Inc42 Datalabs

INDIA'S DEFENCE TECH STARTUP LANDSCAPE

REPORT | 2025

INFOCUS: WARFARE IN THE AGE OF AI

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India's Internet Boom: 1.2 Bn+ Users By 2030

	2024	2030	Absolute Growth (%)
Smartphone Users	1 Bn+	1.5 Bn+	50%
Internet Users	886 Mn+	1.2 Bn+	35%
Urban Internet Users	397 Mn+	546 Mn+	38%
Rural Internet Users	488 Mn+	708 Mn+	45%

Internet Penetration (Active Users)
58%

5G Enabled Indian Cities/Towns
7.7K+

Urban Internet Penetration (Active Users)
77%

Number Of Male Internet Users
470 Mn+

Cost Of 1 GB Internet
$0.16

Number Of Female Internet Users
416 Mn+

Source: KANTAR, IAMAI, Inc42 Analysis
Note: The numbers for 2030 are estimated

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The State Of Indian Startup Economy

Third-Largest

Startup Ecosystem Globally, Measured By The Number Of Startups & Unicorns

70K+

Total Number Of Tech Startups Launched

$164 Bn+

Total Funding Raised By Indian Startups Since 2014

124

Total Number Of Unicorns

$650 Bn+

Combined Valuation Of Indian Startups

121

Total Number Of Soonicorns

1.6 Mn+

Total Number Of Direct Jobs Created

9.5K+

Total Number Of Active Investors

40+

Total Number Of Listed New Age Tech Companies

Source: Inc42

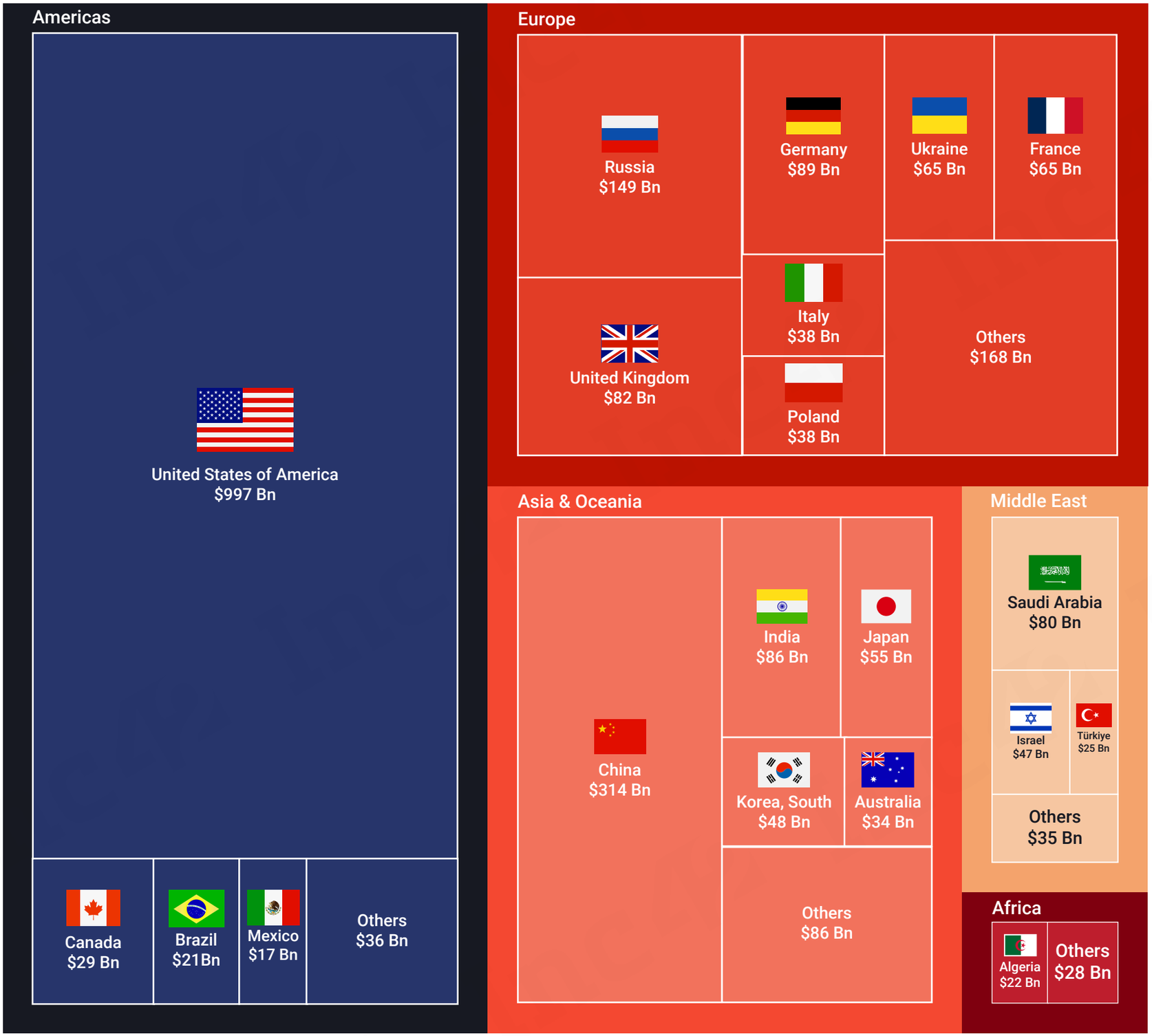
The Global Outlook

The Value Chain Of Global Defence Market

Raw Materials	Extraction and processing of base materials (steel, aluminum, composites, rare earths) essential for defence manufacturing.	ArcelorMittal, RioTinto, Aditya Birla Hindalco
Components & Sub-Systems	Manufacture of discrete parts and systems avionics, propulsion components, sensors, mutations — that are integrated into larger platforms.	Rolls-Royce, Thales, L3Harris, Pratt & Whitney An RTX Business
Prime Contractors (OEMs)	Design, integration, assembly and testing of complete defence platforms (aircraft, ships, armoured vehicles, missile systems).	Lockheed Martin, Dassault Aviation, Boeing, BAE Systems, Northrop Grumman, Raytheon An RTX Business, General Dynamics, Airbus
Systems Integrators & IT	Integration of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR), cybersecurity, mission planning, logistics IT and software defined systems for defence operations.	Booz Allen, Accenture, Deloitte., General Dynamics, Bharat Electronics, HAL
Support & Services	Lifecycle support including maintenance, repair, overhaul (MRO), training, simulation, and supply chain/logistics management.	Rolls-Royce, ST Electronics A company of ST Engineering, HAL
End User	Nations Around The World	

Source: Inc42 Analysis

Global Defence Expenditure



Source: Inc42 Analysis, SIPRI (Data)

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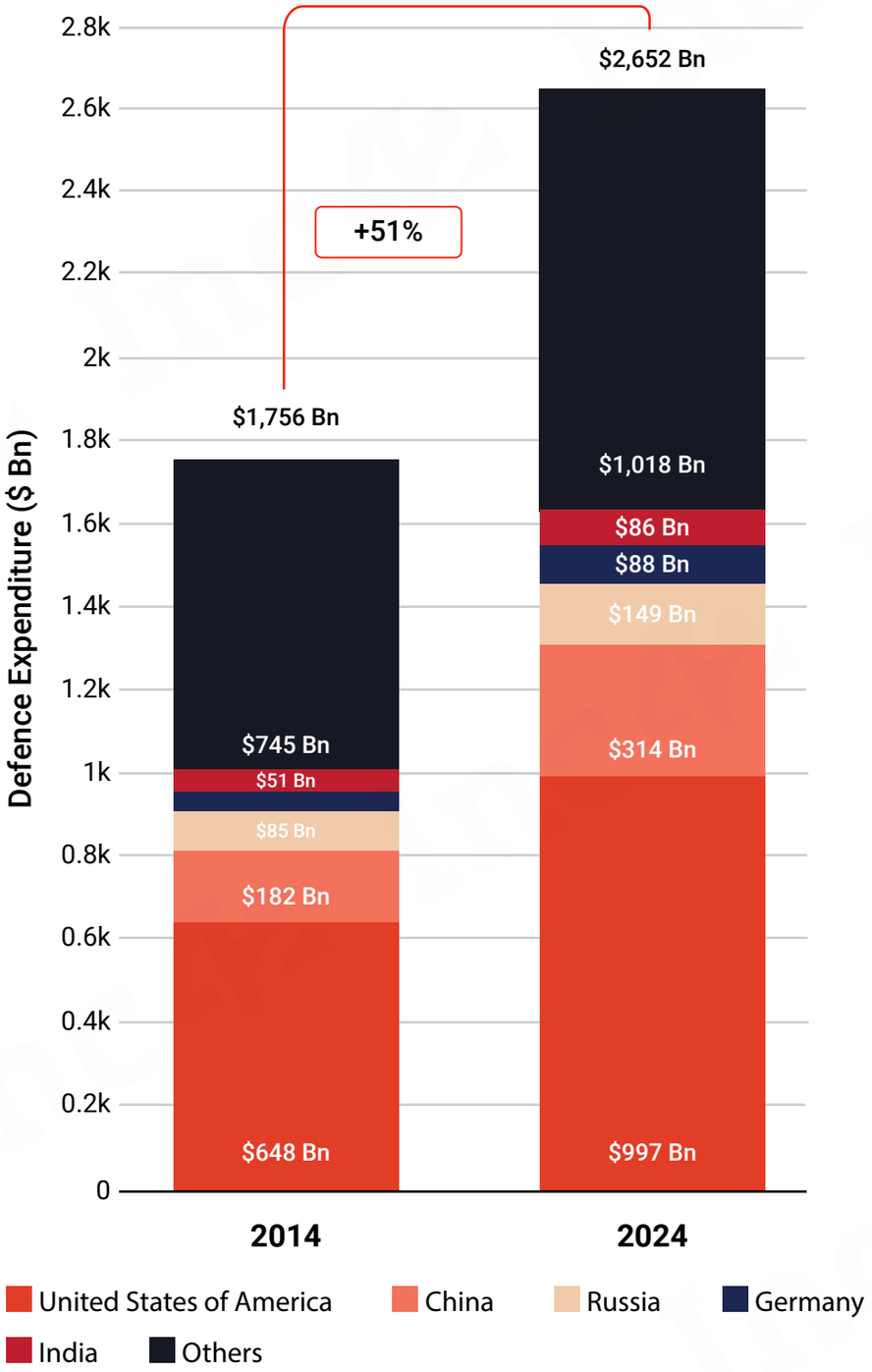
Global Defence Spending Jumped 51% In A Decade: India Is World's Fifth Largest Defence Spender



- **The United States increased its military spending by 54%** over the decade, maintaining its position as the dominant global military power with 38% of total global spending in 2024.
- **China demonstrated the second highest growth rate at 72%,** solidifying its position as the world's second largest military spender and reflecting its growing global ambitions.
- **In 2024, India's defence spending reached $86 billion,** making it the world's fifth-largest military spender. This figure represents a 69% increase in defence expenditure for India since 2014.
- **Total global military expenditure increased by 51% from $1.7 Tn to $2.7 Tn,** indicating a worldwide trend toward increased defence prioritisation and geopolitical tensions.

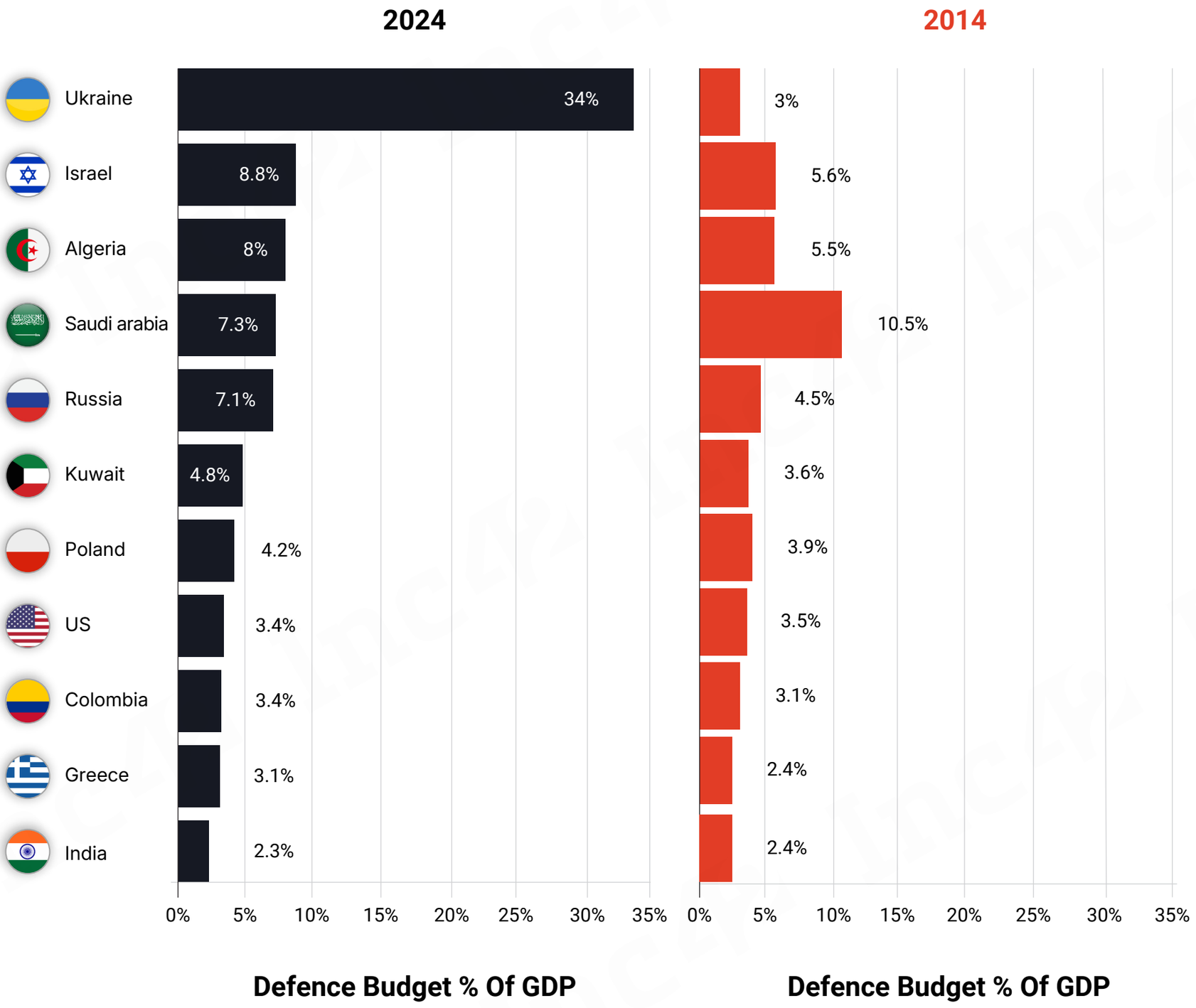
Source: Inc42 Analysis, SIPRI (Data)

Defence Dollars: A Look At The Top Five Global Spenders

Metrics	USA	China	Russia	Germany	India
Defence Expenditure (2024)	$997 Bn	$314 Bn	$149 Bn	$88 Bn	$86 Bn
Global Share Exports (2024)	43%	5.9%	7.8%	5.6%	≈ 0.2%
Global Share Exports (2014)	31%	5%	27%	5%	≈ 0.1%
Global Share Imports (2024)	3.1%	1.8%	0.5%	0.7%	8.3%
Global Share Imports (2014)	3%	5%	< 0.3%	< 0.3%	15%
Stored Warheads (2024)	1,930	576	2,591	Not A Nuclear State	180

Source: Inc42 Analysis, SIPRI (Data), PIB
Note: "≈" represents the approximate value
Global share of imports and exports are calculated at a span of four years, (2010-14) and (2020-24).

How Geopolitical Tensions Are Driving Defence Budgets



Source: Inc42 Analysis, SIPRI (Data)
Note: Countries are listed according to their defence spending as a percentage of GDP for the year 2024.

Top Global Defence Manufacturers And Service Providers

India's largest defence company, Hindustan Aeronautics, holds the 44th position worldwide

Rank	Company Name	Origin	Defence Revenue (2023)	Share Of Defence In Total Revenue
1	LOCKHEED MARTIN	United States	$61 Bn	90%
2	RTX	United States	$41 Bn	59%
3	NORTHROP GRUMMAN	United States	$36 Bn	91%
4	BOEING	United States	$31 Bn	40%
5	GENERAL DYNAMICS	United States	$30 Bn	71%
6	BAE SYSTEMS	United Kingdom	$29.8 Bn	98%
7	Ростех	Russia	$22 Bn	65%
8	AVIC	China	$21 Bn	25%
9	NORINCO	China	$20.5 Bn	27%
10	CETC	China	$16 Bn	29%

Source: Inc42 Analysis, SIPRI Top 100 (2023 edition)
Note: The list is based on the 2023 edition of the SIPRI Top 100 list of arms-producing and military services companies

Emerging Segments In The Global Defence Industry

Space-Based Systems

- The military satellite market is rapidly expanding, driven by the shift toward small-satellite constellations and hardened space communications.
- From a base of $37 Bn in 2025, the market is projected to grow at a 10% CAGR to reach approximately $73 Bn by 2032.
- The industry is shifting towards small-satellite constellations, with Lockheed Martin and Boeing leading in this area.
- There's also a focus on hardened space communications, with Northrop Grumman and Boeing developing advanced systems for secure and resilient communications.

Artificial Intelligence In Defence Operations

- Defence AI expenditure is on an unprecedented trajectory, vaulting from $16 Bn in 2025 to an estimated $68 Bn by 2034 — a 33% CAGR.
- This surge reflects militaries' drive to integrate AI into Command and control, ISR, cyber-defence, and predictive maintenance, reshaping budget allocations toward software-driven warfare and autonomous decision-support systems.

Autonomous Weapon Systems

- Fueled by advances in drone swarms, loitering munitions, and on-board autonomy, the autonomous weapons market rose from $16 Bn in 2025 to a forecast $24 Bn by 2030, at a steady 8% CAGR.
- Key drivers include risk mitigation for personnel, improved targeting precision, and growing investments by leading powers such as the United States, China, Russia and India.

Integrated Air & Missile Defence

- Missiles and armed UAVs are increasingly prominent in modern military strategies, seen in the Russia-Ukraine, Israel-Hamas and India-Pakistan conflicts, driving a growing demand for these weapons and related defence systems.
- RTX Corporation, a top defence manufacturer known for advanced air defence systems like Patriot and NASAMS, saw massive demand in 2024. The company, currently, has a backlog worth $214 Bn for deliveries.

Training & Simulation Solutions

- Affordable, high-quality training solutions are vital due to the complex global security landscape and advanced threats like hypersonic and uncrewed aerial vehicles (UAVs).
- This growth is driven by advanced digital tech and AI, enabling safer, scalable, and immersive training for complex scenarios.

  Companies like Collins Aerospace (RTX) and Boeing Global Services (BGS) offer simulation and training services.

Factors Driving The Growth Of Defence Market Globally

Demand Side Drivers

Rising Geopolitical Tensions

Escalating conflicts in Europe, the Middle East, and Asia have driven defence spending to record highs, with global military expenditure reaching $2.7 Tn in 2024, up 51% percent from 2014.

New Threat Frontiers

The growing prevalence of cyber-attacks, space-based threats, and electronic warfare (EW) has expanded procurement of cybersecurity, counter-space, and other electronic warfare equipments.

Demand For Space Force

Strategic defence reviews in the UK and U.S. are allocating over $1.3 Bn and $4 Bn respectively to space-domain awareness, satellite communications, and AI-enhanced targeting webs, reflecting lessons from Ukraine and Indo-Pacific postures

NATO Defence Budget Overhaul

NATO's defence budget overhaul, raising the spending target to 5% of GDP by 2035 from 2%, is significantly boosting the global defence industry. In 2024, NATO's military expenditure made 55% of the total $2.7 Tn global defence expenditure.

Increase In Use Of UAVs and Missiles

The deployment of drones, anti-drone systems, and missiles in recent international conflicts involving nations such as India, Israel, Iran, Pakistan, Russia, and Ukraine has significantly boosted the global demand for these advanced technologies.

Supply Side Drivers

Advanced Technology Integration

The integration of technologies like AI, autonomous systems, hypersonics, and quantum sensing is creating new military capacities. This aligns with a substantial increase in United States military spending, which nearly tripled from $261 Mn in 2022 to $675 Mn in 2023.

Growing Private Sector

Increased venture capital in defence tech startups is accelerating innovation, with public-private partnerships driving efficiencies in supply chains and reducing development timelines for cutting edge equipment.

Domestic Production Push

Western countries' rising protectionism has prompted emerging global superpowers like India and China to boost their own defence manufacturing. India's domestic defence production hit an all-time high of $17 Bn+ in FY25, a 15% increase year-on-year, while China simultaneously cut its arms imports by 64%.

Policy Reforms and International Alliances

Evolving export controls and defence pacts (e.g., AUKUS, QUAD) are facilitating technology transfers and joint ventures, allowing suppliers to scale production and access newmarkets while complying with international standards.

Maintenance, Repair & Overhaul (MRO)

Growth in MRO services supports fleet readiness and lifecycle extension of legacy platforms, generating recurring revenue streams and driving investment in digital-twin diagnostics and predictive maintenance.

Source: Inc42 Analysis

The India Outlook

Evolution Of India's Defence Policy & Market

Phases	Key Events
Formative Phase (1951-2001)	✦ Establishment of the Ministry of Defence as a separate ministry ✦ Industrial licensing framework introduced; defence manufacturing reserved exclusively for the public sector. ✦ Establishment of the Defence Research and Development Organisation (DRDO). ✦ Post-China War reforms: Military strategy shifted from a defensive to an offensive-defensive posture. ✦ Five-Year Defence Plans introduced emphasising modernisation ✦ Indigenous missile programme launched — development of Prithvi, Akash, Trishul, Nag, and Agni missiles. Declaration of India as a Nuclear Weapons State. ✦ **No FDI allowed; public sector held a monopoly.**
Conservative Phase (2001- 2020)	✦ Entry of the private sector: Defence sector opened to 100% Indian private participation (May 2001). ✦ First Defence Procurement Procedure (DPP) promulgated in 2002. ✦ Official Nuclear Doctrine announced on 4 January 2003. ✦ Defence Offset Policy introduced, mandating 30% reinvestment. ✦ Make in India initiative launched, with defence as a priority sector; FDI limit in defence increased from 26% to 49% under the automatic route. ✦ Licensing procedures simplified; items earlier reserved for MSMEs were opened to large industries. ✦ **Up to 49% FDI allowed; limited private participation introduced.**
Progressive Phase (2020 - Onwards)	✦ FDI limit increased to 74% under the automatic route (May 2020); Atmanirbhar Bharat Abhiyan launched with a defence focus. ✦ Ordnance Factory Board dissolved and corporatised into seven new Defence PSUs; 60% of the capital acquisition budget reserved for domestic procurement. ✦ Defence Production Policy 2018 set ambitious targets: achieving a turnover of INR 1.7 lakh crore by 2025. ✦ Launch of iDEX (Innovation for Defence Excellence) in 2018 to create an ecosystem for startups and MSMEs in defence innovation. ✦ Defence exports reached INR 21,083 Cr in FY 2023–24; Fifth Positive Indigenisation List of 346 items for DPSUs released (July 2024). ✦ Appointment of India's first Chief of Defence Staff to improve tri-service coordination. ✦ **Up to 74% FDI permitted, with measures implemented to reduce government sector dominance.**

Source: Inc42, Secondary Sources

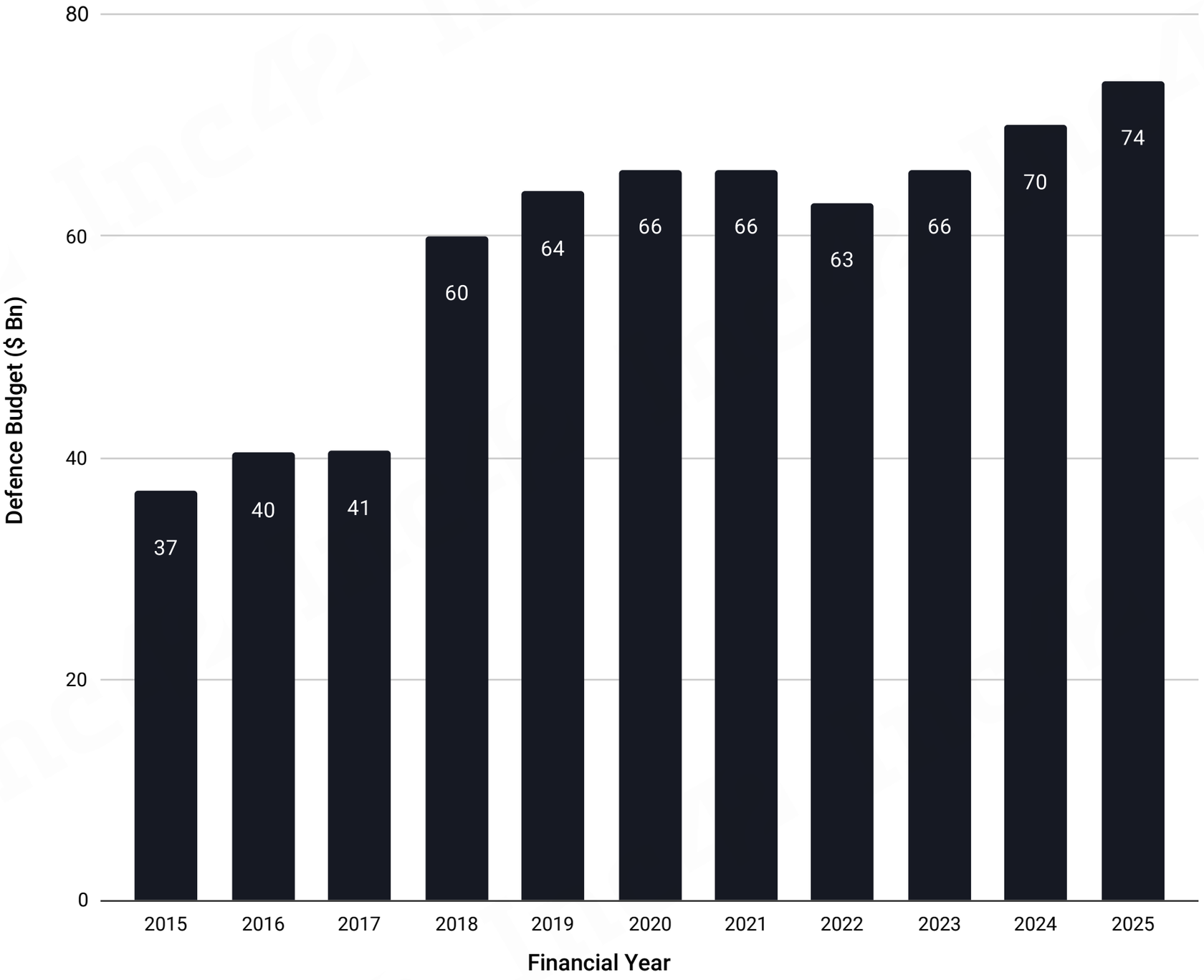
India's Defence Tech Market Landscape

Land Systems	Companies designing and manufacturing armoured vehicles, artillery systems, combat helicopters, and related support equipment.	Ashok Leyland, Bharat Forge, Kalyani, DRDO, Larsen & Toubro, Mahindra, Tata Motors
Air Systems	Producers of fighter and transport aircraft, helicopters and aerospace subsystems.	Adani Defence and Aerospace, Dynamatic Technologies, Paras Defence & Space Technologies Limited, HAL, Larsen & Toubro, Mahindra, Tata Motors
Unmanned Systems (UAVs & Drones)	Designers and integrators of reconnaissance and combat UAVs, counter-UAV systems, and payloads.	Adani Defence and Aerospace, Asteria Aerospace, Big Bang Boom Solutions, DroneAcharya, Garuda Aerospace, ideaForge, IG Drones, Intelligence Open to Ideas
Naval Systems	Builders of surface combatants, submarines, naval helicopters, and naval weapon systems.	Bharat Dynamics Limited, Larsen & Toubro, GRSE, Mazagon Dock Shipbuilders Limited
Electronic Systems & C4ISR	Providers of command-and-control systems, radar, sonar, communications, electronic warfare (EW), and reconnaissance solutions.	Bharat Electronics, Centum T&S, Data Patterns, ECIL, Optimized Electronics, Paras Defence & Space Technologies Limited, Tata Elxsi

Source: Inc42
Note: This is just a representation of some of the key players, and not an exhaustive list.

India's Defence Budget Has Doubled Over The Decade

A decade of exponential military spending points to significant future demand for Indian defence manufacturers



Source: Inc42 Analysis, Government data

35% Of India's Defence Budget Open To Private Players

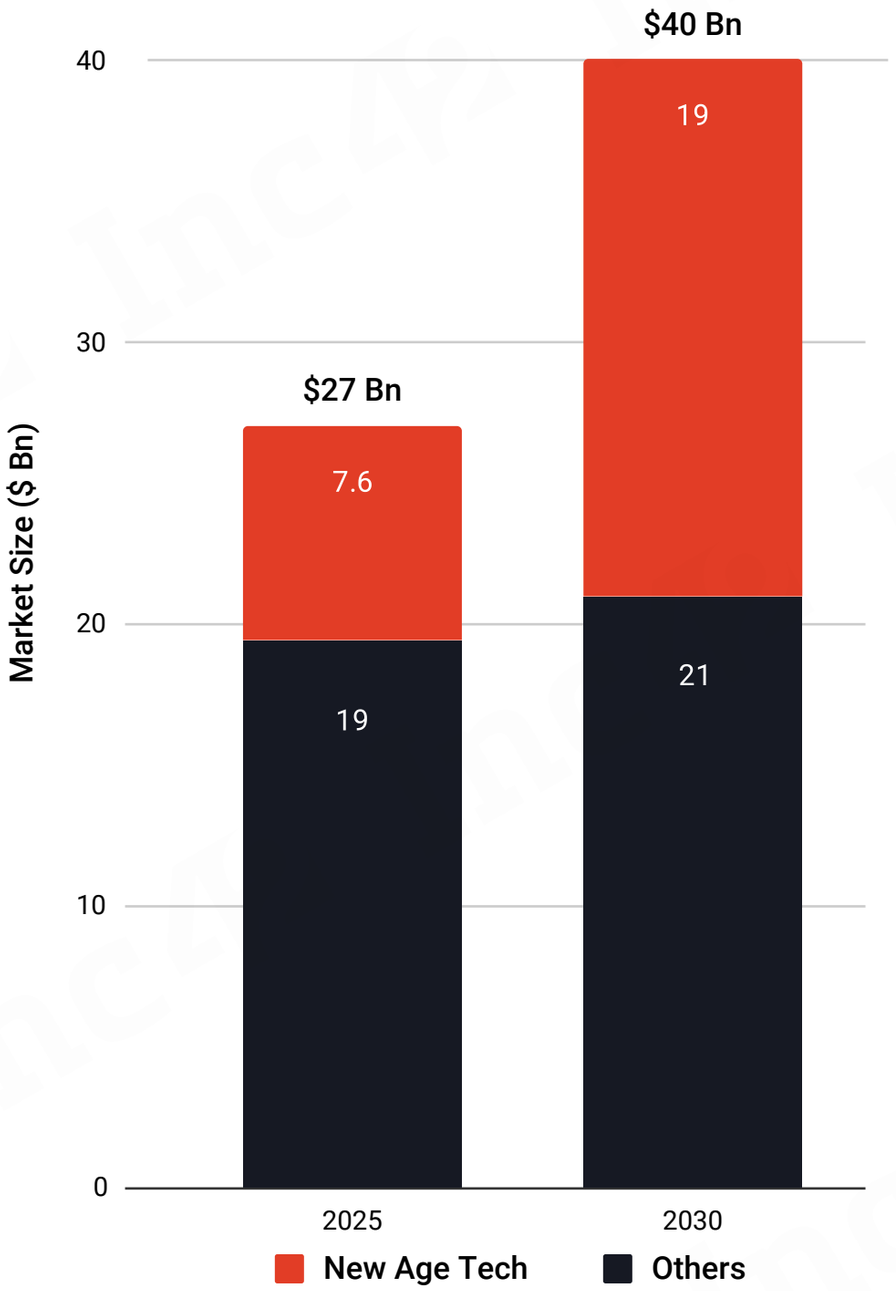
Category	FY15 Breakdown	FY25 Breakdown
Personnel	45-48%	42-44%
Capital (Acquisition/ Modernisation)	22-25%	28-29% (with >75% domestic procurement)
Maintenance/Storage	18-20%	16-18%
R&D	~5%	5-6% (AI, UAVs, Quantum focus)
Other	5-7%	6-7% (testing, infrastructure)

India's FY25 defence budget significantly surpasses FY15 levels, with a strong emphasis on indigenous production and cutting-edge technologies. This includes substantial investments in next-gen platforms like Tejas, AMCA, and UAVs, advanced naval shipbuilding, missile defence, C4ISR, and the critical AI/quantum warfare segments. These technology-rich areas, bolstered by increased capital allocation and indigenisation policies, present the broadest opportunities for the private sector.

Source: Inc42 Analysis, Government data

India's Defence Tech Market Is Projected To Reach $19 Bn By 2030

The new age tech market is growing at a 20% CAGR, compared to the overall market's 8%

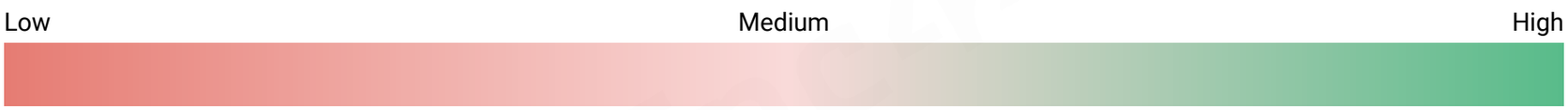


- The Indian defence market is expected to grow by 48% over the next five years. Rising geopolitical tensions globally and in India's region are driving increased demand for arms and defence equipment, both internationally and domestically.
- Amid global geopolitical tensions, the Indian government is actively boosting domestic defence production. In FY25, India's defence exports hit a record high of $2.8 Bn, the highest since independence.
- New age technologies like AI, UAVs, and quantum computing are set to become crucial in modern military operations. We estimate that by 2030, these technologies will constitute 48% of India's defence market, up from 28% in 2025.

Source: Inc42 Analysis, Ministry of Defence, PRS Legislative Research
Note: The total market size is determined by adding the domestic market and defence exports. This analysis excludes personal and maintenance/store costs from India's national defence budget.

AI In Defence: The Next Big Bet For Private Players

Segment	Proliferation of PSUs (Score)	Private Player Opportunity (Score)	Rationale
Artificial Intelligence In Defence	4.0	8.4	Private sector leads AI integration and innovation
Training & Simulation Solutions	3.7	7.9	Both sectors contribute; private players innovating in simulation tech
Unmanned Systems (UAVs & Drones)	4.4	7.4	Private sector leads in UAV innovation and investment
Satellite Systems	6.5	7	ISRO leads, but private sector gaining share in satellite launches and services
Integrated Air & Missile Defence Systems	8.3	6.2	PSUs lead in system integration; private sector in subsystems and innovation
Naval Defence Systems	9.1	6	PSUs dominate shipbuilding and naval systems; private players in components and services
Electronic Systems & C4ISR	5.3	6	Both sectors active; private players innovating in electronics and communication systems
Weapon and Armours	8.0	5.9	Balanced presence; private sector innovation increasing
Naval Shipbuilding	9.6	5.7	PSUs control shipyards; private sector participation limited
Military Vehicles [Land]	7.0	5.6	PSUs dominate production and R&D; private players growing but face barriers
Fighter Jets & Transport Aircrafts	8.8	5.5	PSUs (e.g., HAL) have near monopoly; private players limited to components and services



Source: Inc42
Note: Analysis is based on market structure, regulatory environment, and competitive landscape acros Indian defence segments. The PSU Proliferation Index measures state enterprise dominance, while the Private Player Opportunity Score indicates market accessibility and growth potential.

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Operation Sindoor Provided A Major Boost To India's Defence Stocks

Source: Inc42 Analysis, NSE
Note: The defence stocks consist of all the firms featured in the NIFTY Defence Indices, along with ideaForge.

India's Defence Tech Startup Landscape

Drones & Anti Drone Systems

ARMORY
BIG BANG BOOM SOLUTIONS
Garuda aerospace
ideaForge
IG DRONES
NewSpace
SHARANG SHAKTI
TECHEAGLE
YALI AEROSPACE
Zebu Intelligent Systems
ZULU DEFENCE
ZUPPA

Intelligence, Surveillance, and Reconnaissance (ISR) Systems

CRON AI
GALAXEYE
Insight360.ai
Kawa Space
Optimized ELECTROTECH
SISIR RADAR
SKYLARK LABS
TARDID technologies
TONBO imaging
VAYUDH

Military Hardware & Robotics

8OL ROBOTICS
AGNIT
CONSTELLI
VINVELI
sde Intelligence Open to Ideas
SANLAYAN TECHNOLOGIES
EyeROV™

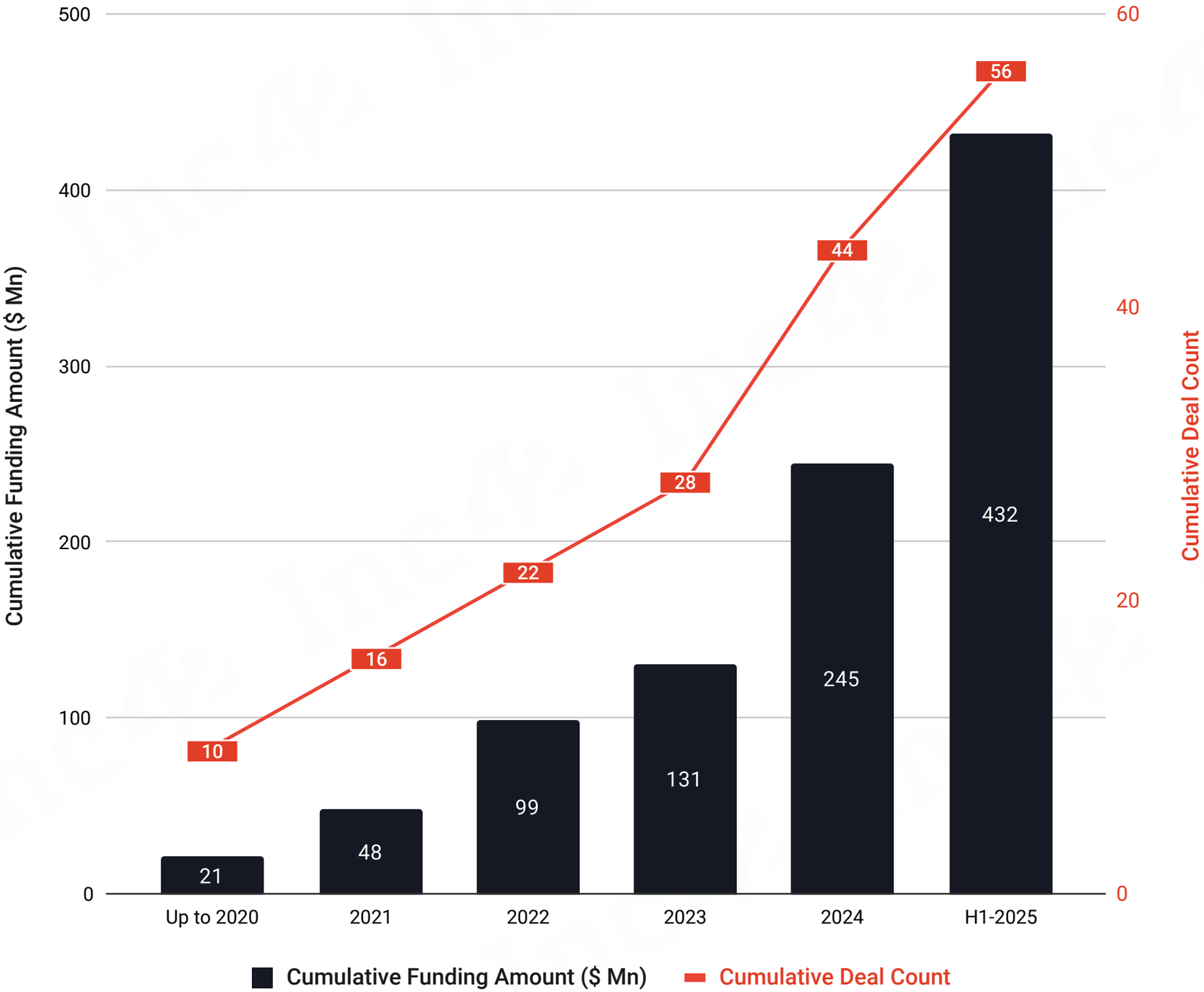
Training & Simulation

AjnaLens
CONSTELLI®

Source: Inc42
Note: This is just a representation of some of the key players,
and not an exhaustive list. Certain companies in the industry function across multiple segments.

$432 Mn Raised By Indian Defence Tech Startups

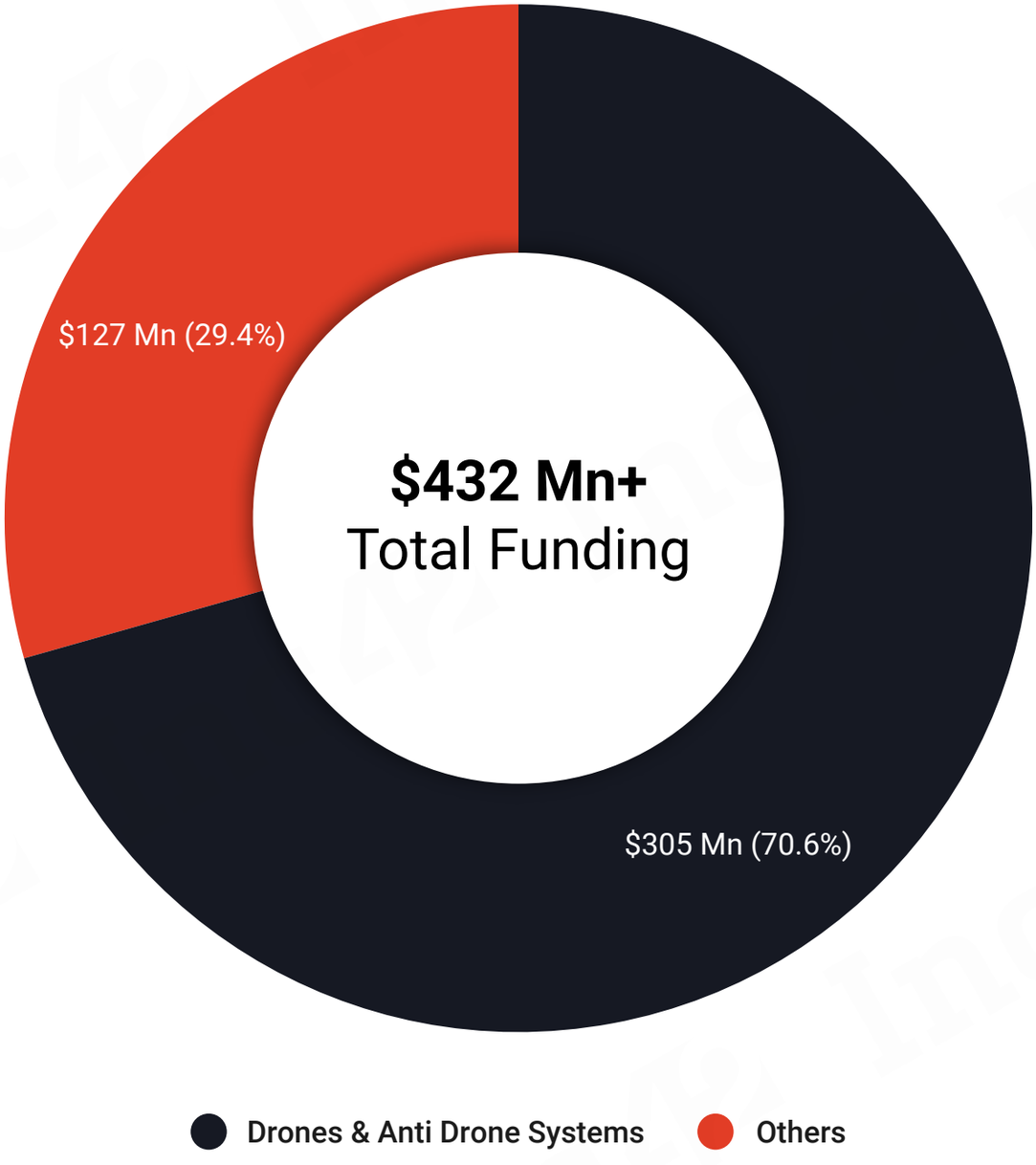
70% (or $307 Mn) of the total funding, was invested between 2024 and the first half of 2025



Source: Inc42

Drone Tech Dominate Indian Defence Tech Funding

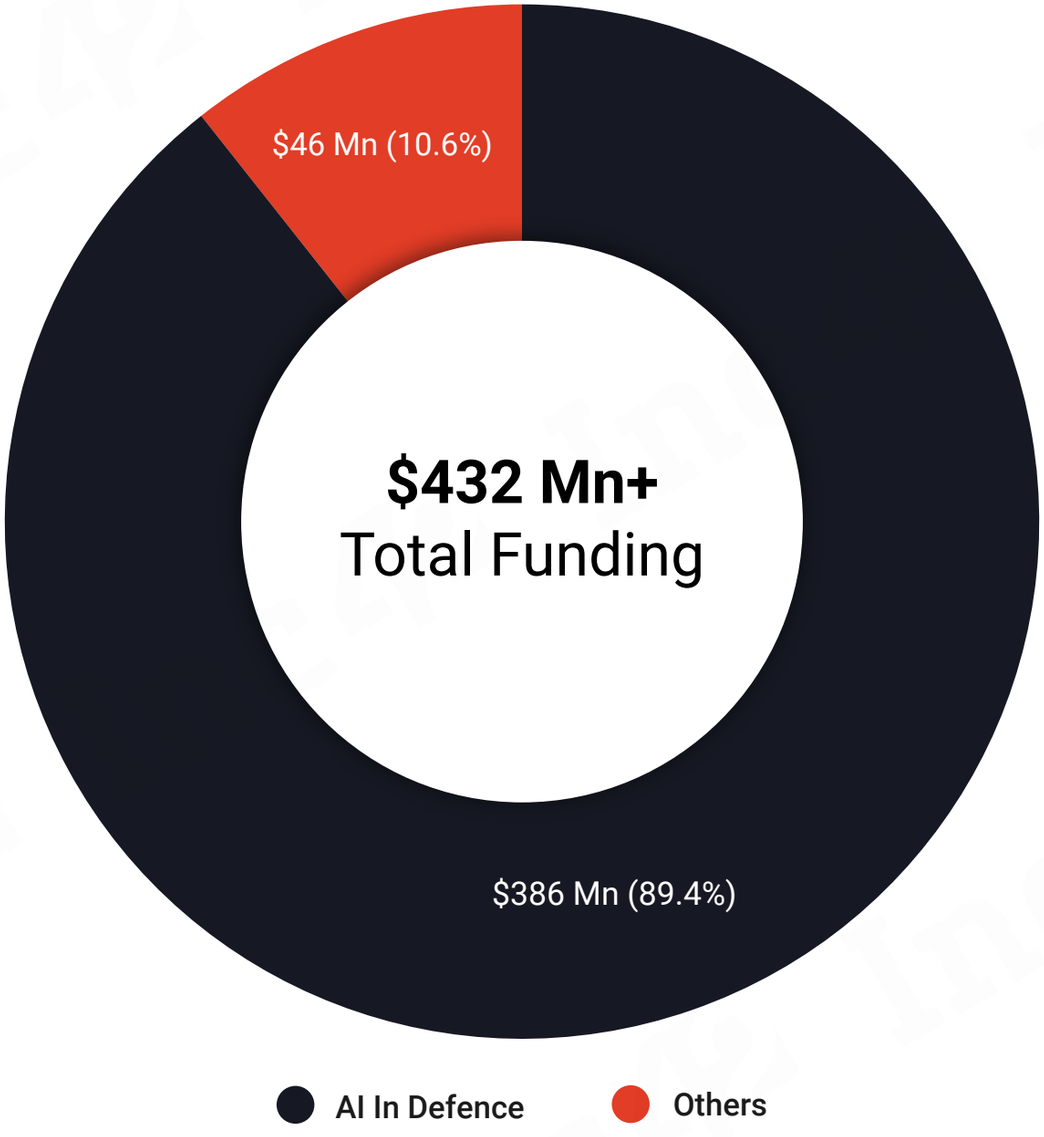
In India, startups focused on drones and anti-drone technology account for 71% of all defence tech funding



Source: Inc42

89% Of Indian Defence Tech Startups Have Integrated AI In Their Offerings

The widespread integration of AI in this sector clearly indicates significant value generation and heightened investor interest in this technology.



Source: Inc42

Top Segments In India's Defence Tech Startup Ecosystem

Segments	Total Funding	Active Startups	Investors
Drones & Anti Drone Systems	$305 Mn+	BIG BANG BOOM SOLUTIONS, Garuda aerospace, IG DRONES, ideaForge	ANTLER, Finvolv, VentureCatalysts
Intelligence, Surveillance, Reconnaissance (ISR) Systems	$94 Mn+	CRON AI, GALAXEYE, Optimized ELECTROTECH, tonbo imaging, VAYUDH	100 UNICORNS, BLUME, Shastra VC, VentureCatalysts, YourNest
Military Hardware & Robotics	$25 Mn+	AGNIT, CONSTELLI, EyeROV, SANLAYAN, VINVELI	3ONE4 CAPITAL, dlabs, GEMBA CAPITAL, pravega, Qualcomm ventures, Shastra VC
AI In Defence	$386 Mn+	CRON AI, BIG BANG BOOM SOLUTIONS, tonbo imaging	DRDO, GENERAL CATALYST, sidbi, think INVESTMENTS, VenturEast
Training & Simulation	Not Available	AjnaLens, CONSTELLI	LVX LetsVenture, JITO INCUBATION & INNOVATION FOUNDATION

Source: Inc42
Note: "Not Available" indicates a lack of sufficient data for analysis
This is not an exhaustive list of startups and investors.

Stage Wise Analysis Of Indian Defence Tech Startup Ecosystem

Metrics	Seed Stage	Growth Stage	Late Stage
Total Funding	$43 Mn+	$305 Mn+	$67 Mn+
Deal Count	24+	17+	4+
Median Ticket Size	$1.3 Mn	$11 Mn	Not Available
Top Startup Hub	Chennai & Delhi NCR	Bengaluru	Not Available
Number of Active Investors	50+	35+	15+

The higher amount of investment in growth stage than in late stage indicates that the industry is currently in a "growth phase". The successful movement of these companies past the early stage suggests that investors believe the sector has significant potential to scale up.

Source: Inc42
Note: "Not Available" indicates a lack of sufficient data for analysis.
The number of active investors is an estimate based on real historical data.

India's Top Defence Tech Startup Hubs

	Funding Amount	Deal Count	Notable Startups
 Bengaluru	$158 Mn	14+	Tonbo Imaging, GalaxEye, Sanlayan, NewSpace Research & Technologies, Zulu Defence Systems
 Delhi NCR	$117 Mn	9+	Raphe mPhibr, IG Drones, Vayudh, Armory, Sharang Shakti
 Chennai	$79 Mn	11+	Big Bang Boom Solutions, Garuda Aerospace, Zuppa
 Mumbai	$51 Mn	9+	ideaForge, AjnaLens, Sagar Defence Engineering Zeus Numerix
 Hyderabad	$3 Mn	2+	Constelli, Zebu

Bengaluru leads the sector thanks to its investor ecosystem's strong appetite for backing startups in emerging technology and R&D-heavy domains. Interestingly, Chennai, long regarded as one of India's aerospace hubs, is fast positioning itself as a prime destination for defence tech startups. Both Karnataka and Tamil Nadu boast robust supply chains and advanced manufacturing infrastructure, giving them a strong foundation to support the growth of homegrown defence technology ventures.

Source: Inc42

Investors Backing India's Defence Tech Boom

Source: Inc42
Note: This is not an exhaustive list or a ranking of any kind.

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Policy Push Opens New Frontiers For Defence Startups & Private Players

Policy/Initiative Name	Year	Key Highlights
Defence Acquisition Procedure (DAP)	2020	✦ This comprehensive policy framework prioritises domestic procurement through "Buy Indian" categories and emphasises Indian Design, Development & Manufacturing (IDDM) ✦ The procedure mandates indigenisation and provides a structured framework for private sector participation while reducing reliance on imports ✦ The policy ensures that all modernisation requirements of Defence Services and Indian Coast Guard are indigenously sourced, with imports requiring specific DAC/Raksha Mantri approval
Innovations for Defence Excellence (iDEX)	2018	✦ iDEX is specifically designed to foster innovation among startups, MSMEs, and individual innovators ✦ The programme provides grant funding up to INR 1.5 Cr through the SPARK (Support for Prototype and Research Kickstart) framework, with iDEX Prime offering up to INR 10 Cr for larger projects ✦ iDEX has partnerships will incubators and has provided funding to numerous startups and MSMEs, creating a vibrant defence innovation ecosystem

Source: Inc42 Analysis, Secondary Sources

Policy/Initiative Name	Year	Key Highlights
Foreign Direct Investment (FDI) Liberalisation	2020	✦ The FDI cap in defence manufacturing has been increased from 49% to 74% under the automatic route, with up to 100% permitted through government approval ✦ This liberalisation attracts foreign investment and advanced technology while enabling joint ventures for sophisticated defence systems ✦ The enhanced FDI policy has facilitated significant foreign investment in India's defence sector, bringing both capital and cutting-edge technology
Technology Development Fund (TDF)	2016	✦ The TDF scheme, executed by DRDO, provides up to 90% funding (maximum INR 50 Cr) for indigenous technology development ✦ The programme particularly encourages SMBs and startups, with 40+ SMBs and 20+ startups supported as of 2025 ✦ TDF has sanctioned 78+ projects worth INR 334 Cr, successfully developing 27 defence technologies.

Source: Inc42 Analysis, Secondary Sources

Policy/Initiative Name	Year	Key Highlights
Defence Production & Export Promotion Policy (DPEPP)	2020	✦ The DPEPP 2020 sets ambitious targets of achieving INR 175K Cr turnover by 2025, including INR 35K Cr in defence exports ✦ This policy creates a comprehensive framework for private sector expansion in both domestic and international markets ✦ Defence exports have surged from INR 686 Cr in FY14 to over INR 23K Cr in FY2024-25 (34-fold increase since FY14)
SRIJAN Portal	2020	✦ The SRIJAN portal, launched in 2020, serves as a transparent marketplace connecting DPSUs with private industry for indigenisation opportunities ✦ The primary purpose of this portal is privatisation, MSME/Startup participation, Indigenisation and technology development ✦ The platform features 19K+ defence items for indigenisation. Where private players including SMBs and startups can contribute

Source: Inc42 Analysis, Secondary Sources

Key Signals To Watchout From India's Defence Tech Startup Ecosystem

Demand For EDGE AI

India's defence forces are increasingly adopting edge AI solutions to process critical data closer to the battlefield, reducing latency and communications overload. An example is DRDO's Abhyas autonomous aerial target drone, which incorporates onboard edge-AI processing to navigate complex flight paths and simulate hostile threats without continuous ground-station guidance.

Autonomous Drone & Anti Drone Systems

In India, 71% of funded defence tech startups are in the drone sector, showing strong investor confidence in its potential. This was further demonstrated during 'Operation Sindoor', where the extensive use of indigenously made drones, including those from Delhi NCR-based startup IG Drones, highlighted the country's growing capabilities.

AI Powered Simulation & Combat Training

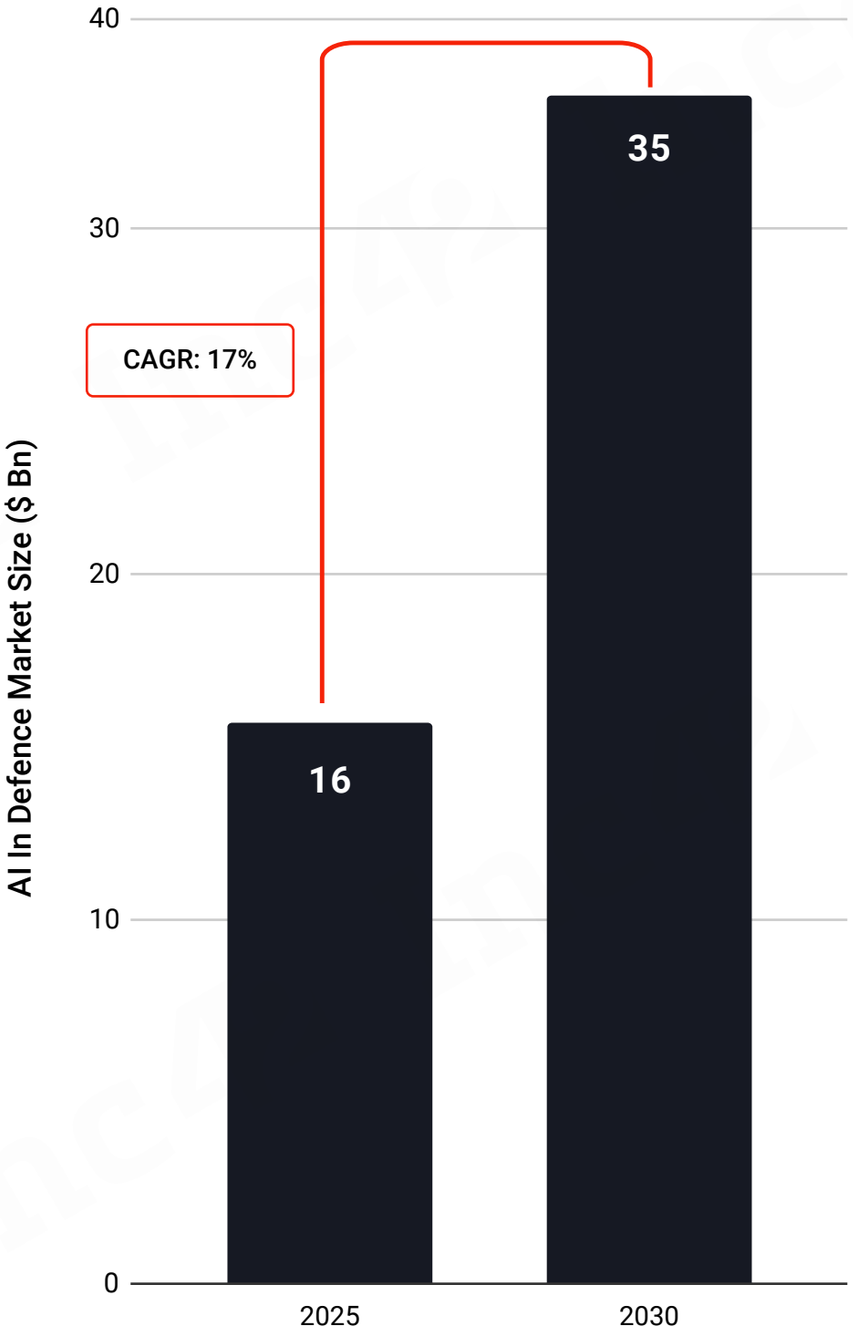
A high number of funded defence tech startups in India 89% are using AI technology, showing its wide-spread adoption. This is particularly noticeable in military training, where generative AI is transforming wargaming and simulations with adaptive, scenario-based modules. The Army Training Command and Rashtriya Raksha University have partnered to create the Wargame Research and Development Centre (WARDEC) in New Delhi, which will be the country's first simulation-based training centre.

Jet Engine Technology

Boosting indigenous jet engine capabilities remains a strategic priority, with India's "Kaveri" engine program receiving INR 2,200 Cr in funding for 2024–25 to achieve over 80 kN thrust—comparable to the GE F404 engines currently powering India's Tejas fighters. While developing Jet Engine is one of most complex technologies in the world, startups can play a major role in manufacturing key components such as propulsion systems and lightweight composite materials.

Source: Inc42

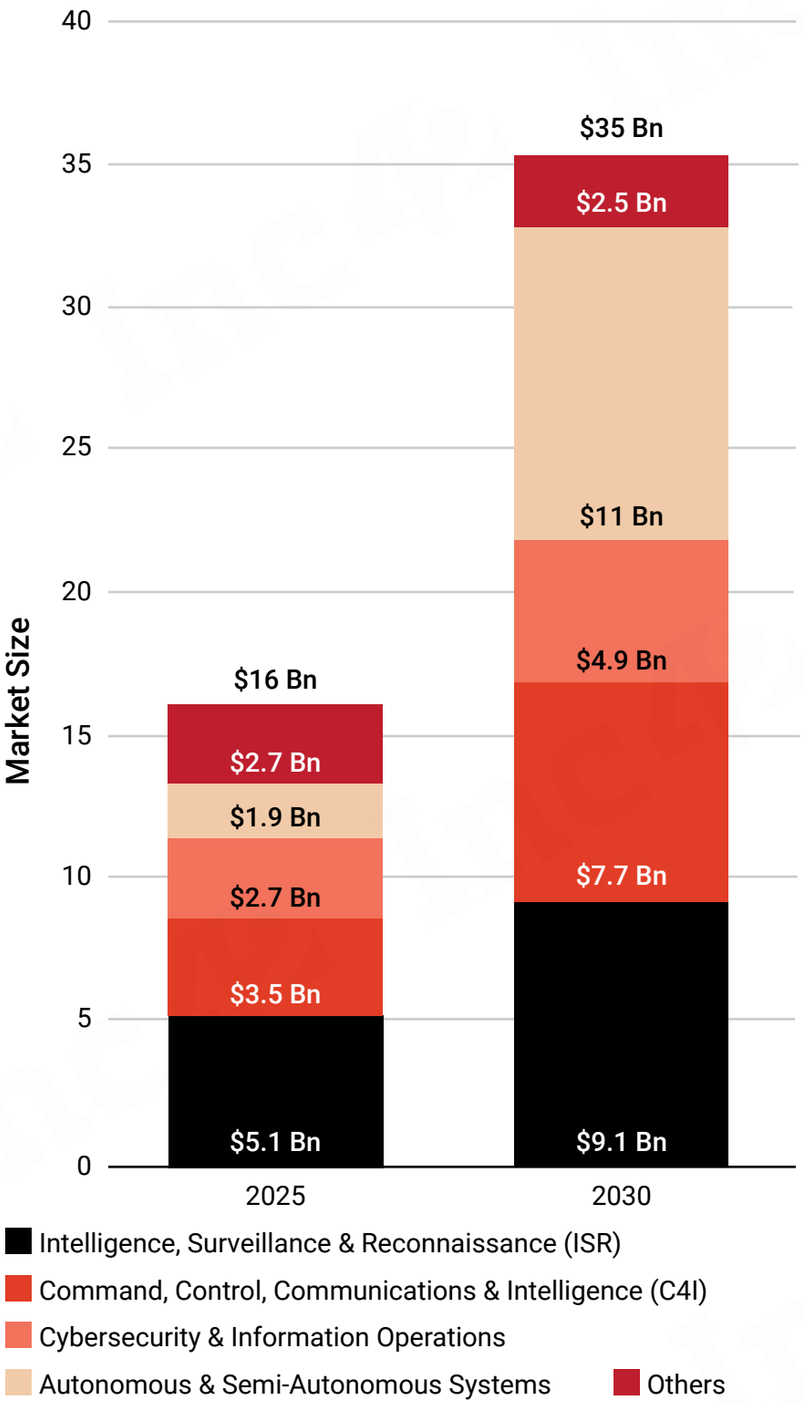
InFocus: Warfare In The Age Of Artificial Intelligence



- The global artificial intelligence market in defence is one of the fastest-growing areas in defence technology.
- According to Inc42 analysis, the global AI military market is valued at $16 Bn in 2025 and is expected to reach $35 Bn by 2030, growing at a compound annual growth rate (CAGR) of 17%. This rapid growth is driven by increasing geopolitical tensions, the need for modernisation, and the proven effectiveness of AI-powered systems in recent conflicts.
- In 2024, global military spending hit a new high of $2.7 Tn, a 9.4% increase that is the largest annual rise since the Cold War ended. Military spending now makes up 2.5% of global GDP.
- The top five countries, the United States, China, Russia, Germany, and India, together account for 60% of this expenditure, with respective spends of $997 Bn, $314 Bn, $149 Bn, $89 Bn, and $86 Bn.

Source: Inc42 Analysis, Secondary Sources

One-Third Of Global AI Defence Spending Will Be On Autonomous Systems By 2030



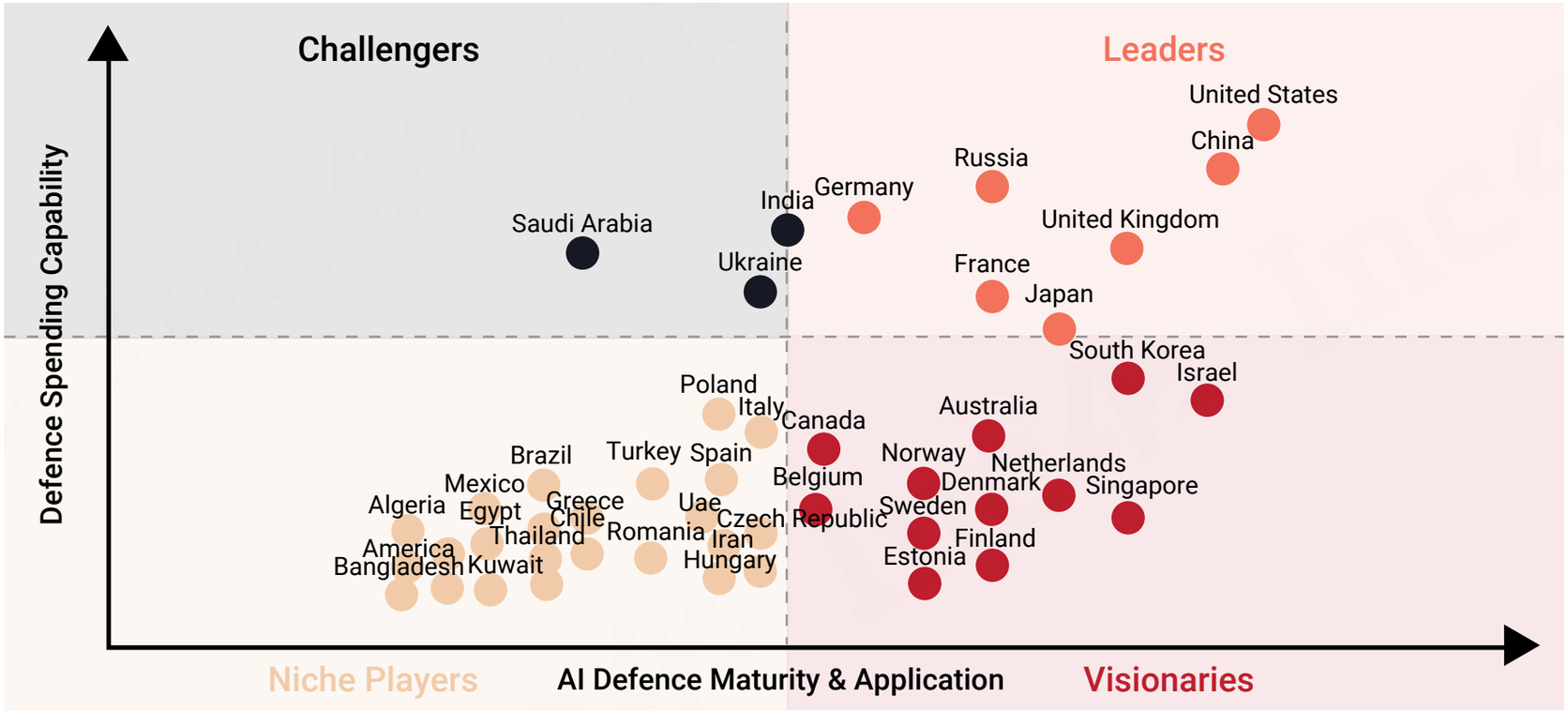
Source: Inc42 Analysis, Secondary Sources

- Autonomous Systems (including loitering munitions and drone swarms) exhibit the strongest growth, increasing from 12% ($1.9 Bn out of $16 Bn) in 2025 to 30% ($11 Bn out of $35 Bn) in 2030 as these platforms mature and proliferate.

- Intelligence, Surveillance, and Reconnaissance (ISR) currently holds 32% of the market, valued at $5.1 Bn out of $16 Bn. This growth is driven by the rising use of AI-enabled sensor fusion in drones, satellites, and ground systems. By 2030, ISR is expected to make up 26% of the market, becoming the second largest segment after autonomous systems.

- The defence AI market is experiencing a major shift, with autonomous and semi-autonomous systems expected to lead by 2030. Companies in this sector need to balance current revenue streams from established applications like ISR and cybersecurity with strategic investments in emerging areas such as autonomous systems.

Defence AI Quadrant: India Is On The Cusp Of Defence AI Leadership



- **Leaders (Top-right):** Countries like the US ($997 Bn) and China ($314 Bn) with high spending and advanced AI capabilities
- **Challengers (Top-left):** Several countries that are consistently boosting their defence spending, including India ($86 Bn), Saudi Arabia ($80 Bn), and Ukraine ($65 Bn), are also showing a greater interest in integrating AI into their defence systems
- **Visionaries (Bottom-right):** Countries with relatively lower spending but high AI maturity like Israel, South Korea, and Singapore
- **Niche Players (Bottom-left):** Countries with moderate spending and developing AI capabilities

While the US and China lead in overall AI spending and capabilities, countries like Israel, South Korea, and Singapore are making a significant impact in AI defence applications relative to their size. India is also a key player, on the verge of becoming a leader in the field. As the world's fifth-largest military spender, India is actively developing its own autonomous AI defence systems, including UAVs and surveillance technology.

Source: Inc42, SIPRI (Data), NATO (Data)
Note: This quadrant maps the top fifty countries by military expenditure (2024) against their current state of AI application in defence.

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Decoding The AI Strategy of World's Top Defence Companies

Organisation	Key Defence Products	AI Integration Strategy
LOCKHEED MARTIN Lockheed Martin Corp.	F-35, F-16 (fighter jets), MDCX, THAAD, HIMARS	✦ The F-35 (TR-3 configured) is designed to partner with next generation and existing systems, and transformative autonomous technology, to achieve air dominance ✦ Over 50K developers, engineers, and scientists utilise the AI factory tools developed by the company to enhance and optimise their production ✦ Demonstrated autonomous capabilities for the U.S. Navy by integrating their MDCX™ autonomous platform with the Navy's Unmanned Carrier Aviation Mission Control Station to control an MQ-20 Avenger UAS
RTX RTX Corporation	Patriot Missiles System, AIM-120 AMRAAM, SPY-6	✦ RTX explicitly identifies risks associated with AI, stating that the methods and processes used to develop, deploy, or use AI systems may not comply with rapidly evolving regulatory standards. ✦ The company is integrating AI powered capabilities in their Coyote effector system to counter complex drone targets. ✦ Leverages the RTX BBN Technologies research institute and RTX Ventures CVC arm to drive fundamental AI breakthroughs and external innovation partnerships, fueling a data-driven R&D flywheel

Source: Inc42 Analysis, Secondary Sources
Note: The approach to AI integration for every company relies on the insights found in the Management Discussions and Analysis (MD&A) part of their annual reports, in addition to reliable media outlets.

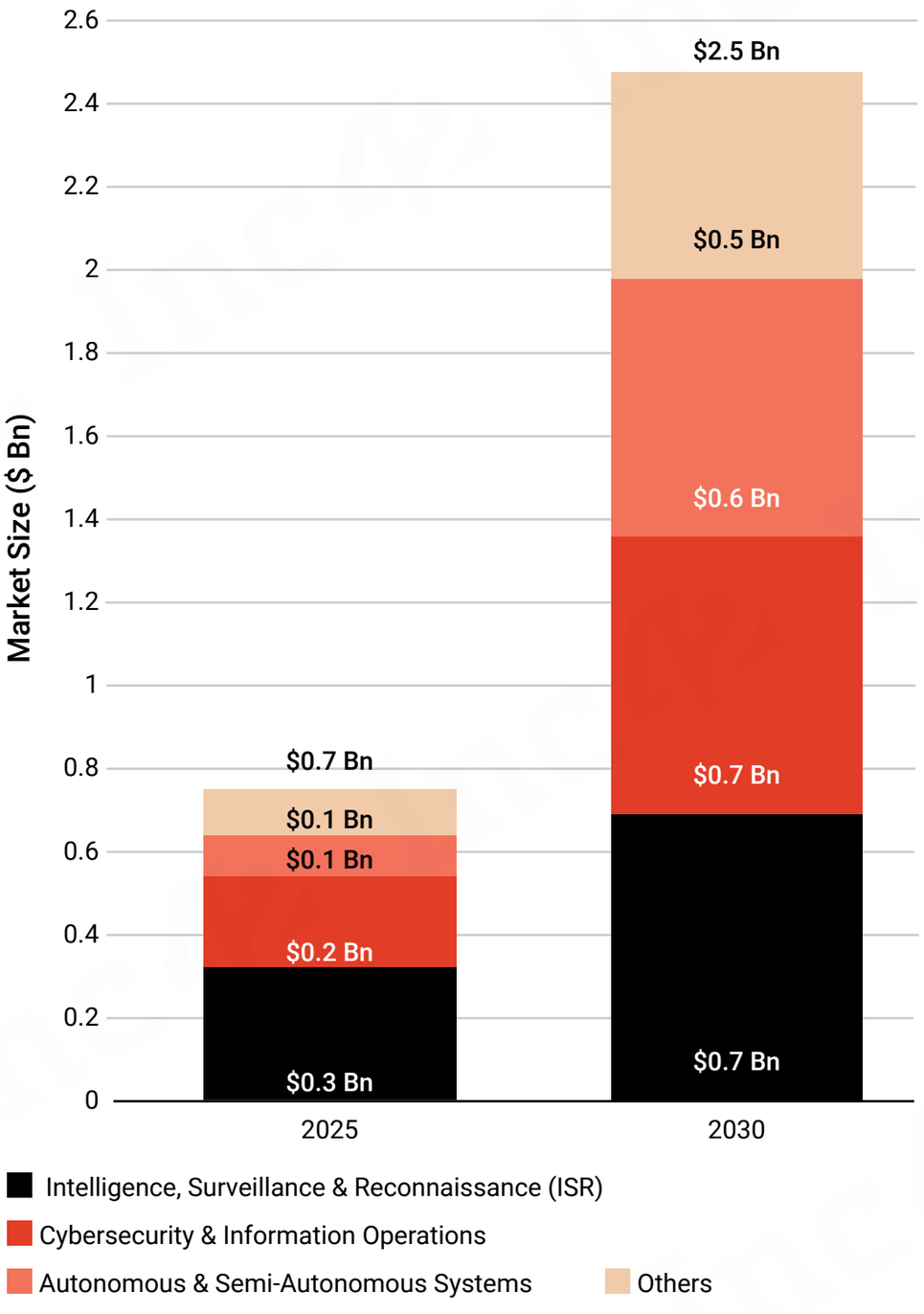
Organisation	Key Defence Products	AI Integration Strategy
Northrop Grumman Corp.	B-2 Spirit, RQ-4 Global Hawk, E-2 Hawkeye, LITENING Pods	✦ Filed 28 AI patents in Q2 2024 for human–system AI agent architectures, optimising interactions and decision-making between operators and autonomous systems ✦ Added AI to the Forward Area Air Defense (FAAD) Advanced Battle Manager, automating real-time weapon-target pairing for counter-UAS missions, enhancing speed and accuracy of threat defeat ✦ Employs AI for predictive maintenance, analysing sensor data from aircraft and platforms to anticipate failures, reduce downtime, and improve readiness .
Boeing	F/A-18 Super Hornet, AH-64 Apache, KC-46 Pegasus, P-8 Poseidon	✦ Applies AI offensively in defence & space via Phantom Works, developing autonomous systems, digital twins, and AI-driven mission planning for classified programmes ✦ Boeing used AI to create a new open architecture for the MQ-25 refueling drone. This technology allows other aircraft to directly control the drone for refueling and surveillance, enabling the U.S. Navy to more effectively integrate manned and unmanned aircraft without needing traditional ground communication.

Source: Inc42 Analysis, Secondary Sources
Note: The approach to AI integration for every company relies on the insights found in the Management Discussions and Analysis (MD&A) part of their annual reports, in addition to reliable media outlets.

Organisation	Key Defence Products	AI Integration Strategy
GENERAL DYNAMICS General Dynamics Corp.	M1 Abrams Family, Stryke, Light armored vehicle, Submarines	✦ The company is using AI and machine learning to modernise the U.S. Central Command's (CENTCOM) IT infrastructure, improving decision-making and network performance across their communications, cyber, and intelligence systems ✦ The Combat systems division is developing robotic and autonomous vehicles, including the US Army's S-MET program and the TRX combat vehicle prototype, to assist soldiers with tasks like resupply and reconnaissance. ✦ Integrated generative AI to streamline software development cycles, automate battlefield simulations, and enhance decision support for military operations
BAE SYSTEMS BAE Systems	Type 26 Frigates, Type 45 Destroyers, Challenger 2 (Battle tank), Typhoon aircrafts	✦ Advocates multi-domain integration, using AI to fuse data across land, sea, air, cyber, and space domains for unified situational awareness and response in the modern “information battlespace” ✦ A new AI assistant for Typhoon aircraft maintenance uses an LLM to give multi-language, step-by-step instructions, helping technicians work faster and get planes back in the air sooner ✦ Developed an AI system to help customers fight cyber threats, utilising an LLM trained on extensive cyber threat analysis to generate actionable insights and recommendations for vulnerabilities and mitigation

Source: Inc42 Analysis, Secondary Sources
Note: The approach to AI integration for every company relies on the insights found in the Management Discussions and Analysis (MD&A) part of their annual reports, in addition to reliable media outlets.

India's AI In Defence Market Projected To Hit $2.5 Bn by 2030



India's AI defence market is expected to grow at a compound annual growth rate (CAGR) of 28%, outpacing the global market's growth rate of 17% from 2025 to 2030.

Intelligence, Surveillance & Reconnaissance (ISR) is set to be the largest contributor to the overall market size. Additionally, the integration of AI technology in Unmanned Aerial Vehicles (UAVs) for ISR is a rapidly growing segment for AI applications in India's defence sector.

Among the three primary segments, autonomous & semi-autonomous systems is leading with the fastest growth at a CAGR of 35%, closely followed by Cybersecurity & Information Operations at 32%. Drone swarms and autonomous air and naval defence systems are expected to be significant revenue drivers within the autonomous systems segment.

Source: Inc42 Analysis, Secondary Sources
Note: The market size is determined by India's share in the global AI defence market over the specified periods.

Indian Startups & New-Age Companies Driving AI Innovation In Defence

Startup Name	Total Funding	Funding Stage	AI-Based Defence Solution
AjnaLens	$6.3 Mn	Seed Stage	AI-powered mixed reality glasses for defence training and ops.
BIG BANG BOOM SOLUTIONS	$31 Mn	Growth Stage	Anti-drone systems, AI combat drones, unmanned tanks.
CONSTELLI	$3 Mn	Seed Stage	Signal processing, radar testing, electronic warfare simulators.
CRON AI	$4 Mn	Growth Stage	Edge Ai based 3D perception platform uses deep learning for security, surveillance, and intelligent border management
EyeROV	$2 Mn	Seed Stage	Underwater drones for naval inspections and surveillance.
FLYING WEDGE DEFENCE & AEROSPACE	$500K+	Seed Stage	Precision munitions, autonomous combat UAVs.
GALAXEYE	$14 Mn	Growth Stage	AI-powered multi-sensor satellites for all-weather, all-time earth observation, enabling real-time military surveillance and strategic intelligence.
Garuda aerospace	$37 Mn	Growth Stage	AI powered unmanned aerial vehicles (UAVs) for reconnaissance, surveillance, and specialised missions like landmine detection and logistics
ideaForge	$40 Mn	Public Listed	AI-powered UAVs for surveillance, reconnaissance, and intelligence missions.
IG DRONES	$1 Mn	Seed Stage	Advanced drone and counter-drone systems, leveraging artificial intelligence for contemporary military operations.

Source: Inc42
Note: This is not an exhaustive list of startups working on AI-based defence solutions. The companies are listed in alphabetical order.

Startup Name	Total Funding	Funding Stage	AI-Based Defence Solution
NewSpace	$73 Mn	Growth Stage	AI powered autonomous systems for defence including— drone swarms, loitering munitions, and tethered drones for surveillance and reconnaissance.
Optimized Electrotech	$13 Mn	Growth Stage	Electro-optic aircraft guidance solutions for surveillance and reconnaissance.
	$100 Mn	Growth Stage	AI-powered unmanned aerial systems (UAS) for military reconnaissance and strike missions.
sde Intelligence Open to Ideas	Undisclosed	Growth Stage	Unmanned surface and underwater vehicles for naval defence.
SHARANG SHAKTI	$500K+	Seed Stage	AI-powered kinetic interceptor for neutralising hostile UAVs.
TARDID technologies	$600K+	Seed Stage	AI-powered autonomous maritime vessels for military support and surveillance.
TONBO imaging	$46 Mn	Late Stage	AI-driven imaging systems for surveillance and reconnaissance.
VAYUDH	$10 Mn	Growth Stage	AI-powered nano drones and swarm technology for military reconnaissance and intelligence applications.
ZEUSNUMERIX	$3 Mn+	Undisclosed	AI-powered simulation and modeling for defence equipment
ZULU DEFENCE	$980K+	Seed Stage	AI-enabled tactical air defence drones for applications such as autonomous reconnaissance, oitering munitions, and anti-drone solutions

Source: Inc42
Note: This is not an exhaustive list of startups working on AI-based defence solutions. The companies are listed in alphabetical order.

Methodology

Since 2015, Inc42 has established itself as the premier resource for discovering Indian startups that are revolutionising industries and making a significant impact on society.

The report titled "India's Defence Tech Startup Ecosystem Report 2024, InFocus: Warfare In The Age Of AI" showcases the Inc42 team's commitment to mapping and understanding the trajectory of the Indian startup revolution from 2014 to the present. This comprehensive analysis aims to provide insights into the dynamic changes and advancements within the sector, highlighting the pivotal role of innovation and technology in driving growth and transformation.

For this report:

- Overall data in this report is from 2014 to June 26, 2025, unless mentioned otherwise
- **Seed stage:** Startup at angel or seed stage
- **Growth stage:** Startups at Series A and B funding stage
- **Late stage:** Startups at Series C or above funding stage
- Our database enrichments and corrections are done on a regular basis, therefore slight variations in funding-related data compared to previously released reports may exist
- The total market size (India's defence market) is determined by adding the domestic market and defence exports. This analysis excludes personal and maintenance/store costs from India's national defence budget
- The market size (India's AI in defence) is calculated by evaluating India's portion of the global AI defence market during the given time frames. This involves analysing India's contributions and growth within the global context

Defence AI Quadrant

The Defence AI Capability Quadrant uses a dual-axis framework to rank the top 50 global defence spenders based on spending data and AI maturity. Defence expenditure figures come from SIPRI's 2024 Military Expenditure Database, measured in constant USD billions. AI Defence Maturity scores (0-100) are composite assessments from public data on national AI strategies, defence AI procurement, autonomous systems, cyber warfare AI, and public-private partnerships in military AI.

Countries are categorised on the following:

- **Leaders:** High defence spending and advanced AI implementation.
- **Challengers:** High defence spending but lower AI sophistication.
- **Visionaries:** Relatively lower defence spending but high AI maturity.
- **Niche Players:** Moderate spending and emerging AI defence programs.

This framework allows strategic comparisons across nations, emphasizing that AI defence leadership depends on AI sophistication and integration, not just spending.

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