction of Women EP in ICG : In alignment with the Government of India's policy on gender inclusivity and empowerment, the Indian Coast Guard is preparing to induct women Enrolled Personnel from the year 2027 onwards. This initiative highlights the ICG's commitment to fostering diversity within its ranks. To facilitate this transition, the ICG is revising policies and revamping its infrastructure, both ashore and afloat, to ensure a seamless and supportive working environment for women.

Department of Defence Production

The organisations under DDP undertook a wide range of initiatives during 2024-25 to promote women's empowerment and welfare. These measures covered skill development, workplace welfare, compliance with statutory provisions, health and childcare facilities, and awareness programmes, ensuring both employees and women in surrounding communities benefitted.

Skill Development and Livelihood Opportunities

- **HAL** supported a *Micro Skillpreneurship Development Programme* in rural areas around Bangalore, training more than 1200 women in trades such as fashion technology, jute manufacturing and food processing. Beneficiaries were also provided financial literacy, support for bank linkages, and assistance with UDHYAM and FSSAI registrations. Over 250 women registered, and loans worth more than ₹ 50 lakh were sanctioned for new enterprises.
- **BEML** and **GRSE** upgraded skills of women employees through technical, soft-skill, behavioural, leadership and project management training.
- **GIL**, through its Women Welfare Association (WWA), organised vocational courses for women empowerment.

Workplace Welfare and Institutional Support

- **BEML, GSL, MDL, MIDHANI, MIL, TCL, YIL, GIL**, and **DGAQA** have constituted **Internal Complaints Committees** under the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013. Many organisations also conduct regular awareness programmes for employees.
- **BEML** has Women Cells in all units and provides a monthly crèche allowance for employees with children under five years.
- **MIDHANI** runs a fully equipped crèche within its premises and extends maternity benefits under relevant Acts.
- **MIL** provides crèche facilities in six factories, with initiatives underway in others, and ensures free sanitary pad distribution to women and girls for menstrual hygiene.
- **YIL** offers maternity leave, childcare leave, and crèche facilities, while ensuring equal opportunity in wages, training, promotions, and work allocation.
- **GSL** and **MDL** maintain Internal Complaint Committees and regularly conduct awareness and training programmes. **MDL** women employees are active participants in the *Forum of Women in Public Sector (WIPS)*.

Health and Welfare Measures

- **MIL** conducted awareness training on women's rights and protection, including sessions on the POSH Act.

- **GIL** ensured regular visits of a female doctor to its OPF unit.
- **AWEIL** operates the *Udita Women's Welfare Association*, which manages welfare activities in estates and nearby areas, including running a nursery school.

Celebrations and Recognition

- **GRSE** organised "Vanita: A Day-Out Programme" on International Women's Day 2025.
- **AWEIL** celebrated International Women's Day 2023 across its units.
- **MDL** marked International Women's Day through WIPS-led activities and regional meets.

Sainik Schools

Sainik Schools are committed to fostering an inclusive environment that promotes gender equality and the welfare of women. This involves implementing various initiatives and policies designed to empower female cadets and ensure they have equal opportunities for growth and development. Regularly Meeting on Quarterly Basis are organised on The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal Act 2013. Complaint Mechanism Cell is constituted for the Awareness and Safety of the Girl Child and Women. Counselors have been appointed and regular session by Counselor on POCSO Act. Regular Sessions are being conducted to sensitize the Cadets regarding relevant provisions of POCSO Act during Principal, Vice Principal and House Masters Assembly Maternity and CCL are being given to female staff members.

Armed Forces Medical Services

First Lady DGAFMS in the History of the Armed Forces: Surg Vice Admiral Arti Sarin, AVSM, VSM was appointed as the DGAFMS on 01 Oct 2024, and is the first Lady Medical Officer of the Armed Forces to reach this apex appointment.

First Lady Director General Medical Services of the Army: Lt Gen Sadhna S Nair, AVSM, VSM became the first lady DGMS (Army) when she assumed the appointment on 01 Aug 2024.



First Lady Commandant of AMC Centre & College, Lucknow: Lt Gen kavita Sahai, SM, VSM (now Surg Vice Admiral Kavita Sahai) was the First Lady commandant of AMC Centre & College, Lucknow when she assumed the appointment on 01 Feb 2024



Women on Siachen Glacier: Captain Geetika Koul became the first woman medical officer to be deployed at the Siachen Glacier after successfully completing the demanding induction training, and Captain Fatima Wasim made history as the first woman to be stationed at an operational post on the glacier. These milestones reflect the significant strides women are making in the Indian Armed Forces, particularly within the AFMS, and underscore their growing influence and invaluable contributions to the military's medical services.



All Women AFMS Marching Contingent: All Women Marching contingent of the Armed Forces Medical Services (AFMS) made history by marching on the Kartavya Path for the first time in the history of Independence India. The contingent comprised of Maj Shrishti Khullar from Army Medical Corps as the contingent Cdr with Capt Amba Samant from the Army Dental Corps, Surgeon Lieutenant Kanchana from the Indian Navy and Flight Lieutenant Dhivya Priya from the Indian Air Force as the supernumerary Officers along with 144 Officers of Military Nursing Service in the files.



Way Forward

The empowerment of women in the defence sector is not just about equality; it is about enhancing the effectiveness, adaptability, and resilience of defence forces worldwide. By tapping into the full potential of both men and women, the sector benefits from a broader range of perspectives, ideas, and talents. Though challenges persist, the growing participation of women in defence is a powerful reminder that strength, leadership, and courage are qualities that transcend gender. As the world continues to evolve, so too will the role of women in defence, paving the way for a more inclusive, dynamic, and effective defence sector for generations to come.



