



Doing business in defence

Defence Partnerhip Days



November 2024

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Foreword IMR

Ever since the “Atmanirbharta in Defence” initiative was launched, the armed forces and defence industry have made good strides in indigenisation and import substitution, thanks to extensive changes in the Defence Acquisition Procedure (DAP) to promote domestic industry, Positive Indigenisation Lists, creation of Defence Corridors, supporting initiatives like the Srijan Defence portal, Innovations for Defence Excellence (iDEX), Self-certification scheme, Third Party Inspection Scheme, Defence Export Promotion Scheme, opening up of Lab Test facilities and proof facilities, Technology Development Fund, Transfer of Technology by DRDO, releasing BIS standards and Joint Service Specifications, and so on.

There is a huge untapped potential of capable, successful and technology-rich companies waiting to be tapped. A number of events have been organised where Indigenisation challenges are thrown open, problem statements are released, and efforts are made to widen the pool of industry in the Defence ecosystem.



Maj Gen Ravi Arora (Retd)

CEO

IMR Media Pvt Ltd

Defence Partnership Days is one such effort to bring domestic industry and the Armed Forces together and interact. Through face-to-face and one-to-one confirmed pre-scheduled meetings between key officers of the Ministry of Defence and Defence Services dealing with indigenisation and procurement, on one hand, and the domestic industry on the other, the stakeholder will get a better understanding of the indigenisation challenges and industry capabilities to provide solutions. It will also help the Armed Forces in carrying out skill and capability mapping of industry and enlarge the pool of companies by bringing untapped Start-ups and MSMEs into the defence procurement ecosystem.

I would like to thank the Chief of Defence Staff, Department of Defence Production, Ministry of Defence, HQ Integrated Defence Staff and Services HQs, besides the Centre for Joint Warfare Studies and KPMG in India for the sterling role played in making this event possible.



Foreword KPMG in India

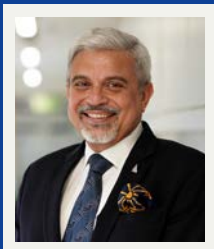
The last few years have seen major conflicts erupt across the world. As countries flex their military power to defend their sovereignty, neighbouring nations continue to proactively take measures by investing in defence infrastructure and improving their capabilities to defend their borders. A large portion of these defence investments have been allocated for procurement of military systems and equipment. As of March 2023, total global military expenditure, surpassed INR 2,01,81,600 crores (USD 2.4 trillion) and accounted for 2.3 per cent of the world GDP¹.

The Indian defence industry is on a growth path, driven by a combination of strategic initiatives and pressing security needs. The primary drivers are the rising geopolitical tensions and a comprehensive modernisation

program coupled with the resolve to become self-reliant in defence manufacturing.

In this report, we will look at the industry in relation to the global context, upcoming opportunities, Indian regulatory landscape, market dynamics at play, KPMG in India value chain framework and market entry strategy for the startups/MSMEs.

We, at KPMG in India, remain steadfast in supporting India's indigenisation journey towards self-reliance, requiring the dedication and ingenuity of all stakeholders. As we move forward, let us remain committed to the vision of a self-reliant India, where our capabilities are built on the foundation of strength and innovation.



Cdr Gautam Nanda

Associate Partner

Aerospace, Defence and Space
Management Advisory

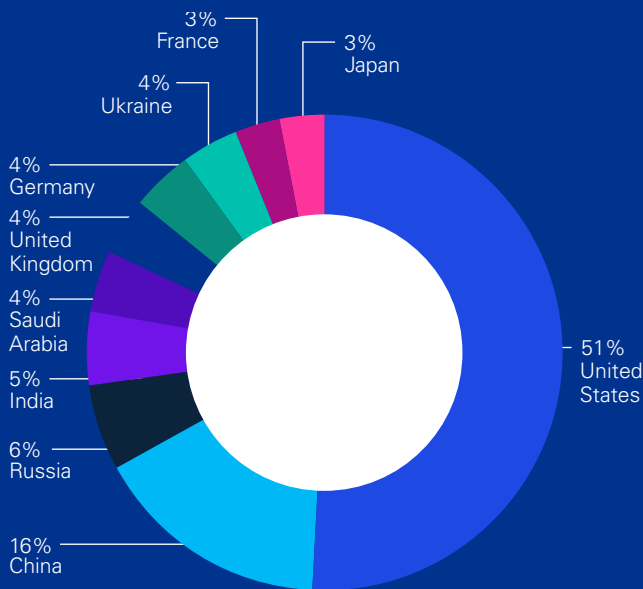
1. SIPRI Yearbook 2024

Executive summary

The rapidly evolving geopolitical landscape has resulted in the increased demand for military equipment both globally and within India, which is driven by regional conflicts, and the proposed modernisation efforts of the armed forces worldwide. Total military expenditure accounted for 2.3 per cent¹ of the world GDP in 2023. The five biggest spenders in 2023 were the United States, China, Russia, India and Saudi Arabia, which together accounted for 61 per cent¹ of world military spending. The five largest exporters of arms during 2019-23 were USA, France, Russia, China and Germany, accounted for 75 per cent¹ of all arms exports. During the same period the top five arms importers were India, Saudi Arabia, Qatar, Ukraine and Pakistan, accounting to received 35 per cent¹ of total imports.



Defence expenditure (USD Billion) (2023)



1. SPRI Yearbook 2024

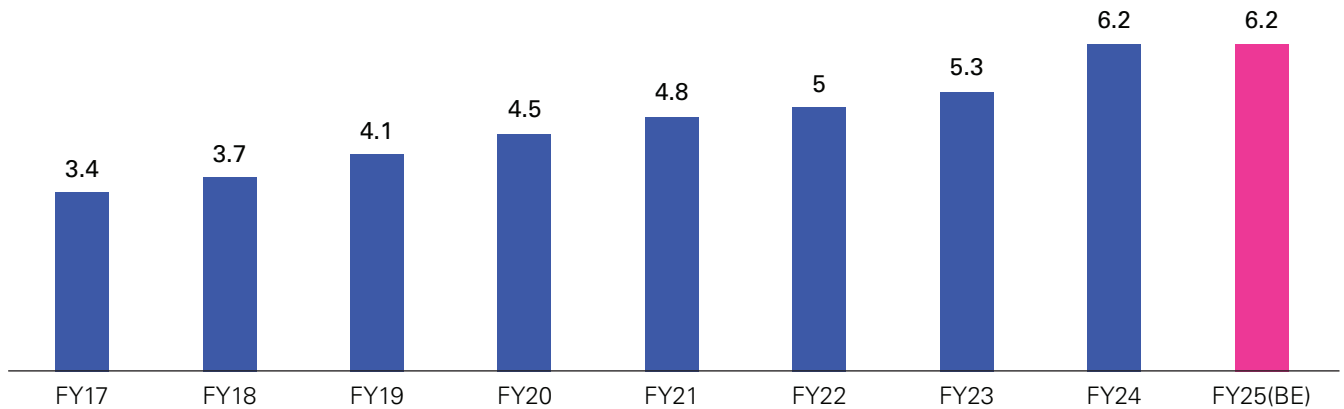
With increased government spending and focus on indigenisation, India's defence budget has been on a steady rise for the past 10 years. This increase in defence expenditure is directly linked to Government initiatives with focus on modernising India's defence forces and self-reliance. In FY23-24, INR 6,23,888 crores² (USD 75.1 billion) was allocated for the total defence budget with a revised estimate of INR 6,21,541 crores² (USD 74.8 billion) for FY24-25.

Over the period of FY17-22, the contribution of private players has increased by about 41 per cent owing to government initiatives to increase the private sector contribution in A&D manufacturing. For FY24-25, the defence production has reached INR 25,144 crores³ (USD 2.98 billion) against the set target of INR 1,60,000 crore³ (USD 19.02 billion).

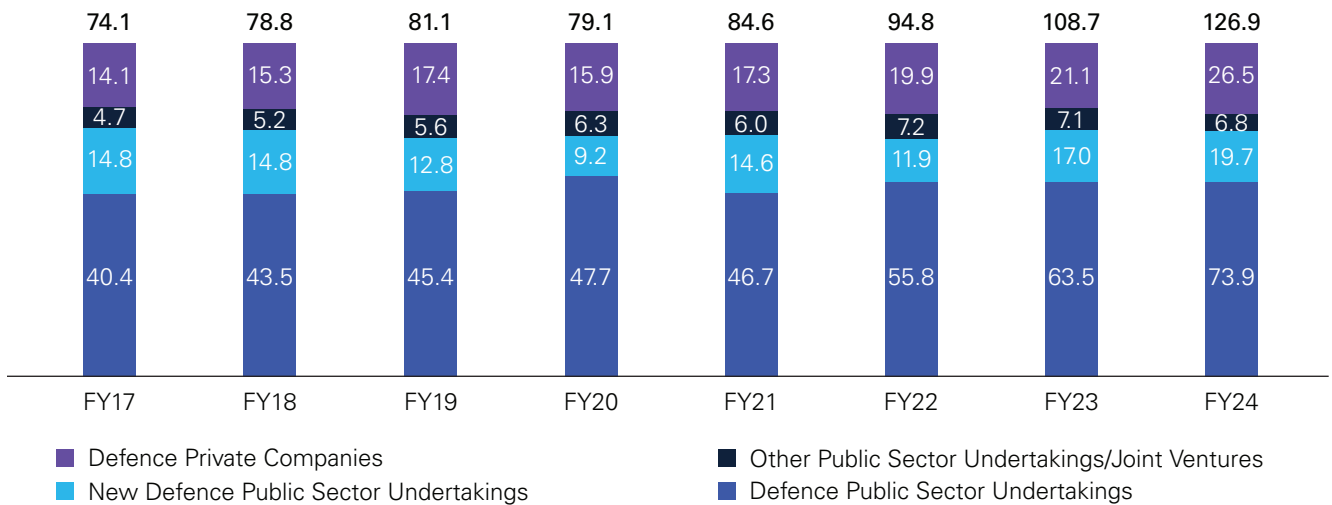
2. MoD Budget Analysis, 2024

3. DDP Dashboard

Defence Budget (INR lakh Crores)



India defence production (INR 000 crores)



Defence exports have been rising over the past few years, wherein over FY17 to FY23, India's defence exports have increased by ~40 per cent CAGR. Indian government has set a target of INR 30,000 crore⁴ (USD 3.56 billion) by FY25, as of today we have achieved INR 21,083 crore⁴ (USD 2.50 billion).

4. Military balance database, International Institute for Strategic Studies (IISS), KPMG research, SME inputs

In terms of regulatory landscape, the Government has made change in policies related to procurement, acquisition, and trade-related operating procedures. The two main documents that outline India’s procurement process are Defence Acquisition Procedure (DAP) and Defence Procurement Manual (DPM). The other policies such as industrial license for A&D manufacturing, FDI, SCOMET and multi-lateral export control regimes promote the defence manufacturing ecosystem from India.

DAP is the primary document laying down the guidelines for capital procurement for the Indian Armed Forces. The DAP is revised from time-to-time in consultation with industry experts and other stakeholders. In order to promote indigenisation, the Indigenous Content (IC) thresholds have been defined for various procurement categories in DAP 2022:

- Buy (Indian-IDDMM: Minimum 50 per cent.
- Buy (Indian): In the case of indigenous design, minimum 50 per cent, otherwise 60 per cent.

- Buy & Make (Indian): Minimum 50 per cent of Make portion.
- Buy (Global-Manufacture in India): Minimum 50 per cent.
- Buy (Global): Foreign Vendor- Nil, minimum 30 per cent for Indian vendor.

Defence Procurement Manual (DPM) is a compendium of procedures related to revenue procurement, as well as the provision of all other goods, services and support activities intended to maintain the operational effectiveness of the armed forces.

The opportunities in the defence ecosystem flow from the procurement programs of the armed forces, technology roadmap and indigenisation plans. The ongoing and upcoming capital programs across land, airborne and naval platforms create a visible opportunity landscape for a total value of INR 12,45,090 crores⁵(USD 148.04 billion) over the next 10-15 years.

		Land programs	Airborne programs	Naval programs
Ongoing Programs	Value	~ INR 60,364 crores (USD 7.17 billion)	~ INR 5,05,783 crores (USD 60.13 billion)	~INR 2,20,943 crores (USD 26.27 billion)
	Select programs	<ul style="list-style-type: none"> • Dhanush Howitzer • T-90s MBT 	<ul style="list-style-type: none"> • Multi Role Combat Aircraft • P-8I 	<ul style="list-style-type: none"> • Nilgiri Frigate (Project 17A) • Kalvari attack submarine
Upcoming programs	Value	~ INR 2,31,132 crores (USD 27.4 billion)	~ INR 40,081 crores (USD 4.76 billion)	~ INR 1,86,787 crores (USD 22.2 billion)
	Select programs	<ul style="list-style-type: none"> • Towed guns • FRCV 	<ul style="list-style-type: none"> • Dhruv-Mk 3 • MQ-9B 	<ul style="list-style-type: none"> • Fast patrol vessel (FPV) • Decoy systems

5. Military balance database, International Institute for Strategic Studies (IISS), KPMG research, SME inputs

With the focus on upgrades and modernisation, the services are building both conventional and unconventional capabilities and accordingly have developed capability roadmaps and indigenisation plans for future procurement programs.

The government has launched multiple initiatives to encourage indigenisation and innovation such as positive indigenisation list, DPSU mandate list, iDEX and TDF, Srijan portal and formulation of defence corridors.

TPCR 2018

A strategic document that serves as a reference for taking decisions on defence procurement, R&D investments, and collaborative efforts to strengthen India's defence industry.

Indian Navy Indigenisation Plan (INIP)

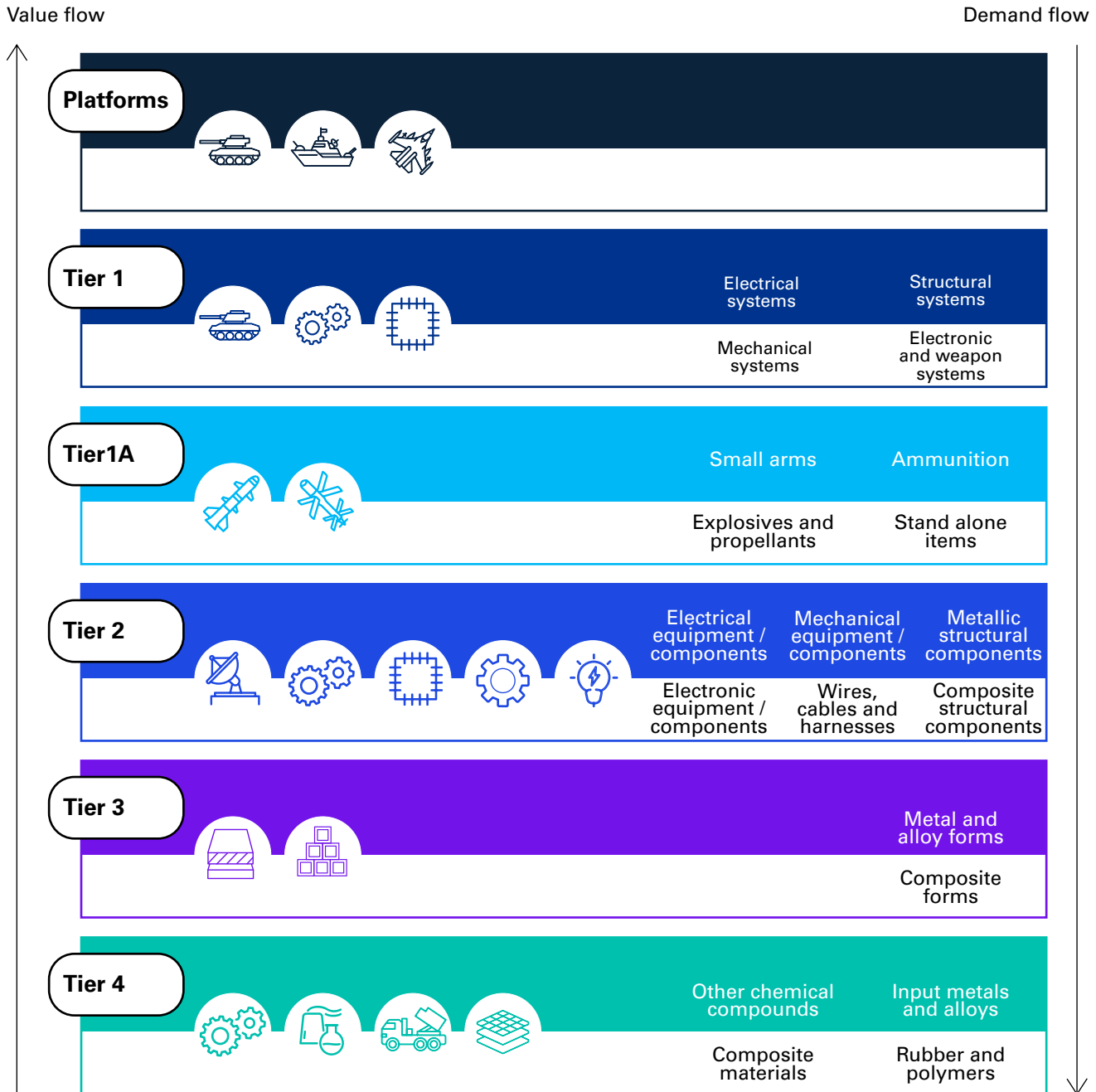
A strategic document that provides roadmap to achieve self-reliance in the naval shipbuilding industry, developing R&D capabilities, listing out spares and sub-systems identified for indigenisation under float, move and flight components.

Indigenisation Roadmap for Indian Airforce (INIAF)

Strategic plan that focuses on indigenous solutions for upgrading aircraft, avionics, weapon systems, and other critical components and maintaining high-quality standards to ensure reliability in indigenous production.



Aerospace and defence sector is complex sector with high end technologies and systems in place hence it is important to understand the value chain. KPMG in India team has analysed the defence industry value chain and segregated into 04 tiers which further sub-categorised into 21 sub-sectors.



Source: KPMG in India Proprietary Framework

Based on the strategic intent and capability of the company, it can decide its value chain position and formulate a strategy to enter or grow in the market.

Once the value chain position is decided, the startup /MSMEs can follow a defined approach to enter this market:

Step 1: Companies need to identify the opportunity

Step 2: Build infrastructure and team.

Step 3: Secure order so that you can establish yourself in the market.

Step 4: Seek the required certifications and plan for further expansion.

Step 5: Move up the value chain.

Step-01: Identifying the opportunity

- Understand your key strength and core competencies.
- Develop robust vision and objective
- Identify key product segments to focus on.
- Map critical gaps and ways to address them.
- Identify key focal person(s) to spearhead sectorial initiatives.
- Create dedicated business vertical.
- Devise entry strategy and investment plan.
- Develop a production strategy to manufacture in house/outsource.

Step-02: Build the infrastructure and team

- Identify focus products and target global supply chain.
- Build and train the focused team for A&D.
- Identify anchor customers and their requirements.
- Create dedicated line/facility for aerospace.
- Initiate process to purchase right machines.
- Establish process, controls and documentation as per industry standards.
- Discuss with sourcing teams of OEMs to synchronise with their India plans.

Step-03: Secure the first order

- Complete registration formalities for each target customer and OEMs.
- Prepare facility for formal assessment by customers.
- Choose the right components to pilot.
- Set up special process & material sourcing tie ups.
- Conduct pilot trials and reviews by the customer till achieving first right part.
- Review regulatory requirements and prepare facility for certifications.
- Secure order or assurance from customer

Step-02: Build the infrastructure and team

- Get the required certifications and customer approvals.
- Scale up facility and processes to meet the required volume.
- Maintain quality and timeliness of deliveries.
- Explore more opportunities with customer.
- Develop healthy portfolio of components.
- Add new components and customers without compromising quality and reputation.
- Plan for additional approvals, audits, quality requirements

Step-05: Move up the value chain

- Develop clear vision and strategy to move up from component to sub assembly manufacturer.
- Build capability.
- Look for global players (JVs, acquisition) to propel the transformation.
- Target Indian and other global players who have defence manufacturing bases in India.
- Develop capability and approvals to supply sub-assemblies to key global aircraft programs.

01

Regulatory issues

- L1 based procurement is one of the biggest challenges for private sector companies.
- Application process for industrial license has a long turnaround time and is not completely transparent.
- Quality and safety certification process is a time-consuming process.
- Procedural delays result in uncertain timelines and thus impact the exports.

02

Supply chain issues

- Owing to proprietary manufacturing techniques as well as quality concerns, there is a dependence on imports of materials.
- Low quality products result in failure rate and delays in orders being placed.

03

Limited capability in the industry

- There is a limited capability within the industry in terms of technology and skilled manpower.
- New entrants face difficulties acquiring the cutting-edge technology because of limited technology transfers agreements.

04

Monopsony market

- As the primary buyers are only the government and defense organizations, they have significant negotiating powers, because of bulk order purchases.
- Issues with procurement procedures result in fluctuating demand.

05

Competitive landscape

- Established players have the competitive advantage due to their strong and established government relationships.
- Concentrated industry as few large players dominates the market.

06

Limited focus on R&D

- Substantial costs and high gestation period to see the benefits of R&D have not encouraged private industry from investing in R&D initiatives.
- Lack of competition within Indian R&D agencies.

01

Global defence overview

The last few years have seen major conflicts erupt across the world and the implications are here for us to witness. As countries flex their military power to defend their sovereignty, neighbouring nations continue to proactively take measures by investing in defence infrastructure and improving their capabilities to defend their borders. The rapidly evolving geopolitical landscape has resulted in the increased demand for both globally and within India, which is driven by regional conflicts, and the proposed modernisation efforts of the armed forces worldwide.

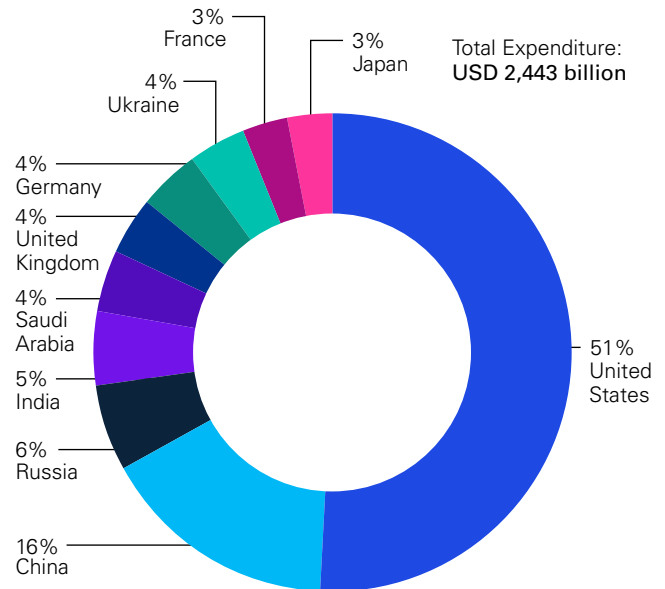


1.1 Military expenditure

Total global military expenditure, driven by regional conflicts and wider geopolitical tensions, rose for the ninth consecutive year in 2023. It surpassed INR 2,01,81,600 crores (USD 2.4 trillion)¹ and accounted for 2.3 per cent of the world GDP.

The five biggest spenders in 2023 were U.S, China, Russia, India and Saudi Arabia, which together accounted for 61 per cent of world military spending. The United States remained by far the largest military spender in the world with a total of INR 77,02,644 crores (USD 916 billion)¹, that was more than the combined spending of the 09 other countries among the top 10 spenders, and 3.1 times as large as that of the second biggest spender, China at INR 24,89,064 crores (USD 296 billion)¹

Defence expenditure (USD Billion) (2023)



1.2 Export and Imports

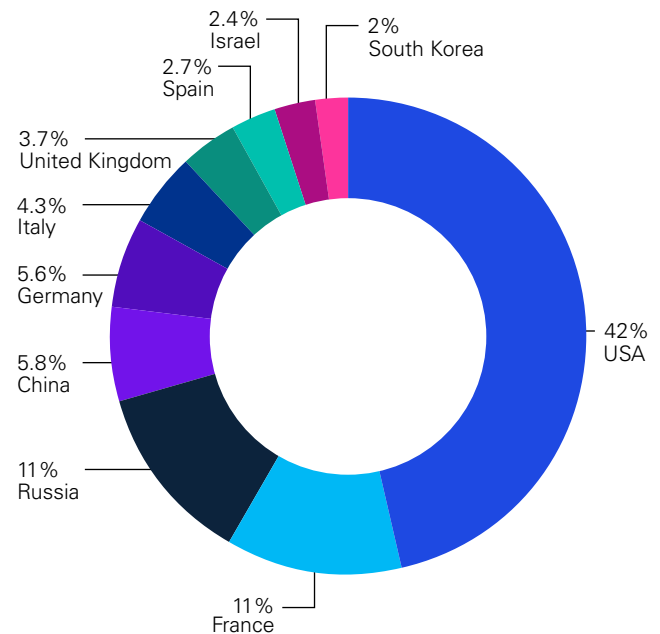
Global arms exports

Over the period of 2019-23¹, the five largest exporters of arms were U.S, France, Russia, China and Germany that accounted for 75 per cent of all arms exports. Over this period, the largest share of U.S arms exports went to states in the Middle East at 38 per cent, followed by Asia and Oceanic at 31 per cent, Japan at 9.5 per cent, Australia at 7.1 per cent and South Korea at 5.3 per cent.

The majority of France’s arms exports went to states in Asia and Oceania, but India was by far the largest recipient, accounting for 29 per cent of total French arms exports.

Most of Russia’s arms exports went to States in Asia and Oceania (68 per cent of total Russian arms exports), but India was by far the largest recipient, accounting for 34 per cent.

Share of global arms exports (2019-23)



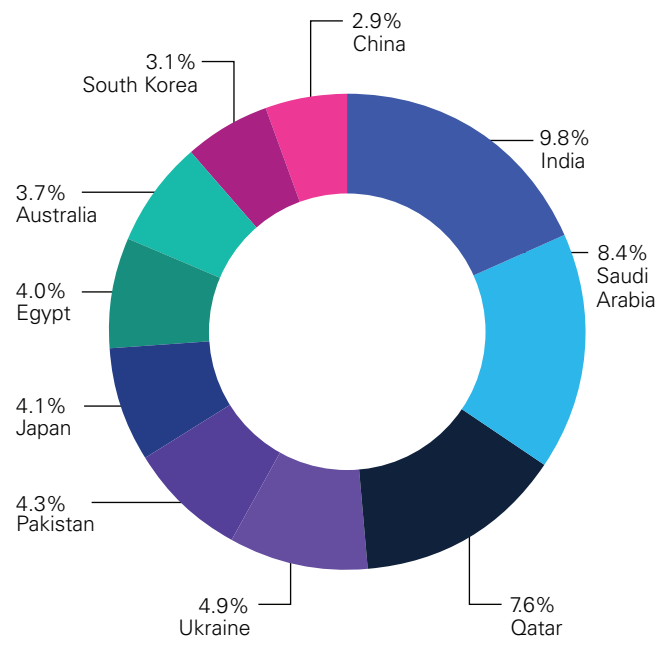
1. SPRI Yearbook 2024

Global arms imports

Over the period of 2019-23², the top five arms importers were India, Saudi Arabia, Qatar, Ukraine and Pakistan, that received 35 per cent of all arms imports globally. Countries in Asia and Oceania accounted for 37 per cent of all arms imports in 2019-23, followed by countries in the Middle East with 30 per cent, Europe with 21 per cent the Americas with 5.7 per cent and Africa with 4.3 per cent.

Russia remained India's main supplier, but its share of Indian arms imports has come down from 76 per cent in 2009-13 to 36 per cent in 2019-23.

Share of global arms imports (2019-23)



2. SIPRI Yearbook 2024.



02

Indian defence overview

The Indian defence industry is on a growth path, driven by a combination of strategic initiatives and pressing security needs. The primary drivers are the rising geopolitical tensions and a comprehensive modernisation program coupled with the resolve to become a self-reliant in defence manufacturing. India's strategic position in South Asia, coupled with ongoing regional conflicts and border tensions have doubled down on the need for a robust and responsive defence stance.

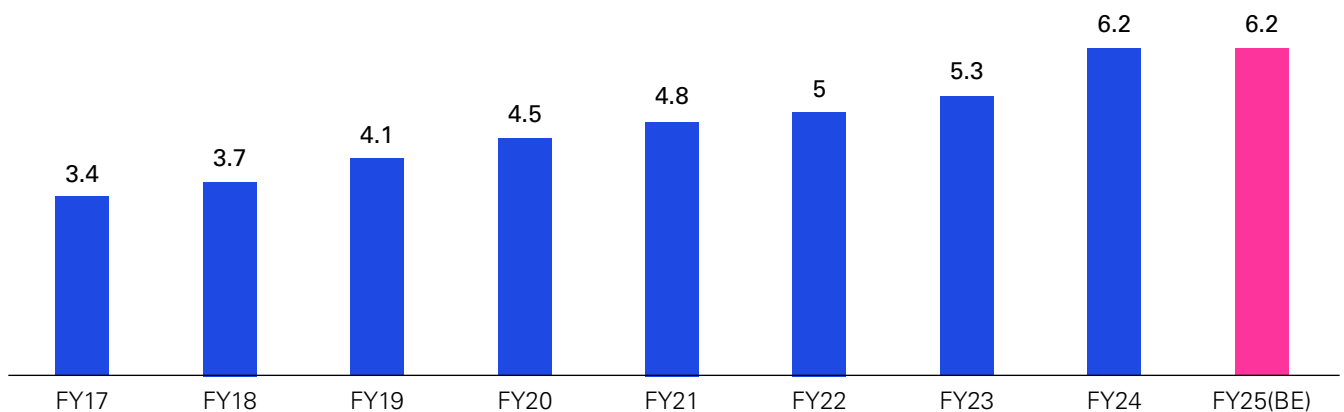


Defence budget, production, export and import trends

Defence budget analysis

With increased government spending and focus on indigenisation, India's defence budget has been on a steady rise for the past 10 years. This increase in defence expenditure is directly linked to Government initiatives that focus on modernising India's defence forces .

Defence Budget (INR lakh Crores)



In FY23-24, INR 6,23,888 crores (USD 75.1 billion)¹ was allocated for the total defence budget with a budgeted estimate of INR 621,54¹ crores (USD 74.8 billion)¹ for FY24-25. There is an upward trend in the defence budget as well as the capital outlay. From INR 83,475 crore (USD 9.92 billion)¹ in FY19, capital expenditure has increased to INR 1,61,290 crore (USD 19.17 billion)¹ in FY24, highlighting the conscious efforts being put towards modernising platforms and systems.

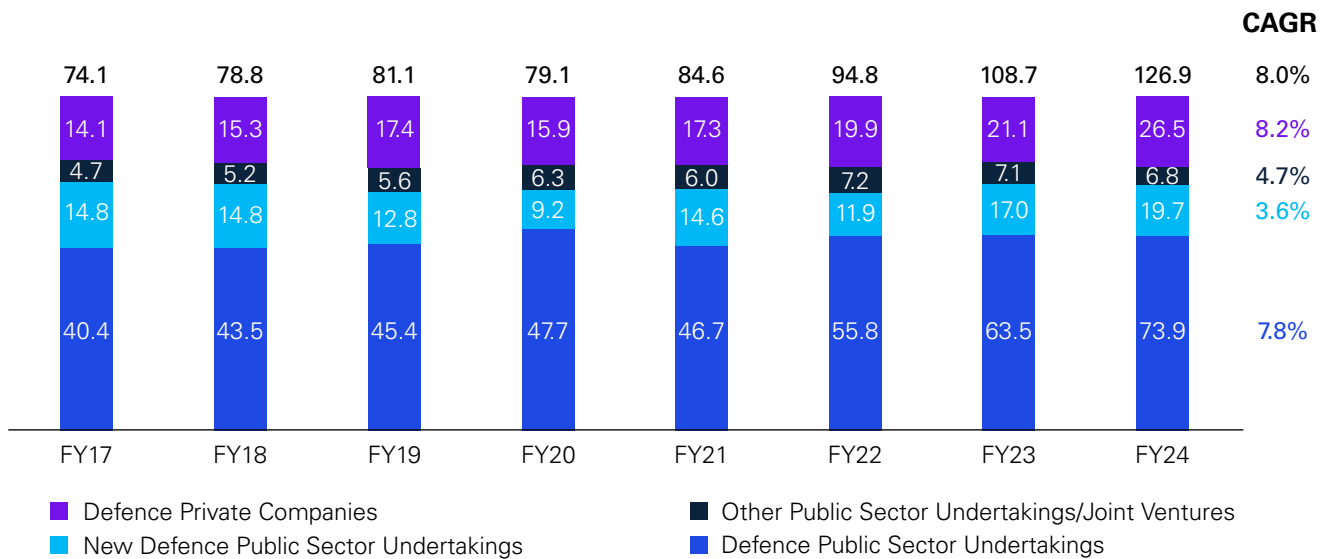
The Indian Army gets the highest share at 52 per cent on account of its size, spread and role, followed by the Indian Air Force at 24 per cent, the Indian Navy at 19 per cent and approximately 05 per cent of the defence budget is allocated toward R&D¹. The Indian Army's revenue expenditure is primarily due to indigenisation and modernisation initiatives along with repair/maintenance of legacy systems. Unlike the Army, the Indian Navy's expenditure is split equally, with capital procurements steadily increasing to meet the planned fleet numbers. The Indian Air Force also spends about 36 per cent to 40 per cent on revenue procurements and about 53 per cent to 60 per cent on capital procurements, focusing on procuring advanced multirole fighter jets, transporters, and support aircraft.¹

1. MoD Defence budget analysis 2024.

Defence production

Defence production in India has been growing steadily with private defence companies taking a share of about 20 per cent. The government has set a goal to reach INR 1.75 lakh crore (USD 20.80 billion)² in defence production by FY 26.

India defence production (INR 000 crores)



Over the period of FY17-22, the contribution of private players has increased by about 41 per cent owing to government initiatives to include and increase the private sector contribution in A&D manufacturing.

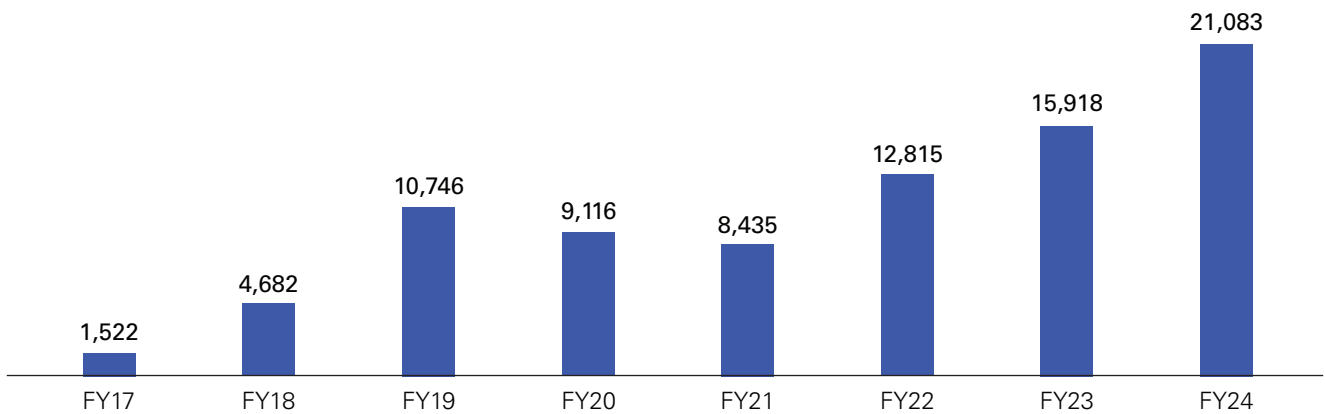
As on date for the FY24-25, the defence production has reached INR 25,144 crores (USD 2.98 billion)² against the set target of INR 1,60,000 crore (USD 19.02 billion).²



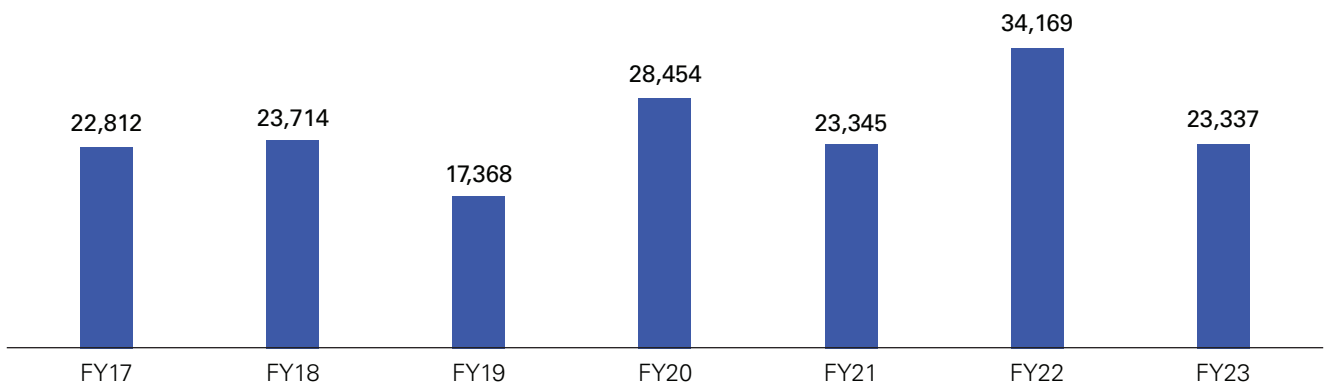
Defence exports and imports

Defence exports have been rising over the past few years and over FY17 to FY24, India's defence exports have increased by ~40 per cent CAGR. Indian government has set a target of INR 30,000 crore (USD 3.56 billion)³ by FY25, as of today we have achieved INR 11,334 crore (USD 1.34 billion).³

Total export (INR crores)



Imports (INR crores)



While there is a pronounced thrust on indigenisation and self-reliance in the last decade, dependence on imports still exists for certain equipment and systems. Over FY 17-23, India has imported defence products worth more than INR 1,73,199 crores (USD 20.58 billion).⁴

3. DDP Dashboard

4. SIPRI Import data 2023

Regulatory landscape

In India, the Ministry of Defence (MoD) is the central authority that regulates all capital procurements in the A&D sector. It has several branches and departments that overlook different aspects of regulation in defence production, acquisition, and R&D.

Procurement procedures

The two main documents that outline India's procurement process are Defence Acquisition Procedure (DAP) and Defence Procurement Manual (DPM). The other policies such as industrial license for A&D manufacturing, FDI, SCOMET and multi-lateral export control regimes promote export-import from India.

Defence Acquisition Procedure

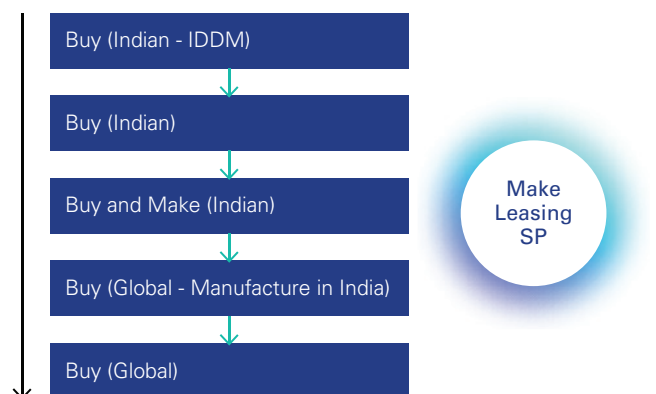
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- Buy (Indian-IDDMM): Minimum 50 per cent.
- Buy (Indian): In the case of indigenous design, minimum 50 per cent, otherwise 60 per cent.
- Buy & Make (Indian): Minimum 50 per cent of Make portion.
- Buy (Global-Manufacture in India): Minimum 50 per cent.
- Buy (Global): Foreign Vendor- Nil, minimum 30 per cent for Indian vendor.

Defence Procurement Manual (DPM) is a compendium of procedures related to revenue procurement, as well as the provision of all other goods, services and support activities intended to maintain the operational effectiveness of the armed forces. While DAP 2020 covers product

support engineering support package, annual maintenance contract, comprehensive maintenance contract, life cycle support contract, performance-based logistics etc. for a specified duration, all procurements post such period or items beyond the scope of product support agreement shall be governed by DPM. For 'in service' platforms procured under earlier iterations of the policy as well as future procurements under DAP 2020, any contract involving revenue expenditure such as repair, maintenance etc. which does not enhance the utility of existing assets shall be covered under DPM.

DAP Priority of Acquisition



Opportunities in the Indian Armed Force

Procurement programs

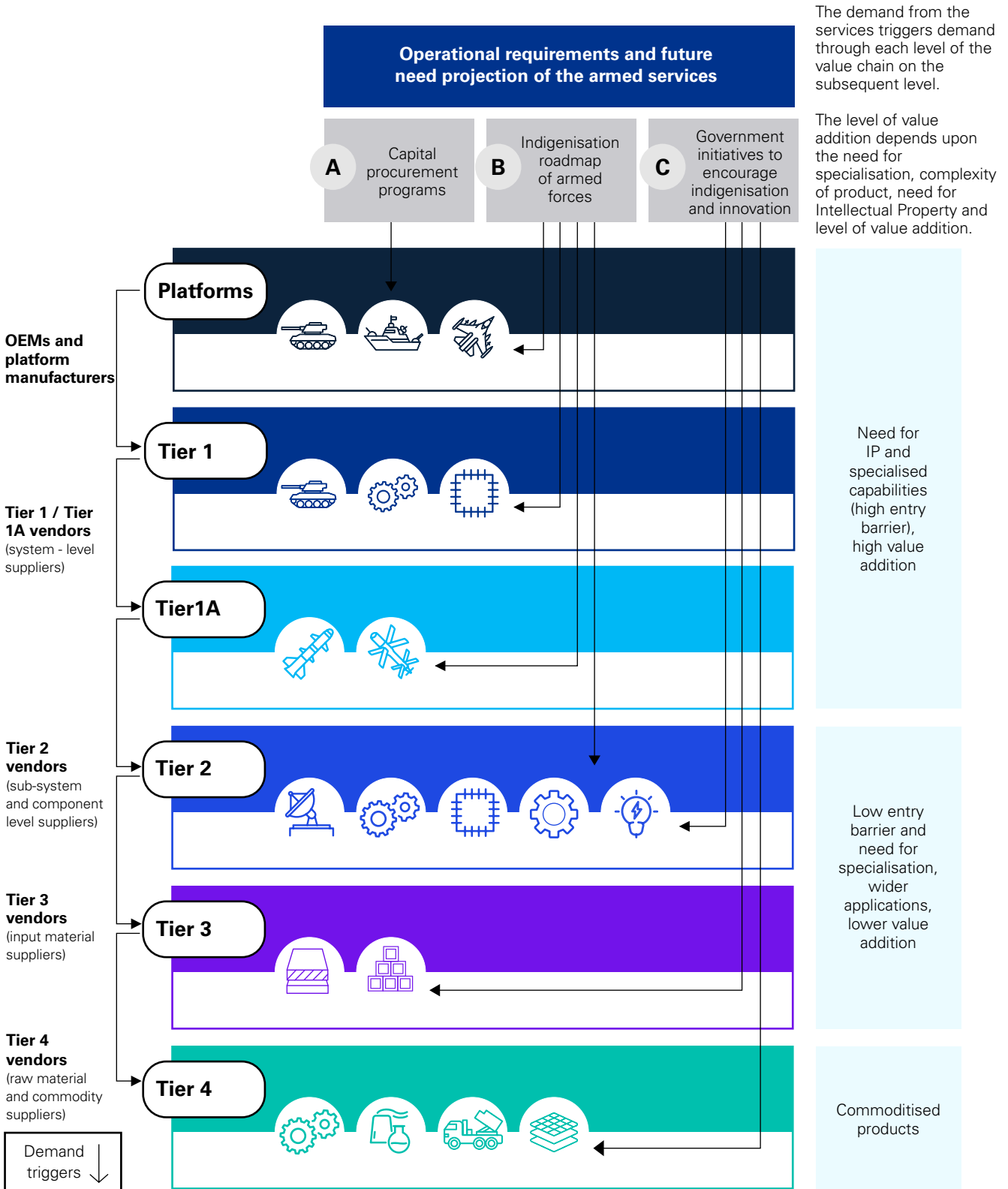
Some of the key ongoing and upcoming programs across land, airborne and naval platforms create a visible opportunity landscape for a total value of INR 12,45,090 crores (USD 148.04 billion)⁵ over the next 10-15 years .

	Ongoing programs	Estimated value (INR Cr.)/USD million	Upcoming programs	NEstimated value (INR Cr.)/USD million
Land Programs	Dhanush Howitzer	6,500 (USD 773 million)	K 9 Vajra Self Propelled Guns (SPG) – follow on orders	9,000 (USD 1,070 million)
	K 9 Vajra Self Propelled Guns (SPG)	5,976 (USD 711 million)	Towed guns	6,500 (USD 772 million)
	T-90s MBT	22,971(USD 2,731 million)	Future Ready Combat vehicle	1,17,174 (USD 13,932 million)
	Akash Surface to Air Missiles (SAM)	5,357 (USD 637 million)	Akash Prime SAM	10,000 (USD 1,189 million)
Airborne programs	Advanced Medium Combat Aircraft	1,76,183 (USD 20,948 million)	Su-30MKI	6,057 (USD 720 million)
	Multi Role Fighter Aircraft	93,094 (USD 11,069 million)	Basic Trainer Aircraft	1,878 (USD 223 million)
	Multi Role Combat Aircraft	31,031 (USD 3,690 million)	Naval utility helicopters	25,818 (USD 3,069.8 million)
	New Transport Aircraft	26,289 (USD 3,126 million)	MQ-9B	4,177 (USD 496.6 million)
	Combat Air Teaming System (CATS) Warrior	17,866 (USD 2,124 million)	Artillery mini-UAV	250 (USD 29.7 million)
Naval programs	Nilgiri Frigate (Project 17A)	61,157 (USD 7,272 million)	Next generation destroyer	82,121 (USD 7,642 million)
	Visakhapatnam Destroyers (Project 15B)	51,342 (USD 6,105 million)	Indian aircraft carrier II	33,100 (USD 3,935.6 million)
	Corvettes	38,065 (USD 4,526 million)	Project P 75 I	45,000 (USD 5,350 million)
	Kalvari attack submarine	31,165	Next Generation Offshore Patrol Vessel (NGOPV)	10,099 (USD 1,200.8 million)

5. Military balance database, International Institute for Strategic Studies (IISS), KPMG research, SME inputs

Framework

The opportunities in the defence ecosystem flow from the procurement programs of the armed forces, technology roadmap and indigenisation plans.



Indigenisation roadmap of armed forces

With the focus on upgrades and modernisation, the services are building both conventional and unconventional capabilities and accordingly have developed capability roadmaps and indigenisation plans for future procurement programs.

<h2>Technology Perspective Capability Roadmap (TPCR) 2018</h2>	<h2>Indian Navy Indigenisation Plan (INIP)</h2>	<h2>Indigenisation Roadmap for Indian Airforce (INIAF)</h2>
<ul style="list-style-type: none"> • A strategic document that serves as a reference for taking decisions on: <ul style="list-style-type: none"> – Defence procurement. – R&D investments. – Collaborative efforts to strengthen India's defence industry. • A roadmap to meet strategic objectives till the late 2020s. • Mentions the approximate quantities of the systems / platforms to be developed / enhanced / procured. 	<ul style="list-style-type: none"> • A strategic document that provides roadmap to achieve: <ul style="list-style-type: none"> – Self-reliance in the naval shipbuilding industry. – Developing R&D capabilities. – Listing out spares and sub-systems identified for indigenisation under float, move and flight components. 	<ul style="list-style-type: none"> • Strategic plan that focuses on: <ul style="list-style-type: none"> – Indigenous solutions for upgrading aircraft, avionics, weapon systems, and other critical components. – Maintaining high-quality standards to ensure reliability in indigenous production. • Recognises the role of MSMEs in defence manufacturing and promotes their participation through a streamlined procurement process.

Government initiatives to encourage indigenisation and innovation

The government has launched multiple initiatives to encourage indigenisation and innovation such as positive indigenisation list, DPSU mandate list, iDEX and TDF, Srijan portal and formulation of defence corridors.

Positive indigenisation list⁶

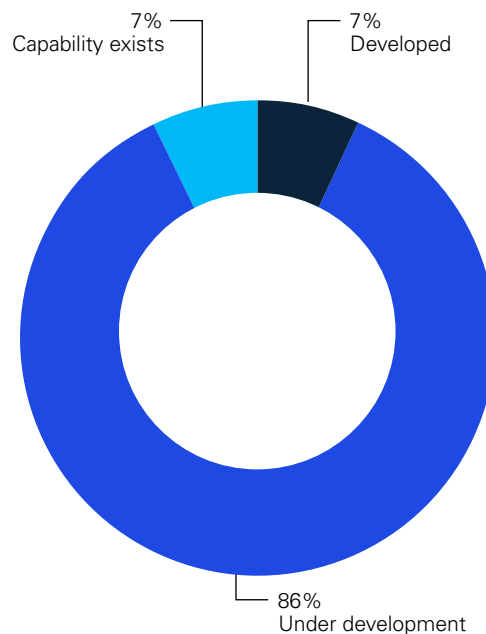
The list present opportunities from the planned import substitution of critical platforms, systems and components. The initial objective of the list was primarily to develop key competencies in the Tier II and Tier III categories in supply chain of products i.e. components, sub-systems etc., eventually, the entire defence product or system is expected to be designed and build using domestic capabilities.

The land-based platforms, primarily operated by the Indian Army make up approximately 46 per cent of the items on the indigenisation lists, followed by naval platforms at 31 per cent and air platforms at 23 per cent. Through this list an indigenisation mandate has been pushed across the armed forces.

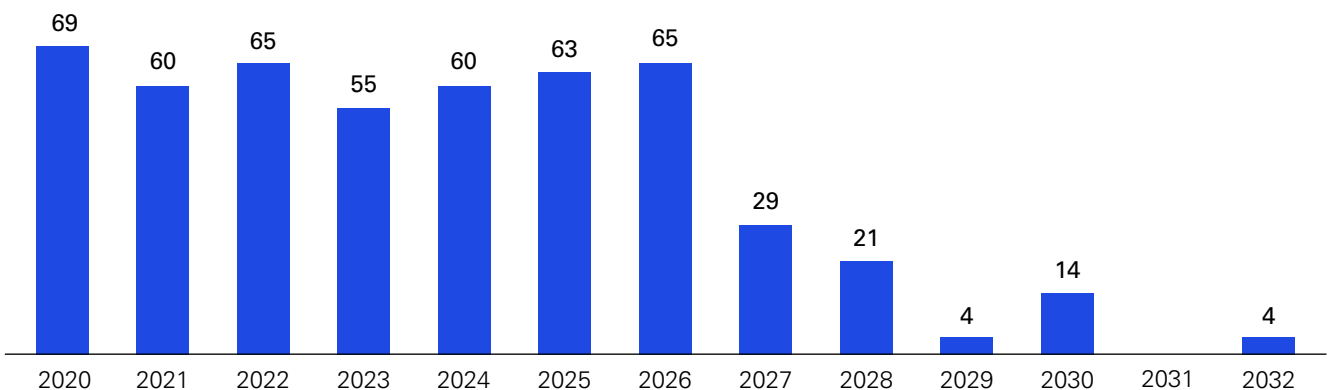
- **Army:** Light Combat Aircraft (LCA) Teja Mk2, Surface-to-Air Missiles (SAMs) etc.
- **Navy:** Light Utility Helicopter (LUH), ship and marine equipment, Offshore Patrol Vessel (OPV)/ Fast patrol vessel (FPV) etc.

- **Air Force:** Multi Role Fighter Aircraft (MRFA), Guided aerial bombs etc

Development status of platforms in PILs



PIL timeline for number of items listed for indigenisation

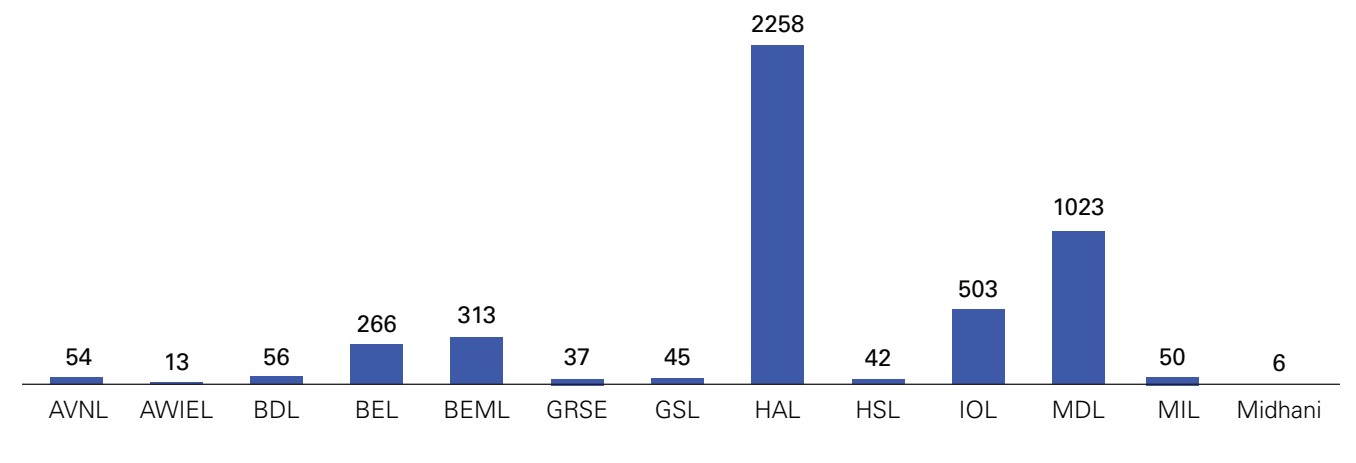


6. Srijan Portal

DPU Mandate list⁷

In lines with PIL, the DPSUs have also got the mandate to indigenise 4,666 items in total which represent opportunities related to technology absorption by the Indian industry, allowing onshoring of DPSU supply chains. The primary objective of the indigenisation mandate is to reduce dependence upon imports of components and spares (including alloys and special materials to be used in defence platforms for DPSUs/OFBs).

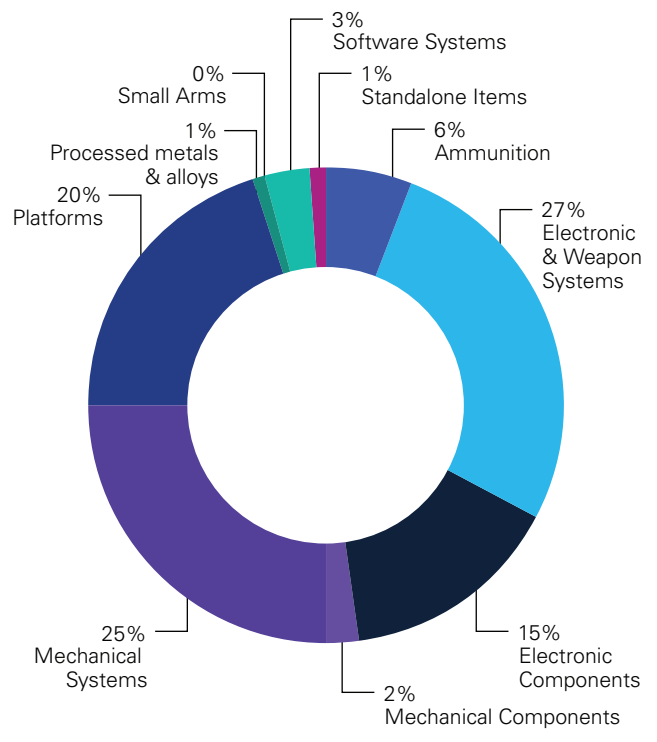
Distribution of components, spares and LRUs across DPSUs identified for indigenisation



Make programs⁸

Make' category fosters indigenous capabilities through design & development by public and private sector industry in a condensed time frame. As of September 2024, there were 44 programs that have been categorised under Make I, 102 programs under Make II and 03 programs under Make III. Under the Make I category, MoD will fund up to 70 per cent of the prototype development cost (capped at INR 250 crores) 13.for each Development Agency (DA). Programs that fall under the Make II category do not receive government funding, instead the prototypes developed are fully funded by the DA.

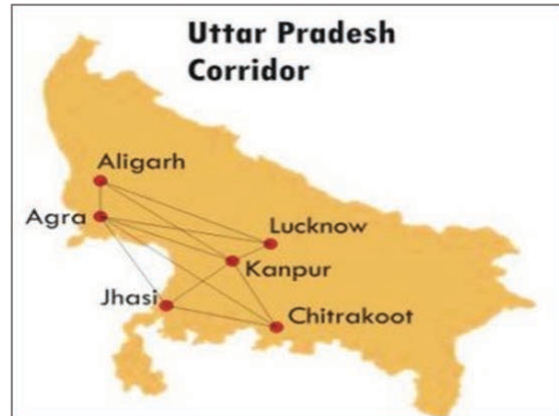
Breakdown of Make programs by category



7. Srijan Portal
8. DDP Dashboard

iDEX and TDF⁹

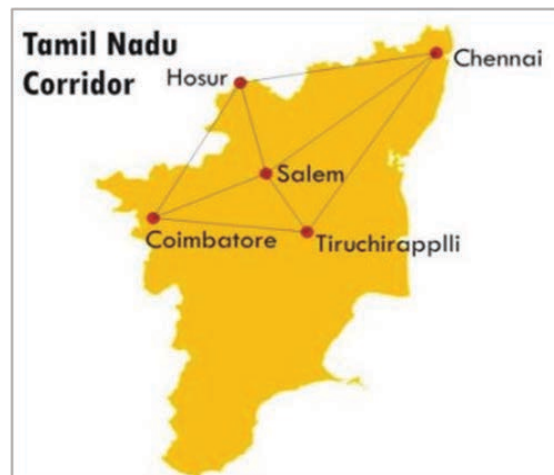
TDF and iDEX target individual innovators, MSMEs and start-ups by funding the design and development of prototypes and solutions for the problems statements put together by relevant A&D stakeholders such as SHQs, DRDO and DPSUs. DRDO has partnered with Invest India to help in the implementation of the TDF scheme and further facilitate MSME and startup participation. Till date 534 startup/MSMEs have bene engaged and 378 have signed the contract.



Srijan Portal¹⁰

SRIJAN was launched on in 2020 for DPSUs/ OFB/Services with an industry interface to provide development support to MSMEs/ Start-ups/Industry for import substitution. It serves as a central hub, connecting private industry players with defence manufacturing units, research organisations, and other stakeholders. Such collaboration can lead to the creation of a robust defence ecosystem that leverages the strengths of both public and private sectors. The DPSU indigenisation lists is available on SRIJAN portal, mandates to reduce dependence upon imports of 4,666 components, spares and LRUs to be used in defence platforms. By gaining these insights the private players can align their capabilities and offerings enhancing their chances of securing contracts.

The Tamil Nadu Defence Industrial Corridor (TNDIC) is planned across 05 nodes namely Trichy, Hosur, Salem, Coimbatore, and Chennai. Tamil Nadu Industrial Development Corporation Ltd (TIDCO) was mandated as the nodal agency by the state Government for the implementation of the TNIDC. TN corridor has attracted and investment of INR 21, 825 crores and have signed more than 45 MoUs till date.



Defence industrial corridors⁹

To promote domestic defence production, two Defence Industrial Corridors (DICs) have been setup in the country. One in the state of Uttar Pradesh (UP) and another in the state of Tamil Nadu (TN).

UPDIC is planned across 06 nodes namely Agra, Aligarh, Lucknow, Kanpur, Chitrakoot and Jhansi. Uttar Pradesh Expressways Industrial Development Authority (UPEIDA) was assigned as the nodal agency for implementing the project. UPDIC has already attracted investment of INR 28,258 crores and have signed more than 135 MoUs till date.

9. DDP Dashboard

10. Srijan Portal



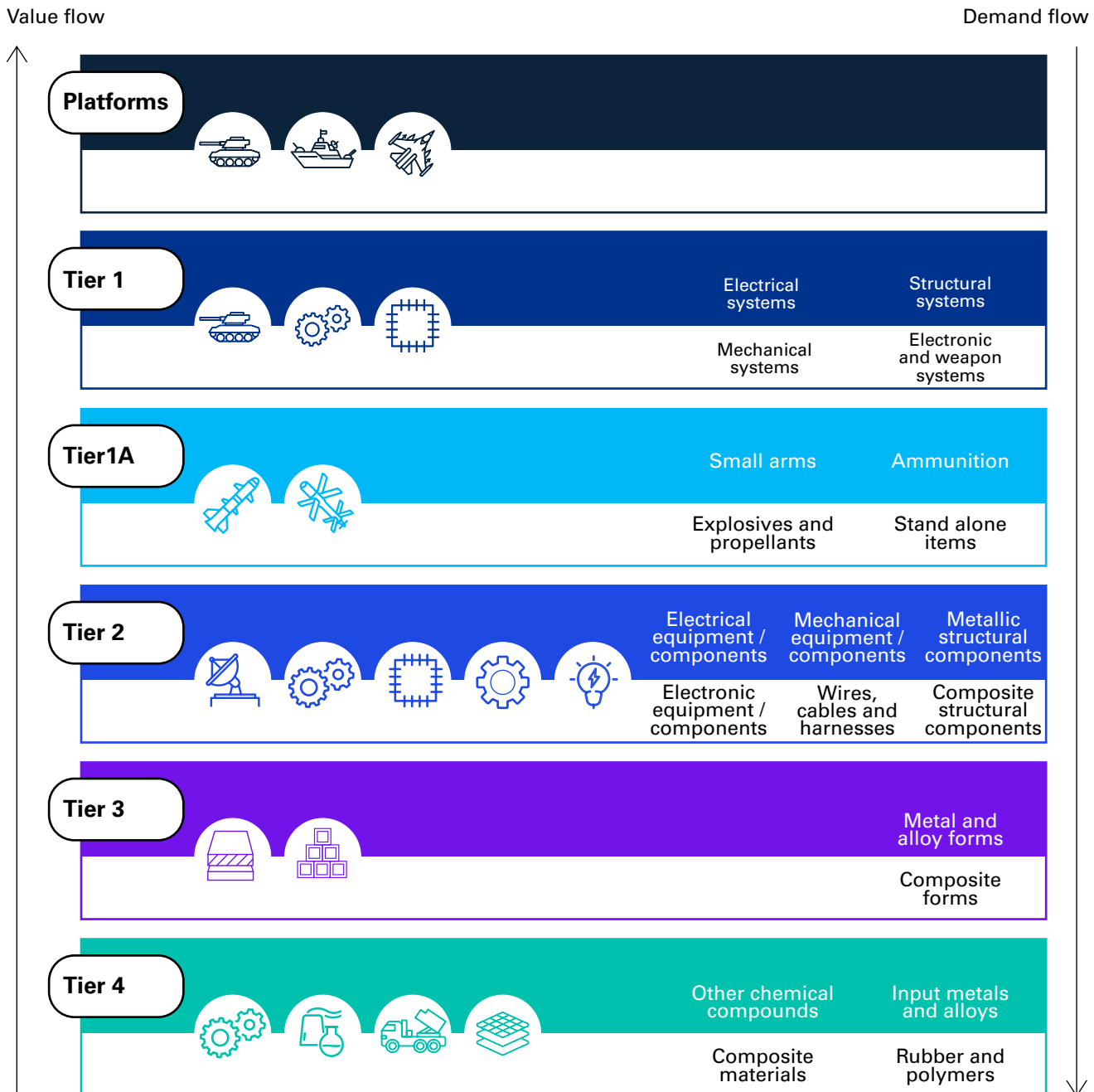
03

Market entry strategy

KPMG in India has analysed the defence industry value chain and segregated them into sub-sectors and developed a framework. Tier I product lines are at the forefront defence technology and play a crucial role in delivering advanced capabilities. Tier1A systems consist of standalone equipment which may or may not be integrated onto a platform. Tier II product lines provide the essential components, equipment, and parts for Tier I systems. Tier III product lines, which involve the production of intermediate materials and forms used in Tier II product lines. Tier IV provide the foundational material/ compounds required for the manufacturing processes.



It is important to understand that the demand is generated at platform level, and it triggers demand at various tiers at lowest possible level. Demands are direct and indirect in nature, when platforms generate demand at Tier 1 level i.e at electronics and weapon systems, mechanical systems it is referred to as direct demand, whereas when the demand is generated at Tier 2 i.e. composite structural components, wires and cables or Tier 3 levels i.e. composite forms, it is known as indirect demand.



Source: KPMG in India Proprietary Framework

This framework assists the companies to decide their positions in the value chain and define their growth/market entry strategy.

Strategic evolution

Based on the capability of the company, measured in terms of financial or technology and its strategic intent, the company decides the strategy to enter the market. The proposed options could be organic or in-organic.

Organic growth

Based on the capability of the company, it plans to go for ab-initio i.e. starting from the scratch. Based on the vertical and horizontal value chain, the company can decide the Tier it wants to focus and the sub-sector it wants to cater to.

Inorganic growth

It is defined as the growth achieved by acquiring capabilities and know-how required for addressing a hereto inaccessible market. The proposed models for this inorganic growth can be defined as:

- **Licensed production or ToT:** This is the production under license, of the product/ platform with assistance provided in the form of technology, machinery, drawings, guidance etc. In return, the entity that owns the technology, receives royalties/licensing fees as a form of reimbursement for the utilisation of its intellectual property.
- **Consortium approach:** A consortium is a partnership agreement that is entered into by multiple companies, each of which brings in its own series of expertise, for the purpose of undertaking a project. Alternatively, a consortium partnership may also be arrived at to leverage the cost benefits in terms of value added by each of the partners and thereby becoming price competitive in market.
- **Joint Ventures (JVs):** JVs are legal entities that are set up by the member firms with the intent of collectively sharing the risks and revenues as agreed. A JV is set up by the member organisations in order to effectively run the new entity as a self-sufficient and legally independent entity.
- **Acquisition and mergers:** Acquisitions are another form of inorganic growth that is a preferred model for growth in the A&D industry globally. Mergers are carried out by entities when neither of the parties is large enough to acquire the other or when a larger company buys out a smaller company with a valuable technology/ IP.

Steps to market entry, focused on MSME

Once the companies have defined their strategic and identified the sub-sector and their position in value chain, they can follow a step by step approach to enter the identified segment and explore the upcoming opportunities

Step-01: Identifying the opportunity

- Understand your key strength and core competencies.
- Develop robust vision and objective
- Identify key product segments to focus on.
- Map critical gaps and ways to address them.
- Identify key focal person(s) to spearhead sectorial initiatives.
- Create dedicated business vertical.
- Devise entry strategy and investment plan.
- Develop a production strategy to manufacture in house/outsource.

Step-02: Build the infrastructure and team

- Identify focus products and target global supply chain.
- Build and train the focused team for A&D.
- Identify anchor customers and their requirements.
- Create dedicated line/facility for aerospace.
- Initiate process to purchase right machines.
- Establish process, controls and documentation as per industry standards.
- Discuss with sourcing teams of OEMs to synchronise with their India plans.

Step-03: Secure the first order

- Complete registration formalities for each target customer and OEMs.
- Prepare facility for formal assessment by customers.
- Choose the right components to pilot.
- Set up special process & material sourcing tie ups.
- Conduct pilot trials and reviews by the customer till achieving first right part.
- Review regulatory requirements and prepare facility for certifications.
- Secure order or assurance from customer

Step-02: Build the infrastructure and team

- Get the required certifications and customer approvals.
- Scale up facility and processes to meet the required volume.
- Maintain quality and timeliness of deliveries.
- Explore more opportunities with customer.
- Develop healthy portfolio of components.
- Add new components and customers without compromising quality and reputation.
- Plan for additional approvals, audits, quality requirements

Step-05: Move up the value chain

- Develop clear vision and strategy to move up from component to sub assembly manufacturer.
- Build capability.
- Look for global players (JVs, acquisition) to propel the transformation.
- Target Indian and other global players who have defence manufacturing bases in India.
- Develop capability and approvals to supply sub-assemblies to key global aircraft programs.

04

Challenges

Although the defence manufacturing sector is lucrative and promising sector for the new companies to enter into, but it has challenges and concerns to be addressed and taken into account. Being highly technologically complex and regulated market, it poses challenges in terms of certification, clearance, and turnaround time.



01

Regulatory issues

- L1 based procurement is one of the biggest challenges for private sector companies.
- Application process for industrial license has a long turnaround time and is not completely transparent.
- Quality and safety certification process is a time-consuming process.
- Procedural delays result in uncertain timelines and thus impact the exports.

02

Supply chain issues

- Owing to proprietary manufacturing techniques as well as quality concerns, there is a dependence on imports of materials.
- Low quality products result in failure rate and delays in orders being placed.

03

Limited capability in the industry

- There is a limited capability within the industry in terms of technology and skilled manpower.
- New entrants face difficulties acquiring the cutting-edge technology because of limited technology transfers agreements.

04

Monopsony market

- As the primary buyers are only the government and defense organizations, they have significant negotiating powers, because of bulk order purchases.
- Issues with procurement procedures result in fluctuating demand.

05

Competitive landscape

- Established players have the competitive advantage due to their strong and established government relationships.
- Concentrated industry as few large players dominates the market.

06

Limited focus on R&D

- Substantial costs and high gestation period to see the benefits of R&D have not encouraged private industry from investing in R&D initiatives.
- Lack of competition within Indian R&D agencies.

About KPMG In India

Established in September 1993, KPMG in India works with 43 per cent of the Fortune 500 companies, globally. Together with our clients, stakeholders and communities, we embrace the challenge of delivering our purpose, through collective action and steadfast commitment. We are not merely envisioning a better future; we are actively building it, one step at a time.

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IMR Media Pvt Ltd was established in 2010. IMR Media is a 360° military media company specializing in seminars, conferences, trade shows and B2B meetings.

IMR Media has organized over 80 defence events since 2011. Subjects include Night Vision, Advanced Materials, Renewable Energy, Precision Attack, Force Protection & Soldier Technology, Military Simulation & Training, Air Defence, Unmanned Aerial Vehicles, Network Centric Operations, Maritime & Coastal Security, Military Logistics & Transportation and Military Medicare.

IMR Media also publishes Indian Military Review (IMR) online monthly magazine in English. It covers national defence, homeland security, neighbourhood, modernization, defence research, military technology, paramilitary forces and military history.

Acknowledgements

KPMG in India

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- Nipun Aggarwal
- Ruchika Verma

Brand and Compliance team

- Shveta Pednekar
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